US Army Corps of Engineers®
New York District

THIS IS AN UNRESTRICTED PROCUREMENT NAISC CODE 237990
SAFETY PAYS

# MAINTENANCE DREDGING

# NEW YORK HARBOR, SANDY HOOK CHANNEL, NEW JERSEY

# FEDERAL NAVIGATION PROJECT

Solicitation &

Specifications

## IFB No. W912DS26BA028

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COVER SHEET

**06/26**

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SECTION 00 00 01

COVER SHEET
**06/26**

PART 1 GENERAL

**NEW YORK DISTRICT**
**CORPS OF ENGINEERS**
**NEW YORK, NEW YORK 10278-0090**

**INVITATION FOR BIDS**
**FOR**
**MAINTENANCE DREDGING**
**NEW YORK HARBOR,**
**SANDY HOOK CHANNEL, NEW JERSEY**
**FEDERAL NAVIGATION PROJECT**

1. Attached is INVITATION FOR BIDS (IFB) NO. W912DS26BA028.

2. BIDS MUST SET FORTH full, accurate, and complete information as requested by this Invitation for Bids, including attachments. The penalty for making false statements in bids is prescribed in Title 18, United States Code, Section 1001.

3. SUBMISSION OF BIDS: Complete details concerning proper submission of bids are contained in the INSTRUCTIONS, CONDITIONS, AND NOTICES TO BIDDERS (Section 00 21 16).

4. REPRESENTATIONS AND CERTIFICATIONS- SECTION 00 45 00
Bidders and Offerors are required to complete the REPRESENTATIONS AND CERTIFICATIONS and submit them with their bids.

5. THIS PROJECT IS NOT A SMALL BUSINESS SET-ASIDE.

PART 2 PRODUCTS

PART 3 EXECUTION

-- End of Section --

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DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 00 00 02

CHECK LIST FOR BIDDERS

**05/26**

PART 1 GENERAL

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SECTION 00 00 02

CHECK LIST FOR BIDDERS
**05/26**

PART 1 GENERAL

ATTACHED IS IFB FOR

**MAINTENANCE DREDGING**
**NEW YORK HARBOR,**
**SANDY HOOK CHANNEL, NEW JERSEY**
**FEDERAL NAVIGATION PROJECT**

ALL INFORMATION REQUIRED BY THE TERMS OF THIS SOLICITATION MUST BE FURNISHED. MISTAKES OR OMISSIONS MAY RENDER YOUR BID INELIGIBLE FOR AWARD. IMPORTANT ITEMS FOR YOU TO CHECK ARE INCLUDED IN BUT NOT LIMITED TO THOSE LISTED BELOW. THIS INFORMATION IS FURNISHED ONLY TO ASSIST YOU IN SUBMITTING A PROPER BID.

__ HAVE YOU ACKNOWLEDGED ALL AMENDMENTS?

__ HAVE YOU COMPLETED THE "REPRESENTATIONS AND CERTIFICATIONS" (SECTION 00 45 00) PORTION OF THE SOLICITATION?

__ IS YOUR DUNS NUMBER LISTED ON THE STANDARD FORM 1442?

__ IS YOUR BID PROPERLY SIGNED?

__ A BID BOND IS REQUIRED. HAS YOUR SURETY PROVIDED YOU WITH A BID BOND ON STANDARD FORM 24 OR A SIMILAR FORM CONTAINING THE SAME LANGUAGE AS A STANDARD FORM 24?

__ IS YOUR BID GUARANTEE IN THE PROPER AMOUNT?

__ IS YOUR BID GUARANTEE PROPERLY SIGNED BY BOTH THE BIDDER AND SURETY AND ARE ALL REQUIRED SEALS AFFIXED?

__ IS THE NAME IN WHICH YOU SUBMITTED THE BID THE SAME ON YOUR BID AS ON THE BID BOND?

__ IS YOUR BID BOND INCLUDED WITH YOUR BID? (A LATE BID GUARANTEE IS TREATED THE SAME AS A LATE BID)

__ HAVE YOU ENSURED THAT YOU HAVE NOT RESTRICTED YOUR BID BY ALTERING THE PROVISIONS OF THE SOLICITATION?

__ WHEN REQUIRED, HAVE YOU ENTERED A UNIT PRICE FOR EACH BID ITEM? (THE SOLICITATION SPECIFICALLY STATES WHEN THIS IS NECESSARY.)

__ ARE DECIMALS IN YOUR PRICES IN THE PROPER PLACE? ARE YOUR FIGURES LEGIBLE?

__ IF YOU HAVE MADE ERASURES OR CORRECTIONS ON YOUR BID, ARE THEY INITIALED BY THE PERSON SIGNING THE BID?

__ DOES THE ENVELOPE CONTAINING YOUR BID PROPERLY IDENTIFY THAT IT IS A

SEALED BID AND DOES IT CONTAIN THE CORRECT SOLICITATION NUMBER AND BID OPENING TIME?

__ WILL YOUR BID ARRIVE ON TIME? (SEE PARAGRAPH ENTITLED "LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS" IN THE INSTRUCTIONS, CONDITIONS, AND NOTICES TO BIDDERS, SECTION 00 21 16 OF THE SOLICITATION.)

BIDDER IS RESPOSIBLE TO ENSURE BID IS SUBMITTED ON TIME.

-- End of Section --

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SECTION 00 01 15

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**05/26**

PART 1 GENERAL

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PART 2 PRODUCTS

PART 3 EXECUTION

-- End of Section Table of Contents --

SECTION 00 01 15

LIST OF DRAWINGS
**05/26**

PART 1 GENERAL

1.1 SUMMARY

This section lists the drawings for the project pursuant to contract clause "DFARS 252.236-7001, Contract Drawings, Maps and Specifications."

1.2 CONTRACT DRAWINGS, MAPS, & SPECIFICATIONS

a. The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

b. The Contractor shall:

(1) Check all drawings furnished immediately upon receipt;

(2) Compare all drawings and verify the figures before laying out the work;

(3) Promptly notify the Contracting Officer or Contracting Officer's Representative of any discrepancies;

(4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and

(5) Reproduce and print contract drawings and specifications as needed.

c. In general:

(1) Large-scale drawings shall in general govern over small-scale drawings. Information and data provided in contract specifications shall govern over similar information and data specified in contract drawings; and

(2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

d. Omissions from the drawings or specifications or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

e. The work shall conform to the following contract drawings and maps, all of which form a part of these specifications and are available in the office of the District Engineer, U.S. Army Corps of Engineers, New York District, 26 Federal Plaza, New York, N.Y.

10278-0090:

Contract drawings are as follows:

| FY 2026<br>Maintenance Dredging of New York Harbor,<br>Sandy Hook Channel, New Jersey,<br>Federal Navigation Project | |
|---|---|
| SHEET NO. | TITLE |
| G-001 | Cover Sheet & Index |
| G-101 | Project Site Plan & Notes |
| C-101 | Dredging Areas and Sounding Map |

f. The Contractor shall check all drawings furnished to him immediately upon their receipt and shall promptly notify the Contracting Officer or Contracting Officer's Representative of any discrepancies. Figures marked on drawings shall in general be followed in preference to scale measurements unless dimensions are specified. Large-scale drawings shall in general govern over small-scale drawings. Information and data provided in contract specifications shall govern over similar information and data specified in contract drawings. The Contractor shall compare all drawings and verify the figures before laying out the work and will be responsible for any errors which might have thereby been avoided (DOD FAR Suppl. 52.236-7002).

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

-- End of Section --

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DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 00 10 00

SF 1442 AND BIDDING SCHEDULE

**01/20**

PART 1 GENERAL

1.1 SF 1442 SOLICITATION, OFFER, AND AWARD
1.2 BID SCHEDULE

PART 2 PRODUCTS

PART 3 EXECUTION

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# SECTION 00 10 00

# SF 1442 AND BIDDING SCHEDULE
**01/20**

## PART 1 GENERAL

### 1.1 SF 1442 SOLICITATION, OFFER, AND AWARD

To be provided by Contracting Division.

### 1.2 BID SCHEDULE

To be provided by Contracting Division.

## PART 2 PRODUCTS

Not Used

## PART 3 EXECUTION

Not Used

-- End of Section --

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DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 00 21 13

INSTRUCTIONS, CONDITIONS, AND NOTICE TO BIDDERS

**01/20**

PART 1 GENERAL

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SECTION 00 21 13

INSTRUCTIONS, CONDITIONS, AND NOTICE TO BIDDERS
**01/20**

PART 1 GENERAL

To be provided by Contracting Division.

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DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 00 45 00

REPRESENTATION AND CERTIFICATION

**01/20**

PART 1 GENERAL

PART 2 PRODUCTS

PART 3 EXECUTION

-- End of Section Table of Contents --

SECTION 00 45 00

REPRESENTATION AND CERTIFICATION
**01/20**

PART 1 GENERAL

To be provided by Contracting Division.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 00 70 00

CONTRACT CLAUSES

**01/20**

PART 1 GENERAL

PART 2 PRODUCTS

PART 3 EXECUTION

-- End of Section Table of Contents --

# SECTION 00 70 00

# CONTRACT CLAUSES
**01/20**

## PART 1 GENERAL

To be provided by Contracting Division.

## PART 2 PRODUCTS

Not Used

## PART 3 EXECUTION

Not Used

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 00 90 00

WAGE RATES

**01/20**

PART 1 GENERAL

1.1 NOTE

PART 2 PRODUCTS

PART 3 EXECUTION

-- End of Section Table of Contents --

# SECTION 00 90 00

## WAGE RATES
**01/20**

## PART 1 GENERAL

### 1.1 NOTE

Wage rates provided by Contracting Division.

A copy of the wage rate shall be displayed at a highly visible location on the dredge at all times for the duration of the project.

## PART 2 PRODUCTS

Not Used

## PART 3 EXECUTION

Not Used

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DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

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LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

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3.1.2 Attachment B Sample Daily Construction Quality Control Report
3.1.3 Attachment C Project Sign and Safety Sign
3.1.4 Attachment D Title 33 Oil and Hazardous Material Operations
3.1.5 Attachment E Accident Prevention Plan Worksheet
3.1.6 Attachment F Daily Reports for Dredging
3.1.7 Attachment G USACE Transportation and Placement Log
3.1.8 Attachment H Daily Site Safety and Health Inspection Log
3.1.9 Attachment I Daily Whale and Turtle Report Logs, and Incident Report of Sturgeon
3.1.10 Attachment J New York Harbor, Sandy Hook Federal Navigation Channel 2017 Grain Size Analysis - See attachments to this solicitation on SAM.GOV for complete Sampling and Testing Results Package.
3.1.11 Attachment K Submittal Register EXAMPLE
3.1.12 Attachment L XYZ Data of September 2025 Before Dredge Survey
3.2 Transcontinental Gas Pipe Line Company (Transco) - Lower New York Bay Lateral Documentation

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# SECTION 00 90 01

## LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS
**05/26**

PART 1 GENERAL

1.1 SUBMITTALS

Not Used

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 ATTACHMENTS

The following attachments have been provided for reference to the bidder for use in performing the contract requirements.

3.1.1 Attachment A New York Harbor, Sandy Hook Channel Reference Map

3.1.2 Attachment B Sample Daily Construction Quality Control Report

3.1.3 Attachment C Project Sign and Safety Sign

3.1.4 Attachment D Title 33 Oil and Hazardous Material Operations

3.1.5 Attachment E Accident Prevention Plan Worksheet

3.1.6 Attachment F Daily Reports for Dredging

3.1.7 Attachment G USACE Transportation and Placement Log

3.1.8 Attachment H Daily Site Safety and Health Inspection Log

3.1.9 Attachment I Daily Whale and Turtle Report Logs, and Incident Report of Sturgeon

3.1.10 Attachment J New York Harbor, Sandy Hook Federal Navigation Channel 2017 Grain Size Analysis - See attachments to this solicitation on SAM.GOV for complete Sampling and Testing Results Package.

3.1.11 Attachment K Submittal Register EXAMPLE

3.1.12 Attachment L XYZ Data of September 2025 Before Dredge Survey

3.2 Transcontinental Gas Pipe Line Company (Transco) - Lower New York Bay Lateral Documentation

Related documentation from the installation of the Transco Gas Pipe Line - Lower New York Bay Lateral are made available to bidders as attachments to this solicitation [for information only] as Attachment M:

a. Map of Transcontinental Gas Pipe Line Company - Lower New York Bay

Lateral

b. Department of the Army Permit No. 7447 (1967-06280)

-- End of Section --

SECTION 00 90 01 ATTACHMENT A
NEW YORK HARBOR, SANDY HOOK CHANNEL, NJ
FEDERAL NAVIGATION PROJECT
REFERENCE MAP

| CONTRACTORS QUALITY CONTROL REPORT (QCR)<br>DAILY LOG OF CONSTRUCTION | REPORT NUMBER<br>XXX<br>DATE<br>14 Sep 2026 - Monday |
|---|---|
| PROJECT<br>Maintenance Dredging of New York Harbor, Sandy Hook Channel, NJ | CONTRACT NUMBER<br>W912DS26CXXXX |
| CONTRACTOR<br>Dredging Contractor Co. | WEATHER<br>Weather Caused No Delay<br>Temperature Min X F Max X F<br>No Precipitation No Wind |

QC Narratives
XXX

PREP/INITIAL DATES
Preparatory inspections held today: XXX

Initial inspections held today: XXX

ACTIVITY START/FINISH

XXX activities were started or finished today

QC REQUIREMENTS

XXX QC requirements were entered today

ISSUED QA/QC DEFICIENCES

XXX QC Deficiency items were issued today

CORRECTED QA/QC DEFICENCY

XXX QC Deficiency items were corrected today

CONTRACTORS ON SITE

XXX Contractors had their first or last day on the site

**LABOR HOURS**

| Crew | Position | | | | Number of Employees | Hours Worked |
|---|---|---|---|---|---|---|
| No labor hours to report | N/A | | | | X.00 | X.00 |
| Total hrs worked to date: | XX.00 | Hrs worked MTD: | XX.00 | Total: | X.00 | X.00 |

**EQUIPMENT HOURS**

| Equipment Name | Description | | | | Idle Hours | Operating Hours |
|---|---|---|---|---|---|---|
| No equipment hours to report | | | | | X.00 | X.00 |
| Total operating hrs to date: | X,XXX.00 | Idle hrs MTD: | XX.00 | Opr hrs MTD: XX.00 | Total: X.00 | X.00 |

| CONTRACTORS QUALITY CONTROL REPORT (QCR)<br>DAILY LOG OF CONSTRUCTION | REPORT NUMBER<br>XXX<br>DATE<br>14 Sep 2026 - Monday |
|---|---|
| PROJECT<br>Maintenance Dredging of New York Harbor, Sandy Hook Channel, NJ | CONTRACT NUMBER<br>W912DS26CXXXX |

MISHAP REPORTING

No mishaps reported today

| CONTRACTOR CERTIFICATION | **On behalf of the contractor, I certify that this Report is complete and correct and all equipment and material used and work performed during this Reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.** | | |
|---|---|---|---|
| QC REPRESENTATIVE SIGNATURE | DATE | SUPERINTENDENT'S INITIALS | DATE |
| | | | |

The use of signs to identify Corps managed or supervised design, construction, and rehabilitation projects - both for military and civil works - is an important part of efforts to keep the public informed of Corps work. For this purpose, a construction project sign package has been adopted. This package consists of two signs: one for project identification and the other to show on-the-job safety performance of the contractor.

These two signs are to be displayed side by side and mounted for reading by passing viewers. Exact placement location will be designated by the contracting officer's representative.

The panel sizes and graphic formats have been standardized for visual consistency throughout all Corps operations.

Panels are fabricated using HDO plywood or aluminum with dimensional lumber uprights and bracing. The sign faces are nonreflective vinyl.

All legends are to be die-cut or computer-cut in the sizes and typefaces specified and applied to the white panel background following the graphic formats shown on pages 16-2 and 16-3. The Communication Red panel on the left side of the construction project sign with Corps Signature (reverse version) is screen-printed onto the white background.

A display of these two signs is shown on the following two pages. Mounting and fabrication details are provided on page 16-4.

Special applications or situations not covered in these guidelines should be referred to the district Sign Program Manager.

# Construction Project Identification Sign

Below are two samples of the Construction Project Identification sign showing how this panel is adaptable for use to identify either military (top) or civil works projects (bottom). The graphic format for this 4'x 6' sign panel follows the legend guidelines and layout as specified below. The large 4'x 4' section of the panel on the right is to be white with black legend. The 2'x 4' section of the sign on the left with the full Corps Signature (reverse version) is to be screen-printed Communication Red on the white background The designation of a sponsor in the area indicated is optional with Military or Civil Works construction signs. Signs may list one sponsoring entity. If agreement on a sponsor designation cannot be achieved, the area should be left blank.

This sign is to be placed with the Safety Performance sign shown on the following page. Mounting and fabrication details are provided on page 16-4.

Special applications or situations not covered in these guidelines should be referred to the district Sign Program Manager.

Legend Group 1: One- to two-line description of Corps relationship to project.
Color: White
Typeface: 1.25" Helvetica Regular
Maximum line length: 19"

Legend Group 2: Division or District Name (optional). Placed below 10.5" reverse Signature (6" Castle).
Color: White
Typeface: 1.25" Helvetica Regular

Legend Group 2a: One- to three-line identification of Military or Civil Works sponsor (optional). Place below Corps Signature to cross-align with Group 5a-b.
Color: White
Typeface: 1.25" Helvetica Regular
Maximum line length: 19"

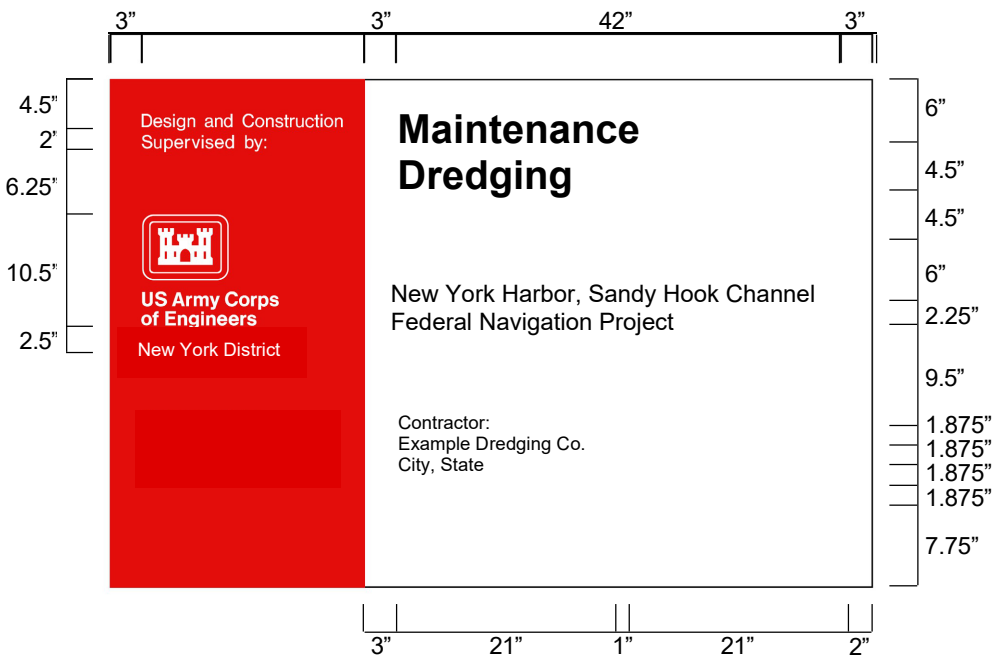
Legend Group 3: One- to three-line project title legend describes the work being done under this contract.
Color: Black
Typeface: 3" Helvetica Bold
Maximum line length: 42"

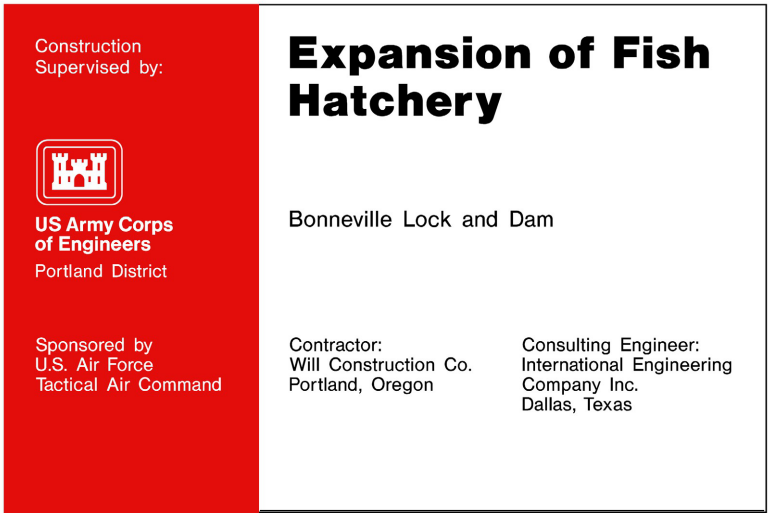
Legend Group 4: One- to two-line identification of project or facility (civil works) or name of sponsoring department (military).
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

Cross-align the first line of Legend Group 4 with the first line of the Corps Signature (US Army Corps) as shown.

Legend Groups 5a-b: One- to five-line identification of prime contractors including: type (architect, general contractor, etc.), corporate or firm name, city, state. Use of Legend Group 5 is optional.
Color: Black
Typeface: 1.25" Helvetica Regular
Maximum line length: 21"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards as specified in Appendix D.




| Sign Type | Legend Size (A) | Panel Size | Post Size | Specification Code | Mounting Height | Color Bkg/Lgd |
|---|---|---|---|---|---|---|
| CID-01 | various | 4'x6' | 4"x4" | HDO-3 | 48" | WH-RD/BK |

Each contractor's safety record is to be posted on Corps managed or supervised construction projects and mounted with the Construction Project Identification sign specified on page 16-2.

The graphic format, color, size and typefaces used on the sign are to be reproduced exactly as specified below. The title with First Aid logo in the top section of the sign, and the performance record captions are standard for all signs of this type. Legend groups 2 and 3 below identify the project and the contractor and are to be placed on the sign as shown.

Safety record numbers are mounted on individual metal plates and are screw-mounted to the background to allow for daily revisions to posted safety performance record.

Special applications or situations not covered in these guidelines should be referred to the district Sign Program Manager.

Legend Group 1: Standard two-line title "Safety is a Job Requirement" with 8" (outside diameter) Safety Green first aid logo.
Color: To match Pantone system 347
Typeface: 3" Helvetica Bold
Color: Black

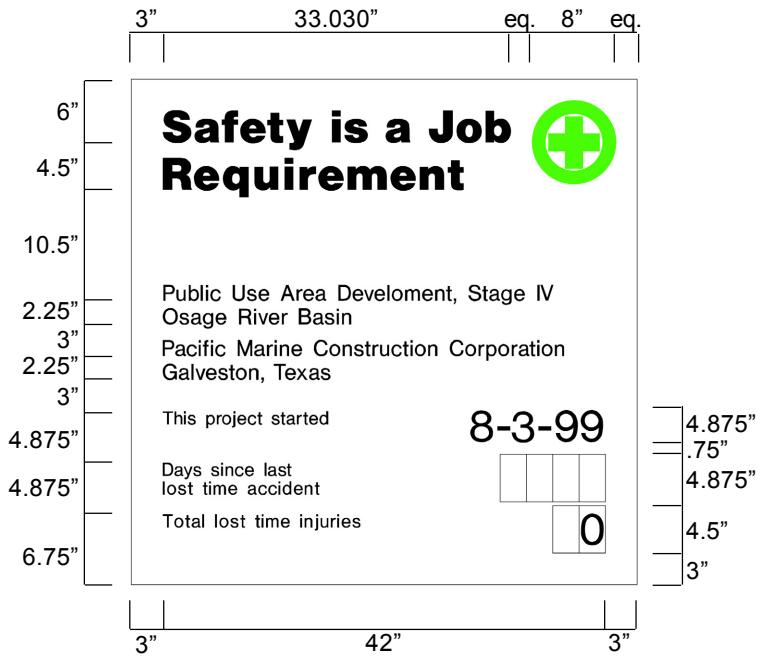
Legend Group 2: One- to two-line project title legend describes the work being done under this contract and name of host project.
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

Legend Group 3: One- to two-line identification: name of prime contractor and city, state address. Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

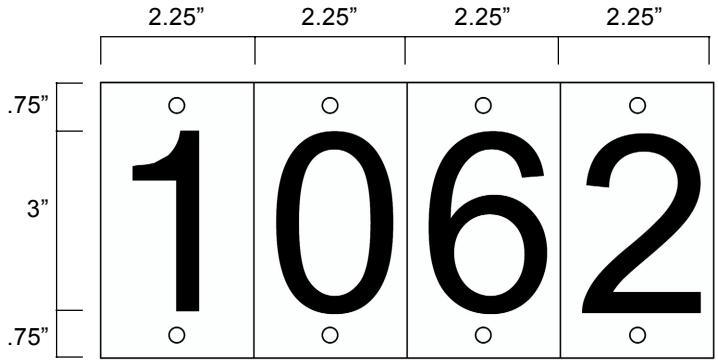
Legend Group 4: Standard safety record captions as shown.
Color: Black
Typeface: 1.25" Helvetica Regular

Replaceable numbers are to be mounted on white .060 aluminum plates and screw-mounted to background.
Color: Black
Typeface: 3" Helvetica Regular
Plate size: 2.5" x 4.5"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards as specified in Appendix D.




| Sign Type | Legend Size (A) | Panel Size | Post Size | Specification Code | Mounting Height | Color Bkg/Lgd |
|---|---|---|---|---|---|---|
| CID-02 | various | 4'x4' | 4"x4" | HDO-3 | 48" | WH/BK-SG |



## Fabrication and Mounting Guidelines

All Construction Project Identification signs and Safety Performance signs are to be fabricated and installed as described below. The signs are to be erected at a location designated by the contracting officer representative and shall conform to the size, format, and typographic standards shown on pages16-2 and 16-3. Detailed specifications for HDO plywood panel preparation are provided in Appendix B.

Shown below the mounting diagram is a panel layout grid with spaces provided for project information. Photocopy this page and use as a worksheet when preparing sign legend orders.

For additional information on the proper method to prepare sign panel graphics, contact the district Sign Program Manager.

The sign panels are to be fabricated from .75" High Density Overlay Plywood. Panel preparation to follow HDO specifications provided in Appendix B.

Sign graphics to be prepared on a white nonreflective vinyl film with positionable adhesive backing.

All graphics except for the Communication Red background with Corps Signature on the project sign are to be die-cut or computer-cut nonreflective vinyl, prespaced legends prepared in the sizes and typefaces specified and applied to the background panel following the graphic formats shown on pages 16-2 and 16-3.

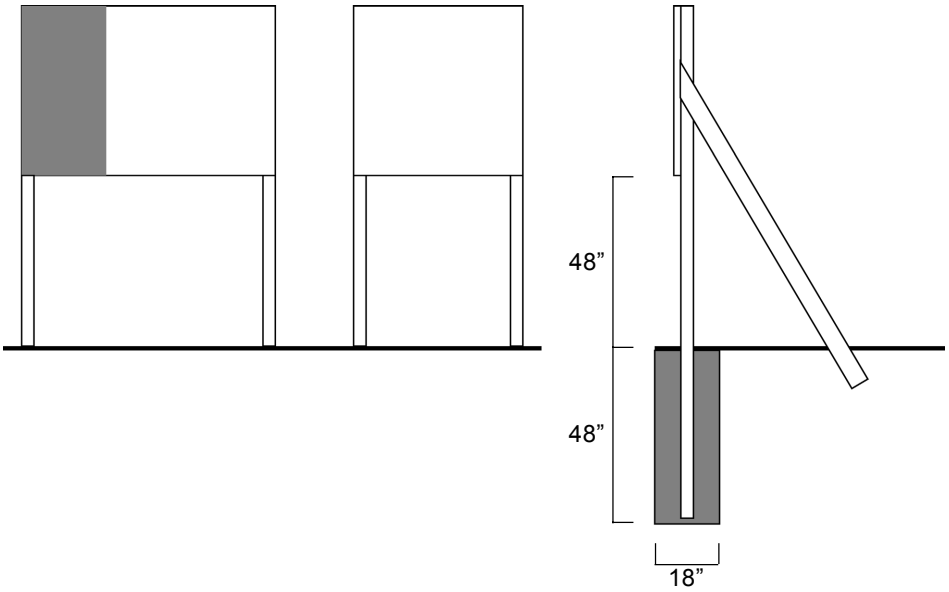
The 2'x 4' Communication Red panel (to match Pantone system 032) with full Corps Signature (reverse version) is to be screen-printed on the white background. Identification of the district or division may be applied under the signature with white cut vinyl letters prepared to Corps standards.

Drill and insert six (6) .375" T-nuts from the front face of the HDO sign panel. Position holes as shown. Flange of T-nut to be flush with sign face.

Apply graphic panel to prepared HDO plywood panel following manufacturers' instructions.

Sign uprights to be structural grade 4" x 4" treated Douglas Fir or Southern Yellow Pine, No.1 or better. Post to be 12' long. Drill six (6) .375" mounting holes in uprights to align with T-nuts in sign panel. Countersink (.5") back of hole to accept socket head cap screw (4" x .375").

Assemble sign panel and uprights. Imbed assembled sign panel and uprights in 4' hole. Local soil conditions and/or wind loading may require bolting additional 2" x 4" struts on inside face of uprights to reinforce installation as shown.




Construction Project Identification Sign
Legend Group 1: Corps Relationship

1. _____
2. _____

Legend Group 2: Division/District Name

1. _____
2. _____

Legend Group 2a: Military/Civil Works Sponsor

1. _____
2. _____

Legend Group 3: Project Title

1. _____
2. _____
3. _____

Legend Group 4: Facility Name

1. _____
2. _____

Legend Group 5: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Legend Group 5b: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Safety Performance Sign
Legend Group 2: Project Title

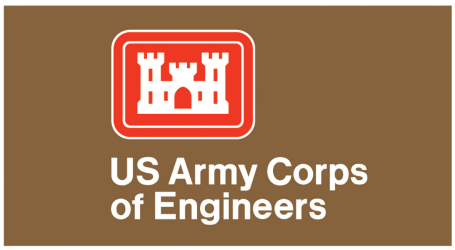
1. _____
2. _____

Legend Group 3: Contractor/A&E

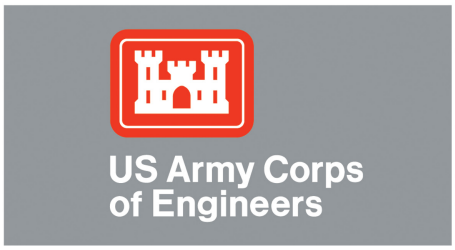
1. _____
2. _____

The illustrations below show the various color configurations possible when using the Corps Signature on signs. Note that there are fewer possible ways to render the Signature on a sign panel than are specified for print applications (see *Graphic Standards Manual*, pages 1-5).

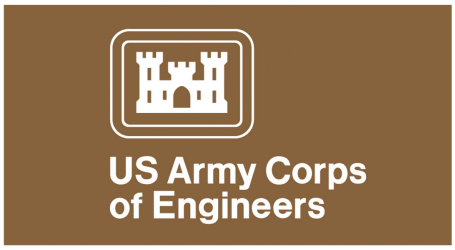
a) The most prominent use of the Signature will be on identification signs. For Standard Identification, post and panel signs, the reverse Signature is used; the Mark is Communication Red, the Signature type is white.



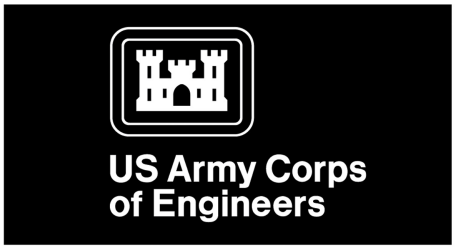

b) For large-scale Standard Identification signs of individual fabricated letters, the positive version is used; the Mark is Communication Red and the Signature typography is white (see page 5-7).



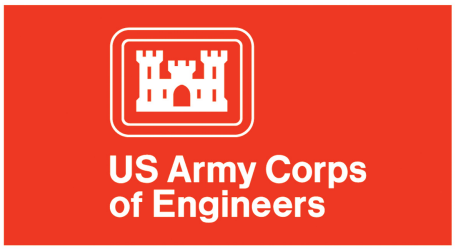

c) The Corps Participation Credit sign uses an all white reverse Signature on a Corps Brown background.



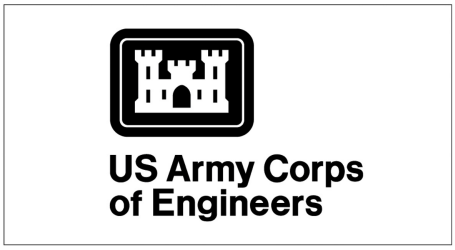

d) The header panels on Building Office Directories use a reverse Signature in white on Dark Grey.




e) Construction Project Identification signs use an all white reverse Signature on a Communication Red background.




f) Boundary signs use the positive Signature in black on a white background.



## Color Standards

Within the Corps sign system there are five standard color palettes. Three have been developed by the Corps and include: 1) Recreation Area signs, 2) Lock, Dam and Waterway signs, and 3) Office Interior signs. Two color groups have been adopted from existing standards: 1) Traffic signs (MUTCD) and 2) Workplace Safety signs (ANSI). Each of these is illustrated on the following pages with descriptions for their use. The two-character color code is in parentheses immediately after the color. Additional color application instructions are included in each respective section.

Colors must conform to the standards presented on the following pages when preparing signs.

For many of the colors shown on the next five pages, a corresponding Federal Standard Color number is listed. These numbers refer to color samples contained in a fan deck titled *Federal Standard 595B Colors*. The fan deck is published by the General Services Administration, order number 7690-01-162-2210.

Shown below are the colors for use on Corps identification, directional, and recreation area signs.

Corps Brown (BR): Background for identification, directional, recreation, and symbol signs. The closest Federal Standard Color is 20095.

White (WH): Legend for identification, directional, and recreation signs. Background for boundary signs. The closest Federal Standard Color is 27925, but the match with the 595B fan deck is not exact.

Communication Red (CR): Corps Mark (Castle) on identification signs. The closest Federal Standard Color is 11350, but the match with the 595B fan deck is not exact. The Graphics Standards Manual (EP 310-1-6) specifies Communication Red shall match Pantone Red 032.

Black (BK): Legend and Signature for boundary signs. The closest Federal Standard Color is 17038.

The colors shown below are used on all safety signs as described in Section 11 of this manual.

Safety Red (SR): Federal Standard Color 11310, but the match with the 595B fan deck is not exact. Danger; warning of an immediate hazard.

Safety Yellow (SY): Federal Standard Color 13591, but the match with the 595B fan deck is not exact. Caution; warning of potential hazard.

Safety Green (SG): Federal Standard Color 14109, but the match with the 595B fan deck is not exact. Notice; for safety.

Safety Blue (SB): Federal Standard Color 15092. Information; general.

Black (SK): Federal Standard Color 17038. Directional and all descriptive legends.

White (SW): Federal Standard Color 27875. All sign backgrounds, except for Caution.

[Code of Federal Regulations]
[Title 33, Volume 2]
[Revised as of July 1, 2005]
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[Page 314-316]

TITLE 33--NAVIGATION AND NAVIGABLE WATERS

CHAPTER I--COAST GUARD, DEPARTMENT OF HOMELAND SECURITY (CONTINUED)

PART 154_FACILITIES TRANSFERRING OIL OR HAZARDOUS MATERIAL IN BULK --Table of Contents

Subpart A_General

Sec. 154.**105** Definitions.

As used in this part:
Barrel means a quantity of liquid equal to 42 U.S. gallons. Boundary Line means any of the lines described in 46 CFR part 7. Captain of the Port (COTP) means the U.S. Coast Guard officer commanding a Captain of the Port Zone described in Part 3 of this chapter, or that person's authorized representative.

Caretaker Status denotes a facility where all piping, hoses, loading arms, storage tanks, and related equipment in the marine transfer area are completely free of oil or hazardous materials, where these components have been certified as being gas free, where piping, hoses, and loading arms terminating near any body of water have been blanked, and where the facility operator has notified the COTP that the facility will be in caretaker status.

Commandant means the Commandant of the Coast Guard or an authorized representative.

Contiguous Zone means the entire zone established by the United States under Article 24 of the Convention on the Territorial Sea and the Contiguous Zone, but not extending beyond 12 miles from the baseline from which the breadth of the territorial sea is measured.

District Commander means the officer of the Coast Guard designated by the Commandant to command a Coast Guard District, as described in Part 3 of this chapter or an authorized representative.

Facility means either an onshore or offshore facility, except for an offshore facility operating under the jurisdiction of the Secretary of the Department of Interior, and includes, but is not limited to, structure, equipment, and appurtenances thereto, used or capable of being used to

transfer oil or hazardous materials to or from a vessel or public vessel. Also included are facilities that tank clean or strip and any floating structure that is used to support an integral part of the facility's operation. A facility includes federal, state, municipal, and private facilities.

Facility operator means the person who owns, operates, or is responsible for the operation of the facility. Hazardous material means a liquid material or substance, other than oil or liquefied gases, listed under 46 CFR 153.40 (a), (b), (c), or (e).

Marine transfer area means that part of a waterfront facility handling oil or hazardous materials in bulk between the vessel, or where the vessel moors, and the first manifold or shutoff valve on the pipeline encountered after the pipeline enters the secondary containment required under 40 CFR 112.7 or 49 CFR 195.264 inland of the terminal manifold or loading arm, or, in the absence of secondary containment, to the valve or manifold adjacent to the bulk storage tank, including the entire pier or wharf to which a vessel transferring oil or hazardous materials is moored.

MARPOL 73/78 means the International Convention for the Prevention of Pollution from Ships, 1973 (done at London, November 2, 1973) as modified by the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (done at London, February 17, 1978).

Mobile facility means any facility that can readily change location, such as a tank truck or tank car, other than a vessel or public vessel.

Monitoring device means any fixed or portable sensing device used to monitor for a discharge of oil or hazardous material onto the water, within or around a facility, and designed to notify operating personnel of a discharge of oil or hazardous material.

Officer in Charge, Marine Inspection (OCMI) means the U.S. Coast Guard officer commanding a Marine Inspection Zone described in Part 3 of this chapter, or an authorized representative.

Offshore facility means any facility of any kind located in, on, or under, any of the navigable waters of the United States, and any facility of any kind which is subject to the jurisdiction of the United States and is located in, on, or under any other waters, other than a vessel or a public vessel.

Oil means oil of any kind or in any form, including but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.

Onshore facility means any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under any land within the United States other than submerged land.

Person in charge means an individual designated as a person in charge of transfer operations under Sec. 154.710 (for facilities) or Sec. 155.700 (for vessels) of this chapter.

STCW means the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers, 1978.

Self-propelled tank vessel means a self-propelled tank vessel other than a tankship.

Tank barge means a non-self-propelled tank vessel.

Tankship means a self-propelled tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk in the cargo spaces.

Tank vessel means a vessel that is constructed or adapted to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue, and that--

(a) Is a vessel of the United States;
(b) Operates on the navigable waters of the United States; or
(c) Transfers oil or hazardous material in a port or place subject to the jurisdiction of the United States.

Transfer means any movement of oil or hazardous material to, from, or within a vessel by means of pumping, gravitation, or displacement. A transfer is considered to begin when the person in charge on the transferring vessel or facility and the person in charge on the receiving facility or vessel first meet to begin completing the declaration of inspection as required by Sec. 156.150 of this chapter. A transfer is considered to be complete when all the connections for the transfer have been uncoupled and secured with blanks or other closure devices and both of the persons in charge have completed the declaration of inspection to include the date and time the transfer was complete.

Vessel operator means a person who owns, operates, or is responsible for the operation of a vessel.

[CGD 75-124, 45 FR 7169, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36252, Sept. 4, 1990; CGD 79-116, 60 FR 17141, Apr. 4, 1995; CGD 93-056, 61 FR 41458, Aug. 8, 1996; 62 FR 3610, Jan. 24, 1997; CGD 79-116, 62 FR 25125, May 8, 1997]

TRANSFER OPERATIONS--Table of Contents

Subpart A_Oil and Hazardous Material Transfer Operations

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156.**100** Applicability.

156.105 Definitions.

156.107 Alternatives.

156.110 Exemptions.

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156.112 Suspension order.

156.113 Compliance with suspension order.

156.115 Person in charge: Limitations.

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156.120 Requirements for transfer.

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156.130 Connection.

156.150 Declaration of inspection.

156.160 Supervision by person in charge.

156.170 Equipment tests and inspections.

Subpart B_Special Requirements for Lightering of Oil and Hazardous Material Cargoes

156.200 Applicability.

156.205 Definitions.

156.210 General.

156.215 Pre-arrival notices.

156.220 Reporting of incidents.

156.225 Designation of lightering zones.

156.230 Factors considered in designating lightering zones.

Subpart C_Lightering Zones and Operational Requirements for the Gulf of Mexico

156.300 Designated lightering zones.

156.310 Prohibited areas.

156.320 Maximum operating conditions.

156.330 Operations.

Authority: 33 U.S.C. 1231, 1321(j); 46 U.S.C. 3703a, 3715; E.O.11735, 3 CFR 1971-1975 Comp., p. 793. Section 156.120(bb) and (ee) are also issued under 46 U.S.C. 3703.

This subpart applies to the transfer of oil or hazardous material on the navigable waters or contiguous zone of the United States to, from, or within each vessel with a capacity of 250 barrels or more; except that, this subpart does not apply to transfer operations within a public vessel.

[CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**105** Definitions.

Except as specifically stated in a section, the definitions in Sec. 154.**105** of this chapter apply to this subpart.

[CGD 90-071a, 59 FR 53291, Oct. 21, 1994]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**107** Alternatives.

(a) The COTP may consider and approve alternative procedures, methods, or equipment standards to be used by a vessel or facility operator in lieu of any requirements in this part if:

(1) Compliance with the requirement is economically or physically impractical;

(2) The vessel or facility operator submits a written request for the alternative at least 30 days before operations under the alternative are proposed, unless the COTP authorizes a shorter time; and

(3) The alternative provides an equivalent level of safety and protection from pollution by oil or hazardous material, which is documented in the request.

(b) The COTP takes final approval or disapproval action on any alternative requested, in writing, within 30 days of receipt of the request.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**110** Exemptions.

(a) The Assistant Commandant for Marine Safety, Security and Environmental Protection, acting for the Commandant, may grant an exemption or partial exemption from compliance with any requirement in this part, and the District Commander may grant an exemption or partial exemption from compliance with any operating condition or requirement in subpart C of this part, if:

(1) The vessel or facility operator submits an application for exemption via the COTP at least 30 days before operations under the exemption are proposed, unless the COTP authorizes a shorter time; and

(2) It is determined, from the application, that:

(i) Compliance with a specific requirement is economically or physically impractical;

(ii) No alternative procedures, methods, or equipment standards exist that would provide an equivalent level of safety and protection from pollution by oil or hazardous material; and

(iii) The likelihood of oil or hazardous material being discharged as a result of the exemption is minimal.

(b) If requested, the applicant must submit any appropriate information, including an environmental and economic assessment of the effects of and reasons for the exemption and proposed procedures, methods or equipment standards.

(c) The exemption may specify the procedures, methods, or equipment standards that will apply.

(d) An exemption is granted or denied in writing. The decision of the Assistant Commandant for Marine Safety, Security and Environmental Protection is a final agency action.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 88-052, 53 FR 25122, July 1, 1988; CGD 86-034, 55 FR 36255, Sept. 4, 1990; CGD 93-081, 60 FR 45017, Aug. 29, 1995; CGD 96-026, 61 FR 33666, June 28, 1996; CGD 93-056, 61 FR 41461, Aug. 8, 1996; CGD0 97-023, 62 FR 33364, June 19, 1997; USCG-2002-12471, 67 FR 41333, June 18, 2002]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**111** Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in paragraph (b) of this section, the Coast Guard must publish notice of the change in the Federal Register; and the material must be available to the public. All approved material is available for inspection at the U.S. Coast Guard, Office of Compliance (G-MOC), 2100 Second Street, SW, Washington, DC 20593-0001 and at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal--register/code--of--federal-- regulations/ibr--locations.html. All approved material is available from the sources indicated in paragraph (b) of this section.

(b) The material approved for incorporation by reference in this part and the sections affected are as follows:

Oil Companies International Marine Forum (OCIMF)
15th Floor, 96 Victoria Street, London SW1E 5JW, England.
Ship to Ship Transfer Guide (Petroleum), Second Edition, 1988--
156.330.

International Chamber of Shipping

12 Carthusian Street, London EC1M 6EB, England.
Guide to Helicopter/Ship Operations, Third Edition, 1989--156.330.

[CGD 93-081, 60 FR 45017, Aug. 29, 1995, as amended by CGD 96-026, 61 FR 33666, June 28, 1996; 69 FR 18803, Apr. 9, 2004]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**112** Suspension order.

The COTP or OCMI may issue a suspension order to suspend transfer operations to the vessel or facility operator when the COTP or OCMI finds there is a condition requiring action to prevent the discharge or threat of discharge of oil or hazardous material, or when the COTP or OCMI is unable to verify compliance with the regulations through an inspection. A suspension order:

(a) May be effective immediately;

(b) Is issued in writing unless it is effective immediately and then it may be issued orally and followed up in writing;

(c) Includes a statement of each condition requiring correction to--

(1) Prevent the discharge of oil or hazardous material; or

(2) Comply with Sec. 154.735 of this chapter; and

(d) Is withdrawn when the COTP, OCMI, or District Commander, as applicable, determines that the condition requiring action to prevent the discharge or threat of discharge of oil or hazardous material has been corrected or no longer exists.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**113** Compliance with suspension order.

(a) No vessel or facility operator to whom a suspension order has been issued may conduct transfer operations from the time the order is effective until that order is withdrawn by the applicable COTP, OCMI, or by the District Commander.

(b) The vessel or facility operator may request reconsideration of the suspension order either orally or in writing to the COTP or OCMI who issued it. The request may contain supporting documentation and evidence that the vessel or facility operator wishes to have considered.

(c) Any person not satisfied with a ruling made under the procedure contained in paragraph (b) of this section may appeal that ruling in writing, except as allowed under paragraph (e) of this section, to the Coast Guard District Commander of the district in which the suspension order was issued. The appeal may contain supporting documentation and evidence that the appellant wishes to have considered. The appeal does not stay the effect of the suspension order while the COTP or OCMI ruling is being reviewed. The District Commander issues a ruling after reviewing the appeal.

(d) The ruling by the District Commander is final agency action.

(e) If the delay in presenting a written appeal under paragraph (c)

of this section would have a significant adverse impact on the appellant, the appeal may initially be presented orally. If an initial presentation of the appeal is made orally, the appellant must submit the appeal in writing within five days of the oral presentation to the District Commander to whom the oral appeal was made, containing, at a minimum the basis for the appeal and a summary of the material presented orally.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**115** Person in charge: Limitations.

(a) No person may serve as the person in charge of transfer operations on more than one vessel at a time during transfers between vessels or between two or more vessels and a facility unless authorized by the COTP.

(b) No person may serve as the person in charge of both a vessel and a facility during transfer operations unless authorized by the COTP.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**118** Advance notice of transfer.

(a) The COTP may require a facility operator to notify the COTP of the time and place of each transfer operation at least 4 hours before it begins for facilities that:

(1) Are mobile;

(2) Are in a remote location;

(3) Have a prior history of oil or hazardous material spills; or

(4) Conduct infrequent transfer operations.

(b) In the case of a vessel to vessel transfer, the COTP may require a vessel operator of a lightering or fueling vessel to notify the COTP of the time and place of each transfer operation, as specified by the COTP, at least 4 hours before it begins.

(c) No person may conduct such transfer operations until advance notice has been given as specified by the COTP.

Note: The notification may be accomplished by submitting a written schedule, periodically updated to be current.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**120** Requirements for transfer.

A transfer is considered to begin when the person in charge on the transferring vessel or facility and the person in charge on the receiving facility or vessel first meet to begin completing the declaration of inspection, as required by Sec. 156.150 of this part. No person shall conduct an oil or hazardous material transfer operation unless:

(a) The vessel's moorings are strong enough to hold during all expected conditions of surge, current, and weather and are long enough to allow adjustment for changes in draft, drift, and tide during the transfer operation;

(b) Transfer hoses and loading arms are long enough to allow the vessel to move to the limits of its moorings without placing strain on the hose, loading arm, or transfer piping system;

(c) Each hose is supported to prevent kinking or other damage to the hose and strain on its coupling.

(d) Each part of the transfer system is aligned to allow the flow of oil or hazardous material;

(e) Each part of the transfer system not necessary for the transfer operation is securely blanked or shut off;

(f) The end of each hose and loading arm that is not connected for the transfer of oil or hazardous material is blanked off using the closure devices required by Sec. Sec. 154.520 and 155.805 of this chapter;

(g) The transfer system is attached to a fixed connection on the vessel and the facility except that when a vessel is receiving fuel, an automatic back pressure shutoff nozzle may be used;

(h) Each overboard discharge or sea suction valve that is connected to the vessel's transfer or cargo tank system is sealed or lashed in the closed position; except when used to receive or discharge ballast in compliance with 33 CFR Part 157;

(i) Each transfer hose has no unrepaired loose covers, kinks, bulges, soft spots, or any other defect which would permit the discharge of oil or hazardous material through the hose material and no gouges, cuts, or slashes that penetrate the first layer of hose reinforcement (``reinforcement" means the strength members of the hose, consisting of fabric, cord and/or metal);

(j) Each hose or loading arm in use meets Sec. Sec. 154.500 and 154.510 of this chapter, respectively;

(k) Each connection meets Sec. 156.130;

(l) Any monitoring devices required by Sec. 154.525 of this chapter are installed and operating properly;

(m) The discharge containment equipment required by Sec. 154.545 of this chapter is readily accessible or deployed as applicable;

(n) The discharge containment required by Sec. Sec. 154.530, 155.310, and 155.320 of this chapter, as applicable, is in place and periodically drained to provide the required capacity;

(o) Each drain and scupper is closed by the mechanical means required by Sec. 155.310;

(p) All connections in the transfer system are leak free except that a component in the transfer system, such as the packing glands of a pump, may leak at a rate that does not exceed the capacity of the discharge containment provided during the transfer operation;

(q) The communications required by Sec. Sec. 154.560 and 155.785 of this chapter are operable for the transfer operation;

(r) The emergency means of shutdown required by Sec. Sec. 154.550 and 155.780 of this chapter, as applicable, is in position and operable;

(s) There is a person in charge on the transferring vessel or facility and the receiving vessel or facility except as otherwise authorized under Sec. 156.115;

(t) Each person in charge required by paragraph (s) of this section:

(1) Is at the site of the transfer operation and immediately available to the transfer personnel;

(2) Has in his or her possession a copy of the facility operations manual or vessel transfer procedures, as appropriate; and

(3) Conducts the transfer operation in accordance with the facility operations manual or vessel transfer procedures, as appropriate;

(u) The personnel required, under the facility operations manual and the vessel transfer procedures, to conduct the transfer operation:

(1) Are on duty; and

(2) Conduct the transfer operation in accordance with the facility operations manual or vessel transfer procedures, as appropriate;

(v) At least one person is at the site of the transfer operation who fluently speaks the language or languages spoken by both persons in charge;

(w) The person in charge of the transfer on the transferring vessel or facility and the person in charge of it on the receiving vessel or facility have held a conference, to ensure that each person in charge understands--

(1) The identity of the product to be transferred;

(2) The sequence of transfer operations;

(3) The transfer rate;

(4) The name or title and location of each person participating in the transfer operation;

(5) Details of the transferring and receiving systems including procedures to ensure that the transfer pressure does not exceed the maximum allowable working pressure (MAWP) for each hose assembly, loading arm and/or transfer pipe system;

(6) Critical stages of the transfer operation;

(7) Federal, state, and local rules that apply to the transfer of oil or hazardous material;

(8) Emergency procedures;

(9) Discharge containment procedures;

(10) Discharge reporting procedures;

(11) Watch or shift arrangement;

(12) Transfer shutdown procedures; and,

(13) If the persons use radios, a predetermined frequency for communications during the transfer, agreed upon by both.

(x) The person in charge of transfer operations on the transferring vessel or facility and the person in charge of transfer operations on the receiving vessel or facility agree to begin the transfer operation;

(y) Between sunset and sunrise the lighting required by Sec. Sec. 154.570 and 155.790 of this chapter is provided; and

(z) For transfer operations between tank barges from sunset to sunrise, lighting is provided as described in Sec. 155.790 of this chapter.

(aa) A transfer operation which includes collection of vapor emitted from a vessel's cargo tanks through a venting system not located on the vessel must have the following verified by the person in charge:

(1) Each manual valve in the vapor collection system is correctly positioned to allow the collection of cargo vapor;

(2) A vapor collection hose or arm is connected to the vessel's vapor connection;

(3) The electrical insulating device required by Sec. 154.810(g) of this chapter or 46 CFR 39.40-3(c) is fitted between the facility vapor connection and the vessel vapor connection;

(4) The initial loading rate and the maximum transfer rate are determined;

(5) The maximum and minimum operating pressures at the facility vapor connection are determined;

(6) The tank barge overfill control system, if installed, is connected to the facility, tested, and operating properly;

(7) The following have been performed not more than 24 hours prior to the start of the transfer operation:

(i) Each alarm and automatic shutdown system required by subpart E of part 154 of this chapter and 46 CFR part 39 has been tested and found to be operating properly, and

(ii) Analyzers required by Sec. 154.820(a), Sec. 154.824 (d) and (e) of this chapter or 46 CFR 39.40-3(a) have been checked for calibration by use of a span gas;

(8) Each vapor recovery hose has no unrepaired loose covers, kinks, bulges, soft spots, or any other defect which would permit the discharge of vapor through the hose material, and no external gouges, cuts, or slashes that penetrate the first layer of hose reinforcement; and

(9) The oxygen content of the vessel's cargo tanks, if inerted, is at or below 8 percent by volume.

(bb) If the transfer operation involves loading oil, as defined in Sec. 151.05 of this chapter, into a cargo tank, the overfill device required by Sec. 155.480 of this chapter is installed and operating properly.

(cc) Smoking is not permitted in the facilities marine transfer area except in designated smoking areas.

(dd) Welding, hot work operations and smoking are prohibited on vessels during the transfer of flammable or combustible materials, except that smoking may be permitted in accommodation areas designated by the master.

(ee) Each tank level or pressure monitoring device required under 33 CFR 155.490 must be activated and monitored whenever the tank is not actively being subjected to cargo operations.

(Approved by the Office of Management and Budget under control number 2115-0506)

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 88-102, 55 FR 25445, June 21, 1990; CGD 86-034, 55 FR 36255, Sept. 4, 1990; CGD 90-071a, 59 FR 53291, Oct. 21, 1994; CGD 93-056, 61 FR 41461, Aug. 8, 1996; CGD 79-116, 62 FR 25127, May 8, 1997; USCG-2001-9046, 67 FR 58524, Sept. 17, 2002]

Subpart A--Oil and Hazardous Material Transfer Operations

Sec. 156.**125** Discharge cleanup.

(a) Each person conducting the transfer operation shall stop the transfer operation whenever oil or hazardous material from any source is discharged:

(1) In the transfer operation work area; or
(2) Into the water or upon the adjoining shoreline in the transfer area.
(b) Except as permitted under paragraph (c) of this section, no person may resume the transfer operation after it has been stopped under paragraph (a) of this section, unless:
(1) Oil or hazardous material discharged in the transfer operation work area is cleaned up; and
(2) Oil or hazardous material discharged into the water or upon the adjoining shoreline is cleaned up, or is contained and being cleaned up.
(c) The COTP may authorize resuming the transfer operation if it is deemed appropriate.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**130** Connection.

(a) Each person who makes a connection for transfer operations shall:
(1) Use suitable material in joints and couplings to ensure a leak-free seal;
(2) Use a bolt in at least every other hole, and in no case less than four bolts, in each temporary bolted connection that uses a flange that meets American National Standards Institute (ANSI) standard flange requirements under Sec. 154.500(d)(2) of this chapter;
(3) Use a bolt in each hole in each temporary bolted connection that uses a flange other than one that meets ANSI standards;
(4) Use a bolt in each hole of each permanently connected flange;
(5) Use bolts of the correct size in each bolted connection; and
(6) Tighten each bolt and nut uniformly to distribute the load and sufficiently to ensure a leak free seal.
(b) A person who makes a connection for transfer operations must not use any bolt that shows signs of strain or is elongated or deteriorated.
(c) Except as provided in paragraph (d) of this section, no person may use a connection for transfer operations unless it is:
(1) A bolted or full threaded connection; or
(2) A quick-connect coupling acceptable to the Commandant.
(d) No person may transfer oil or hazardous material to a vessel that has a fill pipe for which containment cannot practically be provided unless an automatic back pressure shutoff nozzle is used.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36256, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**150** Declaration of inspection.

(a) No person may transfer oil or hazardous material to or from a vessel unless each person in charge, designated under Sec. Sec. 154.710 and 155.700 of this chapter, has filled out and signed the declaration of inspection form described in paragraph (c) of this section.

(b) No person in charge may sign the declaration of inspection unless he or she has determined by inspection, and indicated by initialling in the appropriate space on the declaration of inspection form, that the facility or vessel, as appropriate, meets Sec. 156.120.

(c) The declaration of inspection may be in any form but must contain at least:

(1) The name or other identification of the transferring vessel or facility and the receiving vessel or facility;

(2) The address of the facility or location of the transfer operation if not at a facility;

(3) The date and time the transfer operation is started;

(4) A list of the requirements in Sec. 156.120 with spaces on the form following each requirement for the person in charge of the vessel or facility to indicate by initialling that the requirement is met for the transfer operation; and

(5) A space for the date, time of signing, signature, and title of each person in charge during transfer operations on the transferring vessel or facility and a space for the date, time of signing, signature, and title of each person in charge during transfer operations on the receiving facility or vessel certifying that all tests and inspections have been completed and that they are both ready to begin transferring product; and

(6) The date and time the transfer operation is completed.

(d) The form for the declaration of inspection may incorporate the declaration-of-inspection requirements under 46 CFR 35.35-30.

(e) The vessel and facility persons in charge shall each have a signed copy of the declaration of inspection available for inspection by the COTP during the transfer operation.

(f) The operators of each vessel and facility engaged in the transfer operation shall retain a signed copy of the declaration of inspection on board the vessel or at the facility for at least 1 month from the date of signature.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36256, Sept. 4, 1990; CGD 93-056, 61 FR 41461, Aug. 8, 1996]

Subpart A--Oil and Hazardous Material Transfer Operations

Sec. 156.**160** Supervision by person in charge.

(a) No person may connect or disconnect a hose, top off a tank, or engage in any other critical procedures during the transfer operation unless the person in charge, required by Sec. 156.120(s), supervises that procedure.

(b) No person may start the flow of oil or hazardous material to or from a vessel unless instructed to do so by either person in charge.

(c) No person may transfer oil or hazardous material to or from a vessel unless each person in charge is in the immediate vicinity and immediately available to the transfer personnel.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36256, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**170** Equipment tests and inspections.

(a) Except as provided in paragraph (d) of this section, no person may use any equipment listed in paragraph (c) of this section for transfer operations unless the vessel or facility operator, as appropriate, tests and inspects the equipment in accordance with paragraphs (b), (c) and (f) of this section and the equipment is in the condition specified in paragraph (c) of this section.

(b) During any test or inspection required by this section, the entire external surface of the hose must be accessible.

(c) For the purpose of paragraph (a) of this section:

(1) Each nonmetallic transfer hose must:

(i) Have no unrepaired loose covers, kinks, bulges, soft spots or any other defect which would permit the discharge of oil or hazardous material through the hose material, and no gouges, cuts or slashes that penetrate the first layer of hose reinforcement as defined in Sec. 156.120(i).

(ii) Have no external deterioration and, to the extent internal inspection is possible with both ends of the hose open, no internal deterioration;

(iii) Not burst, bulge, leak, or abnormally distort under static liquid pressure at least 1\1/2\ times the maximum allowable working pressure; and

(iv) Hoses not meeting the requirements of paragraph (c)(1)(i) of this section may be acceptable after a static liquid pressure test is successfully completed in the presence of the COTP. The test medium is not required to be water.

(2) Each transfer system relief valve must open at or below the pressure at which it is set to open;

(3) Each pressure gauge must show pressure within 10 percent of the actual pressure;

(4) Each loading arm and each transfer pipe system, including each metallic hose, must not leak under static liquid pressure at least 1\1/ 2\ times the maximum allowable working pressure; and

(5) Each item of remote operating or indicating equipment, such as a remotely operated valve, tank level alarm, or emergency shutdown device, must perform its intended function.

(d) No person may use any hose in underwater service for transfer operations unless the operator of the vessel or facility has tested and inspected it in accordance with paragraph (c)(1) or (c)(4) of this section, as applicable.

(e) The test fluid used for the testing required by this section is limited to liquids that are compatible with the hose tube as recommended by the hose manufacturer.

(f) The frequency of the tests and inspections required by this section must be:

(1) For facilities, annually or not less than 30 days prior to the first transfer conducted past one year from the date of the last tests and inspections;

(2) For a facility in caretaker status, not less than 30 days prior to the first transfer after the facility is removed from caretaker status; and

(3) For vessels, annually or as part of the biennial and mid-period inspections.

(g) If a facility or vessel collects vapor emitted from a vessel cargo tank with a vapor control system, the system must not be used unless the following tests and inspections are satisfactorily completed:

(1) Each vapor hose, vapor collection arm, pressure or vacuum relief valve, and pressure sensor is tested and inspected in accordance with paragraphs (b), (c), and (f) of this section;

(2) Each remote operating or indicating device is tested for proper operation in accordance with paragraph (f) of this section;

(3) Each detonation arrester required by Sec. 154.820, Sec. 154.826(a), and Sec. 154.828(a) of this chapter or 46 CFR 39.40-3(d), and each flame arrester required by Sec. 154.826(a), Sec. 154.828 (a) and (c) of this chapter has been inspected internally within the last year, or sooner if operational experience has shown that frequent clogging or rapid deterioration is likely; and

(4) Each hydrocarbon and oxygen analyzer required by Sec. 154.820(a) and Sec. 154.824 (d) and (e) of this chapter or 46 CFR 39.40-3(a) is calibrated:

(i) Within the previous two weeks, or

(ii) Within 24 hours prior to operation when the vapor control system is operated less frequently than once a week.

(h) Upon the request of the owner or operator, the COTP may approve alternative methods of compliance to the testing requirements of paragraph (c) of this section if the COTP determines that the alternative methods provide an equal level of protection.

(Approved by the Office of Management and Budget under control number 2115-0096)

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 88-102, 55 FR 25445, June 21, 1990; CGD 86-034, 55 FR 36256, Sept. 4, 1990; CGD 93-056, 61 FR 41461, Aug. 8, 1996]

Subpart B--Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**200** Applicability.

Source: CGD 78-180, 49 FR 11172, Mar. 26, 1984, unless otherwise noted.

This subpart applies to each vessel to be lightered and each service vessel engaged in a lightering operation in the marine environment beyond the baseline from which the territorial sea is measured when the oil or hazardous material lightered is destined for a port or place subject to the jurisdiction of the U.S. This subpart does not apply to lightering operations involving public vessels, or to the dedicated response vessels and vessels of opportunity in accordance with the National Contingency Plan (40 CFR parts 9 and 300) when conducting response activities. These rules are in addition to the rules of subpart A of this part, as well as the rules in the applicable sections of parts 151, 153, 155, 156, and 157 of this chapter.

[CGD 93-081, 60 FR 45017, Aug. 29, 1995]

Subpart B_Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**205** Definitions.

(a) In addition to the terms defined in this section, the definitions in Sec. 154.105 of this chapter apply to this subpart and to subpart C.

(b) As used in this subpart and subpart C:

Lightering or Lightering operation means the transfer of a cargo of oil or a hazardous material in bulk from one vessel to another, including all phases of the operation from the beginning of the mooring operation to the departure of the service vessel from the vessel to be lightered, except when that cargo is intended only for use as fuel or lubricant aboard the receiving vessel.

Marine environment means--

(1) The navigable waters of the United States;

(2) The waters of an area over which the United States asserts exclusive fishery management authority; and

(3) The waters superadjacent to the Outer Continental Shelf of the United States.

Service vessel means the vessel which receives a cargo of oil or a hazardous material from another vessel in a lightering operation.

Vessel to be lightered means the vessel which transports a cargo of oil or a hazardous material to a place within the marine environment for transfer of that cargo to another vessel for further transport to a port or place subject to the jurisdiction of the United States. The term ``vessel to be lightered" does not include drilling rigs, or offshore supply vessels transferring cargo intended for use as fuel or lubricant aboard the receiving vessel.

Work includes any administrative duties associated with the vessel whether performed on board the vessel or onshore.

[CGD 78-180, 49 FR 11172, Mar. 26, 1984, as amended by CGD 86-034, 55 FR 36256, Sept. 4, 1990; CGD 90-052, 58 FR 48436, Sept. 15, 1993; CGD 93-081, 60 FR 45017, Aug. 29, 1995]

Subpart B--Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**210** General.

(a) No vessel may transfer oil or hazardous materials in a port or place subject to the jurisdiction of the United States, if the cargo has been lightered from another vessel, unless:

(1) The regulations in this subpart have been complied with;

(2) Both the vessel to be lightered and service vessel have, on board, at the time of transfer, a valid Certificate of Inspection, Certificate of Compliance, or a Tank Vessel Examination Letter, as would have been required under 46 U.S.C. 3710 or 3711, had the transfer taken place in a port or place subject to the jurisdiction of the United States;

(3) The delivering and receiving vessels have on board at the time of transfer, evidence that each vessel is operating in compliance with section 311(j) of the Federal Water Pollution Control Act (33 U.S.C. 1321(j)) and applicable regulations issued under the authority of section 311(j) in the form of a Declaration of Inspection as required by Sec. 156.150 and a vessel response plan if required under part 155 of this chapter; and

Note: Under 46 U.S.C. 3715, the delivering and receiving vessels must have on board at the time of transfer, a Certificate of Financial Responsibility that would be required if the transfer had taken place in a location subject to the jurisdiction of the U.S. Regulations concerning

Certificates of Financial Responsibility for vessels using the navigable waters of the U.S. are in part 130 of this chapter.

(4) The vessel to be lightered has on board, at the time of transfer, an International Oil Pollution Prevention (IOPP) Certificate or equivalent documentation of compliance with Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), as would be required by Part 151 of this chapter for vessels in navigable waters of the United States. The IOPP Certificate or documentation of compliance shall be that prescribed by Sec.Sec. 151.19 and 151.21 of this chapter, and shall be effective under the same timetable as specified in Sec. 151.19.

(b) Lightering operations involving hazardous materials, other than oil, may be conducted only with the specific approval of the Commandant. A request to lighter hazardous materials, other than oil, must be submitted to Commandant (G-M) prior to the planned beginning of lightering operations. The request must include the information described in Sec. 156.215(a) to the extent known, for the initial transfer, and the estimated frequency of subsequent lightering operations. After the entry into force of Annex II to MARPOL 73/78, vessels lightering hazardous materials shall carry an International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (1973), if required by Annex II to MARPOL 73/78, or equivalent documentation of compliance with the annex.

(c) In an emergency, the COTP, upon request, may authorize a deviation from any rule in this part if the COTP determines that its application will endanger persons, property, or the environment.

(d) On vessels conducting lightering operations in a designated lightering zone, a licensed individual or seaman may not work, except in an emergency or a drill, more than 15 hours in any 24-hour period, or more than 36 hours in any 72-hour period, including the 24-hour and 72-hour periods prior to commencing lightering operations.

[CGD 78-180, 49 FR 11172, Mar. 29, 1984, as amended by CGD 88-052, 53 FR 25122, July 1, 1988; CGD 90-052, 58 FR 48436, Sept. 15, 1993; CGD 93-081, 60 FR 45017, Aug. 29, 1995; USCG-2002-12471, 67 FR 41333, June 18, 2002]

Subpart B--Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**215** Pre-arrival notices.

(a) The master, owner or agent of each vessel to be lightered must give at least 24 hours advance notice to the Captain of the Port nearest the lightering location or zone, prior to arrival in the lightering location or zone. This advance notice must include:

(1) The vessel's name, call sign or official number, and registry:

(2) The cargo type (if oil) or shipping name (if hazardous material) and approximate amount on board;

(3) The number of transfers expected and the amount of cargo expected to be transferred during each transfer;

(4) The lightering location or zone to be used;

(5) The estimated time of arrival in the lightering location or zone;

(6) The estimated duration of transfer operations; and

(7) The name and destination of service vessel(s).

(b) In the event the estimated time of arrival in the lightering location or zone changes by more than six hours, the Master, owner or agent of each vessel to be lightered must advise the Captain of the Port of this change as soon as possible.

(c) Where lightering is conducted as a result of collision,
grounding, tank rupture or any similar emergency, immediate notice must be given to the Captain of the Port.

(d) In addition to the other requirements in this section, the master, owner, or agent of a vessel that requires a Tank Vessel Examination (TVE) or other special Coast Guard inspection in order to lighter in a designated lightering zone must request the TVE or other inspection from the cognizant Captain of the Port at least 72 hours prior to commencement of lightering operations.

[CGD 78-180, 49 FR 11172, Mar. 26, 1984, as amended by CGD 90-052, 58 FR 48437, Sept. 15, 1993; CGD 93-081, 60 FR 45017, Aug. 29, 1995]

Subpart B_Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**220** Reporting of incidents.

(a) An immediate report must be made to the nearest Captain of the Port, by the service vessel, if fire, explosion, collision, grounding or any similar emergency, which poses a threat to the vessels involved, occurs during lightering.

(b) Any discharge of oil or hazardous material into the water shall be reported, by the service vessel, in accordance with the procedures specified in Sec. 151.15 of this chapter.

Subpart B--Special Requirements for Lightering of Oil and Hazardous
Material Cargoes

Sec. 156.**225** Designation of lightering zones.

The District Commander is delegated the authority to designate lightering zones and their operating requirements, where they are necessary for safety or environmental protection. When a lightering zone has been designated, lightering operations in a given geographic area may only be conducted within the designated lightering zone.

Subpart B_Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**230** Factors considered in designating lightering zones.

The following factors are considered in designating a lightering zone:

(a) The findings of the environmental analysis or, if prepared, the Environmental Impact Statement;

(b) The proximity of the zone to:

(1) Shipping lanes;

(2) Vessel traffic schemes or vessel separation systems;

(3) Anchorages;

(4) Fixed structures;

(5) Designated marine sanctuaries;

(6) Commercial and recreational fishing areas;

(7) Environmentally sensitive areas; and

(8) Designated units of the National Park System, National Wild and Scenic Rivers System, National Wilderness Preservation System, properties included on the National Register of Historic Places and National Registry of Natural Landmarks, and National Wildlife Refuge System.

(c) The traditional use of areas for lightering operations;

(d) The normal weather and sea conditions in the areas, and their effect on lightering operations, and the fate of possible cargo discharges;

(e) The depth of water and underwater obstructions that may adversely impact anchorages and clearance of vessels;

(f) Other relevant safety, environmental, or economic data.

U.S. Army Corps of Engineers (USACE)

# ACCIDENT PREVENTION PLAN (APP)

For use of this form, see EM 385-1-1; the proponent agency is CESO.

**Purpose:** An APP is a written site-specific Safety & Occupational Health plan that documents project, contract, and job-specific potential hazards in the workplace, and the company policies, controls, and work practices that will be used to minimize those hazards. They are an integral part of the planning and risk management process. The APP must be developed by a Competent Person and reviewed and approved by the prime contractor and corporate safety official. Upon contractor approval, the plan must be submitted to the Contracting Officer (KO) or Contracting Officer Representative (COR) for review and acceptance prior to the performance of any work. No contract work can begin without a KO or COR accepted APP.

The completed APP must be posted on the SOH bulletin board, or a notice posted on the board stating the location of the plan.

## PART 1 - SIGNATURES

**Plan Preparer - For example: Qualified Person (QP), Competent Person (CP), or project Quality Control (QC).**

| | |
|---|---|
| 1. Name: | 2. Title: |
| 3. Email Address: | 4. Phone Number: |
| 5. Signature | |

**Plan Approver - Corporate Safety Official**

| | |
|---|---|
| 1. Name: | 2. Title: |
| 3. Email Address: | 4. Phone Number: |
| 5. Signature | |

**Plan Concurrence - For example: Industrial hygienist, Project Manager, Superintendent, Site Safety & Health Officer, Quality Control, etc.**

| | |
|---|---|
| 1. Name: | 2. Title: |
| 3. Email Address: | 4. Phone Number: |
| 5. Signature: | |

## PART 2: PROJECT INFORMATION

| | |
|---|---|
| 1. Project Name: | |
| 2. Project Address (attach map in Appendix 1): | |
| 3. Estimated Project Start Date: | 4. Estimated Project Completion Date: |
| 5. Project Description / Description of work to be performed: | |

| PART 3: PRIME CONTRACTOR INFORMATION |
|---|
| 1. Prime Contractor Name: |
| 2. Contract Number: |
| 3. Project Manager Name: |
| 4. Quality Control (QC) Manager Name: |
| 5. Contractor Corporate Safety Official Name: |
| 6. Primary Site Safety & Health Officer (SSHO) Name: |
| 7. Alternate Site Safety & Health Officer (SSHO) Name(s): |

| PART 4: SOH COMMITMENT AND POLICY | | |
|---|---|---|
| 1. Provide a statement of safety and health policy detailing commitment to providing a safe and healthful workplace for all employees on this project. | | |
| 2. Provide a statement outlining the Contractor's safety program goals and objectives. | | |
| 3. Identify policies and procedure regarding non-compliance with safety requirements. | | |
| 4. Provide written procedures for holding managers and supervisors accountable for safety. | | |
| 5. Prime contractor is responsible for the implementation and enforcement of the SOH program for contractor employees, subcontractors, suppliers, and visitors at the site of work? | ☐ Yes | ☐ No |
| 6. Prime contractor will require subcontractors, suppliers, and visitors to comply with the APP and EM 385-1-1? | ☐ Yes | ☐ No |
| 7. No work will be performed unless a designated SSHO is present on the site of work. | ☐ Yes | ☐ No |
| 8. A list of all known subcontractor(s) and supplier(s) are listed in Appendix 2. | ☐ Yes | ☐ No |
| 9. If all subcontractor(s) and supplier(s) are not known at the time of initial APP submittal, Appendix 2 will be updated and resubmitted to the KO/COR for acceptance prior to the start of any work activities. | ☐ Yes | ☐ No |
| 10. All subcontractors will have a copy of the APP, applicable AHAs and will be required to comply with them. | ☐ Yes | ☐ No |
| 11. Subcontractors and suppliers at the site of work will abide by the EM 385-1-1, this APP, and all AHAs. | ☐ Yes | ☐ No |
| 12. This APP and AHAs will be available to all workers at the site of work. | ☐ Yes | ☐ No |

| PART 5: TRAINING | | |
|---|---|---|
| 1. All employees will be trained according to applicable EM 385-1-1, federal, state, and local requirements prior to the commencement of work. | ☐ Yes | ☐ No |

2. The following personnel are identified and designated as personnel responsible for SOH on this project. Add the following documentation to Appendix 3 of this worksheet: 1) SSHO designation letter (ENG Form 6282), 2) instructor signed OSHA 30-hour card (or course completion certificate if within 90 days of having completed the OSHA 30-hour training), and 3) proof of 24 hours of competency of SOH training within the last 3 years for the personnel identified below. (EM 385-1-1, Chapter 2, 2-3 Personnel Qualification/Training):
(Check and list names of personnel being designated)

☐ Primary SSHO Name:

☐ Alternate SSHO Name(s):

3. QP(s) and CP(s) required by EM 385-1-1 (for example, excavation, confined space, scaffolding, fall protection, etc.) for this project will be included in Appendix 3. Include 1) List of names or designation letters and 2) proof of qualification/competency.

| PART 6: SOH INSPECTIONS | | |
|---|---|---|
| 1. All applicable inspections required by EM 385-1-1, contract, federal, state, and local requirements will be completed. | ☐ Yes | ☐ No |

2. The following personnel are assigned to conduct inspections, the type of inspection and frequency for the worksite. At minimum the SSHO must conduct daily site inspections.

| Who will conduct inspection? | Frequency? | What type of inspection? |
|---|---|---|
| | | |

| | | |
|---|---|---|
| 3. Employees that conduct inspections will have technical proficiency needed to perform inspections. Proof of inspector's training/qualification is included in Appendix 3. | ☐ Yes | ☐ No |
| 4. Deficiencies will be documented and tracked as required by this EM 385-1-1? | ☐ Yes | ☐ No |

6. Will any external inspections be required (for example, USCG, OSHA, etc.)? ☐ Yes ☐ No
If yes, describe:

| PART 7: ACCIDENT REPORTING AND INVESTIGATION | | |
|---|---|---|
| 1. Exposure data (man-hours worked) will be reported to KO/COR as required by the contract? | ☐ Yes | ☐ No |
| 2. All accidents will be reported as soon as possible according to EM 385-1-1? | ☐ Yes | ☐ No |
| 3. All accidents occurring incidentally to an operation, project, or facility for which the EM 385-1-1 is applicable will be thoroughly investigated and analyzed. Corrective actions to prevent reoccurrence will be implemented as soon as reasonably possible. The KO/COR will be notified when corrective actions are completed. | ☐ Yes | ☐ No |
| 4. Accident notification will be provided to the KO/COR as stated below: | ☐ Yes | ☐ No |

| ACCIDENT TYPE | KO/COR NOTIFICATION TIME |
|---|---|
| Fatality, permanent and partial disability, or property damage over $600,000 | Immediately, no later than (NLT) 8 hours |
| All other accidents and near misses | Immediately, NLT 24 hours |

| PART 8: SOH OVERSIGHT | | |
|---|---|---|
| 1. A risk management process that meets or exceeds the requirement of the EM 385-1-1 will be implemented on this project site? | ☐ Yes | ☐ No |
| 2. Hazardous conditions and unsafe acts will be immediately corrected? | ☐ Yes | ☐ No |
| 3. APP and AHAs will be prepared by a QP or CP according to the EM 385-1-1 prior to the start of any work activities on the site of work (as much as the information can be known at that point in time). | ☐ Yes | ☐ No |
| 4. The plans and AHAs will be updated throughout the life of the project to include changes in personnel, equipment, conditions, etc. Additional revisions must be incorporated as necessary to reflect changing site conditions, construction methods, personnel roles and responsibilities and construction schedules. | ☐ Yes | ☐ No |
| 5. No activity/work will be started at the site of work until the APP is reviewed and submitted to the KO/COR for acceptance, with the site-specific plans and procedures required by the EM 385-1-1 to complete the project? | ☐ Yes | ☐ No |
| 6. APP and AHAs will be provided to and reviewed by all workers involved in the activity prior to work? | ☐ Yes | ☐ No |
| 7. Workers will sign AHA(s) to concur with identified job steps and controls needed to mitigate hazards? | ☐ Yes | ☐ No |
| **PART 9: SEVERE WEATHER PLAN** | | |
| 1. The SSHO or designated onsite personnel is responsible for checking the weather conditions at a minimum of twice a day? | ☐ Yes | ☐ No |
| 2. What severe weather forecast will require the SSHO to monitor weather conditions continuously? Describe. | | |
| 3. What are the training requirements for severe weather precautions and actions? | | |
| 4. Identify area of retreat or other actions to be taken such as evacuation, shelter in place, etc. | | |
| 5. Identify procedures to stop outdoor activities if extreme weather conditions to include thunderstorms are in the area. | | |

## PART 10: ACTIVITY HAZARD ANALYSIS (RISK MANAGEMENT)

1. Major phases of work anticipated:

2. Definable Features of Work (DFOW)

*Note*. An activity-specific AHA will be submitted to the KO/COR for each DFOW prior to any work being performed.

3. List equipment to be used:

4. Anticipated High-Risk Activities: (See examples below, check all that apply):

- ☐ Electrical and/or Hazardous Energy
- ☐ Working at Heights
- ☐ Scaffolding
- ☐ Diving
- ☐ Load Handling Equipment
- ☐ Occupational Exposure
- ☐ Confined Space
- ☐ Excavations & Trenching
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

| | | |
|---|---|---|
| 5. Detailed project-specific hazards and controls will be provided utilizing AHAs for each activity/DFOW. | ☐ Yes | ☐ No |
| 6. No work will begin on an activity/DFOW until the initial AHA addressing the project-specific hazards has been developed, reviewed, and accepted by the KO/COR. (See EM 385-1-1 Chapter 2 section 2-6). | ☐ Yes | ☐ No |
| 7. AHAs are living documents and are intended to be created, utilized in the field, and updated (by the workers) as necessary. | ☐ Yes | ☐ No |
| 8. Workers/crews will have accepted AHA(s) that reflects current site conditions, personnel, equipment, control measures, etc. while the work is being performed? | ☐ Yes | ☐ No |
| 9. AHA will be used by the contractor personnel to assure work is being performed consistent with the AHA? | ☐ Yes | ☐ No |
| 10. Once the activity has been completed, the AHA will be available and kept onsite for the length of the contract. | ☐ Yes | ☐ No |
| 11. AHAs for unknown work activities will be submitted to the KO/COR prior to work and attached to Appendix 4 of this document. | ☐ Yes | ☐ No |

12. Who has the authority to accept residual risk on AHA(s)? (List below)

| Category of Risk | Approval Authority (Name and Title) |
|---|---|
| Extremely High Risk | |
| High Risk | |
| Medium Risk | |
| Low Risk | |

| PART 11: REQUIRED PROJECT SITE-SPECIFIC PLANS AND PROCEDURES | | |
|---|---|---|
| 1. Based on a risk assessment of contracted activities and on mandatory OSHA compliance programs, the contractor will ensure that all applicable SOH risks and associated compliance plans are in place. | ☐ Yes | ☐ No |
| 2. Include all project-specific compliance plans, as applicable to the work being performed, and as identified below. The plans will incorporate project-wide procedures to control hazards to which the employees of all project employers may be exposed. | ☐ Yes | ☐ No |
| 3. These plans and procedures will be coordinated with all project employers and be included in project-specific emergency response and evacuation procedures. | ☐ Yes | ☐ No |

4. Address each of the plans in the outline below in the order that they are listed.
   Option 1: If a plan is applicable, develop and attach it to Appendix 5. Submit to the KO/COR with this worksheet for acceptance prior to work.
   Option 2: If a plan is applicable, but all of the minimum required information for the plan is not yet known, provide justification next to each plan title, and provide an expected date the plan will be created, reviewed, and attached to Appendix 5. Submit to the KO/COR with this worksheet for acceptance prior to work.
   Option 3: If a plan is not applicable because of the nature of the work to be performed, provide justification next to each plan title.

| Minimum plans required by EM 385-1-1 | Reference EM 385-1-1 paragraph: | Select Option | Justification for Option 2 and Option 3 |
|---|---|---|---|
| Exposure Control Plan | 3-7.a | | |
| AED Program | 3-7.b | | |
| Construction Site Plan | 4-7.a | | |
| Access/Haul Road Plan | 4-7.b | | |
| Hearing Conservation Program | 5-7.a | | |
| Respiratory Protection Program | 5-7.b | | |
| Hazard Communication (HazCom) Program | 6-7.a | | |
| Process Safety Management (PSM) Program | 6-7.b | | |
| Lead Compliance Plan | 6-7.c | | |
| Asbestos Management Plan | 6-7.d | | |
| Ionizing Radiation Safety Plan | 6-7.e | | |
| Radiofrequency Plan | 6-7.e | | |
| Abrasive Blasting Plan | 6-7.f | | |
| Thermal Stress Management Plan | 6-7.g | | |
| Mold Remediation Plan | 6-7.h | | |
| Silica Compliance Plan | 6-7.i | | |
| Fatigue Management Plan | 6-7.j | | |
| Night Operations Lighting Plan | 7-7 | | |
| Traffic Control Plan | 8-7 | | |
| Fire Prevention Plan | 9-7.a | | |
| Wildland Fire Management Plan | 9-7.b | | |
| Housekeeping Plan (Welding and Cutting) | 10-7 | | |
| Electrical Safety Plan | 11-7.a | | |
| Assured Equipment Grounding Conductor Program | 11-7.b | | |
| Site-Specific Energy Control Plan | 12-7.a | | |
| Standard Lift Plan | 16-7.a & b | | |

| | | | |
|---|---|---|---|
| Standard Lift Plan (Floating Plant) | 16-7.a & c | | |
| Critical Lift Plan | 16-7.a & d | | |
| Pile Driving Plan | 16-7.a & e | | |
| Structural Demolition Plan | 17-7 | | |
| Soft Demolition Plan | 17-7 | | |
| Emergency Plan for Marine Activities | 19-7.a | | |
| Severe Weather Plan for Marine Activities | 19-7.b | | |
| Float Plans | 19-7.c | | |
| Tow Plans | 19-7.d | | |
| Fall Protection and Prevention Plan | 21-7.a | | |
| Rescue Plan | 21-7.b | | |
| Scaffold Work Plan | 22-7.b | | |
| Rope Access Work Plan | 23-7 | | |
| Excavation and Trenching Plan | 25-7 | | |
| Compressed Air Work Plan | 26-7.a & b | | |
| Contingency Response Plan | 26-7.a & c | | |
| Emergency Rescue Plans and Equipment | 26-7.a & d | | |
| Ventilation and Dust Control Plan | 26-7.a & e | | |
| Fire Prevention and Protection Plan | 26-7.a & f | | |
| Formwork and Shoring Plan | 27-7.a | | |
| Precast Concrete Plan | 27-7.b | | |
| Masonry Erection Plan | 27-7.c | | |
| Steel Erection Plan | 28-7 | | |
| Explosive Site Safety Plan | 29-7.a | | |
| Master Blasting Plan | 29-7.b | | |
| Vibration Monitoring Plan | 29-7.c | | |
| Safe Practices Plan | 30-7.a & b | | |
| Dive Operations Plan | 30-7.a & c | | |
| Emergency Management Manual | 30-7.a & d | | |
| Snorkeling Plan | 30-7.a & e | | |
| Tree Maintenance and Removal Plan | 31-7 | | |
| Construction Safety and Phasing Plan | 32-7.a | | |
| Safety Plan Compliance Document | 32-7.b | | |
| Aviation Pre-Accident Plan | 33-7.f | | |
| Confined Space Plan | 34-7.b & c | | |
| Housekeeping Plan (Sanitation) | 35-7.a | | |
| Extermination Plan | 35-7.b | | |
| Site Safety and Health Plan | 36-7.a | | |
| Comprehensive Work Plan | 36-7.b | | |
| Emergency Response Plan | 36-7.c | | |

| PART 12: PROJECT SITE COORDINATION |
|---|
| 1. Provide procedures for coordinating SOH activities with other employers on the site of work: |

| PART 13: REQUIRED APPENDICES<br>Indicate if each of the following items are, or are not, attached to this plan. | | |
|---|---|---|
| Appendix 1. Project Map | ☐ Yes | ☐ No |
| Appendix 2. Subcontractor/Suppliers | ☐ Yes | ☐ No |
| Appendix 3. Personal Qualifications and Designations | ☐ Yes | ☐ No |
| Appendix 4. Activity Hazard Analysis | ☐ Yes | ☐ No |
| Appendix 5. Site-specific plans and procedures | ☐ Yes | ☐ No |
| Appendix 6. Any additional plans, procedures, etc. can be added to this appendix and will be coordinated with the KO/COR. | ☐ Yes | ☐ No |

# QUALITY CONTROL REPORT-BUCKET/PIPELINE

| PAGE NO. |
|---|
| Page 1 of X |

| CONTRACT NO. | CONTRACT TITLE | CONTRACTOR | REPORT NO. |
|---|---|---|---|
| W912DS26CXXXX NA | Maintenance Dredging of Sandy Hook Channel | | X |

| CHARACTER OF REPORT | ☑ MAINTENANCE | ☐ NEW WORK | ENVIRONMENT | DATE X/XX/2026 |
|---|---|---|---|---|

| DREDGE | NAME AND TYPE | | | | | SHIFTS PER DAY | | DAYS PER WEEK | |
|---|---|---|---|---|---|---|---|---|---|
| | XXX | | | | | | | | |
| | SIZE | | HORSEPOWER | | | NO. OF CREW MEMBERS | | | |
| | PIPELINE | DIPPER OR BUCKET | DREDGE PUMP | SUCTION PIPE JET | CUTTER OR BUCKET | DREDGE | SHORE | OTHER | TOTAL |
| | | | | | | | | | |

## LOCATION/CHANNEL OF WORK

| LOCATION OF WORK | REACH DREDGED: STATION TO STATION | DISPOSAL AREA USE | QTY DEPOSITED GROSS (CY) | CUMULATIVE AND QTY DEPOSIT FOR DA (CY) |
|---|---|---|---|---|
| | | | | |

| CHARACTER OF MATERIAL (%) | GRAVEL | SAND | CLAY | MUD | SILT | HARDPAN | STONE | SHELL | OTHER |
|---|---|---|---|---|---|---|---|---|---|
| | % | % | % | % | % | % | % | % | % |

| CHANNEL CONDITION | AVERAGE DEPTH | BEFORE DREDGING | AFTER DREDGING |
|---|---|---|---|
| | | | |

| RIVER/TIDE STAGE | MIN | TIME | MAX | TIME | GAGE LOCATION |
|---|---|---|---|---|---|
| | 0 | 00:00 | 0 | 00:00 | |
| | MIN 0 | TIME 00:00 | MAX 0 | TIME 00:00 | GAGE DATUM |

| WEATHER CONDITION | WEATHER | TEMP (min/max) | VISIBILITY | WIND |
|---|---|---|---|---|
| | Weather Caused No Delay | F / F | MI | MPH |

## WORK PERFORMED

| ITEM | UNIT | QUANTITY |
|---|---|---|
| AVERAGE WIDTH OF CUT | FT | |
| TOTAL ADVANCED THIS PERIOD | FT | |
| TOTAL ADVANCE PREVIOUSLY | FT | |
| TOTAL ADVANCE TO DATE | FT | |
| SCOWS LOADED | NUMBER | |
| AVERAGE LOAD PER SCOW | CY | |
| FLOATING PIPE 0 | SHORE PIPE 0 | SUBMERGED PIPE |
| TOTAL LENGTH OF DISCHARGE PIPE | FT | |
| CUBIC YARDS REMOVED | GROSS | CREDITED |
| AMOUNT DREDGE THIS DATE | | |
| AMOUNT PREVIOUSLY REPORTED | | |
| TOTAL AMOUNT DREDGED TO DATE | | |
| AMOUNT DREDGED PER PUMPING/CUTTING HR | | |

OPERATING SUPPLIES

| COMMODITY | | CONSUMED | CREDITED |
|---|---|---|---|
| ITEM | UNIT | QUANTITY | QUANTITY |
| FUEL | BBL | | |
| ELECTRICITY | KW | | |
| LUBRICANTS | GAL | | |

| MOB DATE | DREDGE START | DEMOB DATE |
|---|---|---|
| | | |

## DISTRIBUTION OF TIME AND MILES RUN

| | HR. | MIN. |
|---|---|---|
| EFFECTIVE WORKING TIME | | |
| PUMPING OR DREDGING | | |
| PCT OF EFFECTIVE TIME | | |
| BOOSTER (IN LINE) | | |
| NON-EFFECTIVE WORKING TIME (CHARGEABLE COST OF WORK) | | |
| HANDLING PIPE LINES | | |
| HANDLING ANCHOR LINES | | |
| CLEARING PUMP AND PUMP LINES | | |
| CLEARING CUTTER AND SUCTION HEAD | | |
| WAITING FOR SCOWS | | |
| TO AND FROM WHARF OR ANCHORAGE | | |
| CHANGING LOCATION OF PLANT ON JOB | | |
| LOSS DUE TO OPPOSING NATURAL ELEMENTS | | |
| SHORE LINE AND SHORE WORK | | |
| WAITING FOR BOOSTER | | |
| MINOR OPERATING REPAIRS (EXPLAIN IN REMARKS) | | |
| WAITING FOR ATTENDANT PLANT | | |
| PREPARATION AND MAKING UP TOW | | |
| TRANSFERRING PLANT BETWEEN WORKS | | |
| LAY TIME OFF SHIFT AND SATURDAYS | | |
| SUNDAYS AND HOLIDAYS | | |
| FIRE DRILL | | |
| MOVING OUT OF WAY OF TRAFFIC | | |
| MISCELLANEOUS (EXPLAIN IN REMARKS) | | |
| TOTAL NON-EFFECTIVE TIME | | |
| PCT. OF NON-EFFECTIVE | | |
| TOTAL EFFECTIVE AND NON-EFFECTIVE TIME | 24 | 0 |

RMS FORM 4267

| QUALITY CONTROL REPORT-BUCKET/PIPELINE | | | PAGE NO. Page 2 of 4 |
|---|---|---|---|
| CONTRACT NO. W912DS26CXXXX NA | CONTRACT TITLE Maintenance Dredging of Sandy Hook Channel | CONTRACTOR | REPORT NO. XX |
| DREDGE | XXX | | DATE X/XX/2026 |

| ATTENDANT PLANT | | | | LOST TIME (NOT CHARGEABLE TO COST OF WORK) | | |
|---|---|---|---|---|---|---|
| ITEM | NAME OR NUMBER | H.P. | HOURS | | HR | MIN |
| | | | | MAJOR REPAIRS | | |
| | | | | CESSATION | | |
| | | | | COLLISIONS | | |
| | | | | MISCELLANEOUS | | |
| | | | | TOTAL LOST TIME | | |
| | | | | PERCENTAGE OF TOTAL TIME | | |
| | | | | TOTAL TIME IN PERIOD | 24 | 0 |

## QC NARRATIVE(S)

| CONTRACTOR CERTIFICATION | On behalf of the contractor, I certify that this Report is complete and correct and all equipment and material used and work performed during this Reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above. | | |
|---|---|---|---|
| QC REPRESENTATIVE'S SIGNATURE | DATE | SUPERINTENDENT'S INITIALS | DATE |

RMS FORM 4267

**TRANSPORTATION AND PLACEMENT LOG**
**CONTRACT NUMBER**
**PROJECT NAME**

**DATE:** _____

**LOAD NUMBER:** _____

**INSPECTOR:** _____

**WEATHER CONDITIONS**: _____ **WIND SPEED**: _____**VISIBILITY**: _____

**TUG NAME**: _____ **SCOW NAME**: _____

**DESCRIPTION OF MATERIAL**: _____

| | Date | Time |
|---|---|---|
| LOADING STARTED: | _____ | _____ |
| LOADING COMPLETED: | _____ | _____ |
| SCOW DEPARTED DREDGING SITE: | _____ | _____ |
| SCOW ARRIVED DEWATERING SITE: | _____ | _____ |
| SCOW DEPARTED DEWATERING SITE: | _____ | _____ |
| SCOW ARRIVED PROCESSING SITE: | _____ | _____ |
| SCOW DEPARTED PROCESSING SITE: | _____ | _____ |

COMMENTS: _____
_____
_____
_____
_____

_____
Inspector Signature/date

## DAILY SITE SAFETY & HEALTH INSPECTION LOG

**Project:**

**Date:** _____

Dredges, Scows, and other Work Areas Checked:

_____
_____
_____
_____
_____

Names of All Employees in the Work area

_____ _____
_____ _____
_____ _____
_____ _____

Personal Protective Equipment and Work Equipment in Use

_____
_____
_____
_____
_____

Special Safety and Health Issues & Notes

_____
_____
_____
_____
_____
_____

_____ _____
Name of Safety Personnel Signature of Safety Personnel

**DAILY WHALE REPORTING LOG**

PROJECT: MAINTENANCE DREDGING, _____

1. DATE: _____

2. WHALE SIGHTED: YES_____ NO_____

3. TYPE OF WHALE: _____

4. TIME: _____

5. NUMBER OF WHALES SIGHTED:

   ADULT_____ JUVENILE_____

6. NUMBER OF WHALES INJURED:

   ADULT_____ JUVENILE_____ WORK-RELATED: YES____ NO____

7. NUMBER OF WHALES KILLED:

   ADULT_____ JUVENILE_____ WORK-RELATED: YES____ NO____

8. LOCATION: _____

9. REMARKS: _____

10. SIGNATURE: _____

11. TITLE: _____

**TURTLE OBSERVATION REPORTING LOG**

PROJECT: MAINTENANCE DREDGING, _____

LOAD
NUMBER: _____ DATE _____ TIME _____

LOCATION IN CHANNEL: LATITUDE _____ LONGITUDE _____

WEATHER
CONDITIONS _____

_____

_____

PORT BASKET CONTENTS

_____

_____

_____

_____

_____

_____

TURTLE OR TURTLE PARTS PRESENT: YES _____ NO _____

COMMENTS AND OTHER OBSERVATIONS

_____

_____

_____

_____

_____

BRIDGE WATCH: TIME _____ LOCATION _____

NUMBER OF TURTLES SIGHTED _____

_____

OBSERVER'S NAME

## Sea Turtle Handling and Resuscitation

It is unlikely that sea turtles will survive entrainment in a hopper dredge, as the turtles found in the dragheads are usually dead, dying, or dismantled. However, the procedures for handling live sea turtles follow in case the unlikely event should occur.

*Please photograph all turtles (alive or dead) and turtle parts found during dredging activities and complete the Incident Report of Sea Turtle Take.*

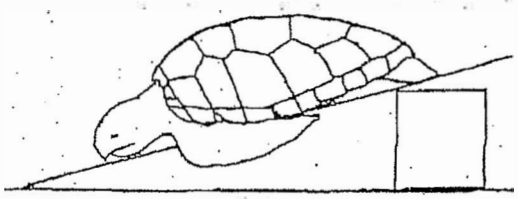
Live sea turtles

When a sea turtle is found in the dredge gear, observe it for activity and potential injuries.

- **If the turtle is actively moving**, it should be retained onboard until evaluated for injuries by a permitted rehabilitation facility. Due to the potential for internal injuries associated with hopper entrainment, it is necessary to transport the live turtle to the nearest rehabilitation facility as soon as possible, following these steps:
  1) Contact the nearest rehabilitation facility to inform them of the incident.
  2) Keep the turtle shaded and moist (e.g., with a water-soaked towel over the eyes, carapace, and flippers).
  3) Contact the crew boat to pick up the turtle as soon as possible from the dredge (within 12 to 24 hours maximum). The crew boat should be aware of the potential for such an incident to occur and should develop an appropriate protocol for transporting live sea turtles.
  4) Transport the live turtle to the closest permitted rehabilitation facility able to handle such a case.

  Do not assume that an inactive turtle is dead. The onset of rigor mortis and/or rotting flesh are often the only definite indications that a turtle is dead. Releasing a comatose turtle into any amount of water will drown it, and a turtle may recover once its lungs have had a chance to drain.

- **If a turtle appears to be comatose** (unconscious), contact the designated stranding/rehabilitation personnel immediately. Once the rehabilitation personnel has been informed of the incident, attempts should be made to revive the turtle at once. Sea turtles have been known to revive up to 24 hours after resuscitation procedures have been followed. The resuscitation regulations can be found at 50 CFR 223.206(d)(1).
  - Place the animal on its bottom shell (plastron) so that the turtle is right side up and elevate the hindquarters at least 6 inches for a period of 4 up to 24 hours. The degree of elevation depends on the size of the turtle; greater elevations are required for larger turtles.
  - Periodically, rock the turtle gently left to right and right to left by holding the outer edge of the shell (carapace) and lifting one side about 3 inches then alternate to the other side.
  - Periodically, gently conduct one of the above reflex tests to see if there is a response.
  - Keep the turtle in a safe, contained place, shaded, and moist (e.g., with a water-soaked towel over the eyes, carapace, and flippers) and observe it for up to 24 hours.
  - If the turtle begins actively moving, retain the turtle until the appropriate rehabilitation personnel can evaluate the animal. The rehabilitation facility should eventually release the animal in a manner that minimizes the chances of re-impingement and potential harm to the animal (i.e., from cold stunning).
  - Turtles that fail to move within several hours (up to 24) must be handled in the manner described in Appendix B-II-E, or transported to a suitable facility for necropsy (if the condition of the sea turtle allows and the rehabilitation facility wants to necropsy the animal).



**Stranding/rehabilitation contacts**

- In New York, the stranding network contact is Kim Durham, Riverhead Foundation for Marine Research, 431 East Main Street, Riverhead, NY (631-369-9829), and New Jersey contacts include Bob Schoelkopf at the Marine Mammal Stranding Center, P.O. Box 773, Brigantine, NJ (609-266-0538).
- Dana Hartely, (NOAA Fisheries Stranding Network Coordinator: (508) 495-2090) should also be contacted immediately for any marine mammal injuries or mortalities.

## ENDANGERED SPECIES OBSERVER FORM

**Daily Report**

Date: _____
Geographic Site: _____
Location: Lat/Long _____ Vessel Name _____

Weather conditions: _____
_____

Water temperature: Surface _____ Below midwater (if known) _____

Condition of screening apparatus: _____
_____
_____

Incidents involving endangered or threatened species? (Circle) Yes No
(*If yes, fill out Incident Report of Sea Turtle/Shortnose Sturgeon Mortality*)

Comments (type of material, biological specimens, unusual circumstances, etc:) _____
_____
_____
_____
_____
_____

Observer's Name: _____
Observer's Signature: _____

*BRIDGE WATCH SUMMARY*

| Species | # of Sightings | # of Animals | Comments |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## Incident Report of Sea Turtle Take

Species _____ Date _____ Time (specimen found) _____

Geographic Site _____
Location: Lat/Long_____
Vessel Name _____ Load #_____
Begin load time _____ End load time_____
Begin dump time _____ End dump time _____

Sampling method _____
Condition of screening _____ Location where specimen recovered_____
_____

Draghead deflector used? YES / NO Rigid deflector draghead? YES / NO
Condition of deflector _____

Weather conditions_____
_____

Water temp: Surface _____ Below midwater (if known)_____

**Species Information:** *(please designate cm/m or inches.)*

Head width _____ Plastron length _____
Straight carapace length (or total length) _____
Straight carapace width_____
Curved carapace length _____
Curved carapace width _____

Condition of specimen/description of animal (please complete attached diagram)_____
_____
_____

Turtle Decomposed: NO SLIGHTLY MODERATELY SEVERELY

Turtle tagged: YES / NO *Please record all tag numbers.* Tag # _____

Photograph attached: YES / NO
(please label *species, date, geographic site* and *vessel name* on back of photograph)

Comments/other (include justification on how species was identified)
_____
_____
_____
_____

Observer's Name _____
Observer's Signature _____

**Incident Report of Sea Turtle Take**

Draw wounds, abnormalities, tag locations on diagram and briefly describe below.

Description of animal:

**Incident Report of Atlantic Sturgeon Take**

*Photographs should be taken and the following information should be collected from all sturgeon (alive and dead) found in association with the project.*

Date_____ Time (specimen found) _____

Geographic Site _____
Location: Lat/Long_____
Vessel Name_____ Load #_____
Begin load time_____ End load time _____
Begin dump time_____ End dump time _____

Sampling method_____
Condition of screening _____
Location where specimen recovered_____
_____

Draghead deflector used? YES NO Rigid deflector draghead? YES NO
Condition of deflector_____
_____

Weather conditions_____
_____

Water temp: Surface_____ Below midwater (if known) _____

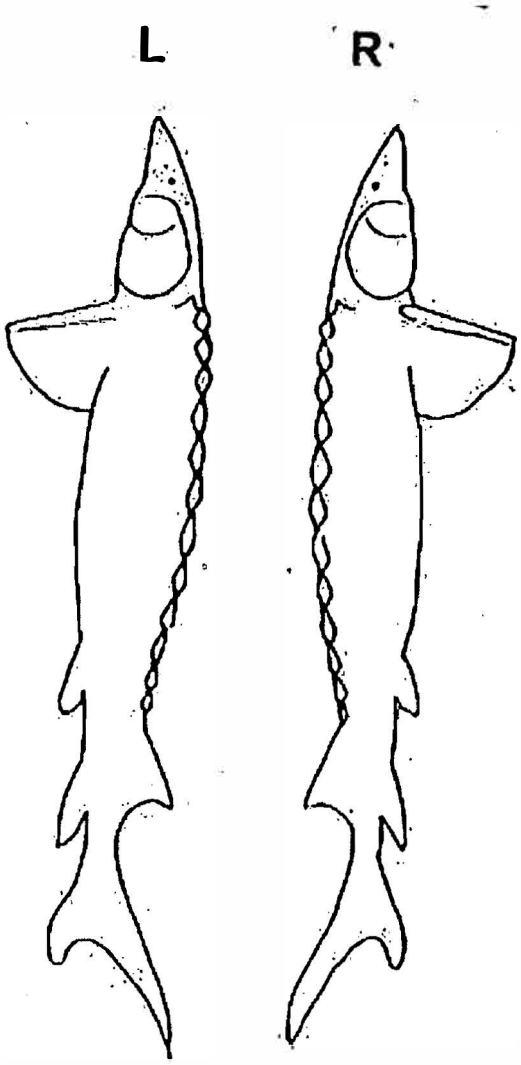
**Species Information:** *(please designate cm/m or inches.)*
Fork length (or total length)_____ Weight _____

Condition of specimen/description of animal_____
_____
_____
_____
_____

Fish Decomposed: NO SLIGHTLY MODERATELY SEVERELY
Fish tagged: YES / NO *Please record all tag numbers.* Tag # _____
Genetic sample taken: YES NO
Photograph attached: YES / NO
(please label *species, date, geographic site* and *vessel name* on back of photograph)
Comments/other (include justification on how species was identified)
_____
_____

Observer's Name_____
Observer's Signature_____

Draw wounds, abnormalities, tag locations on diagram and briefly describe below




Description of fish condition:

**Figure 1: Site Map**

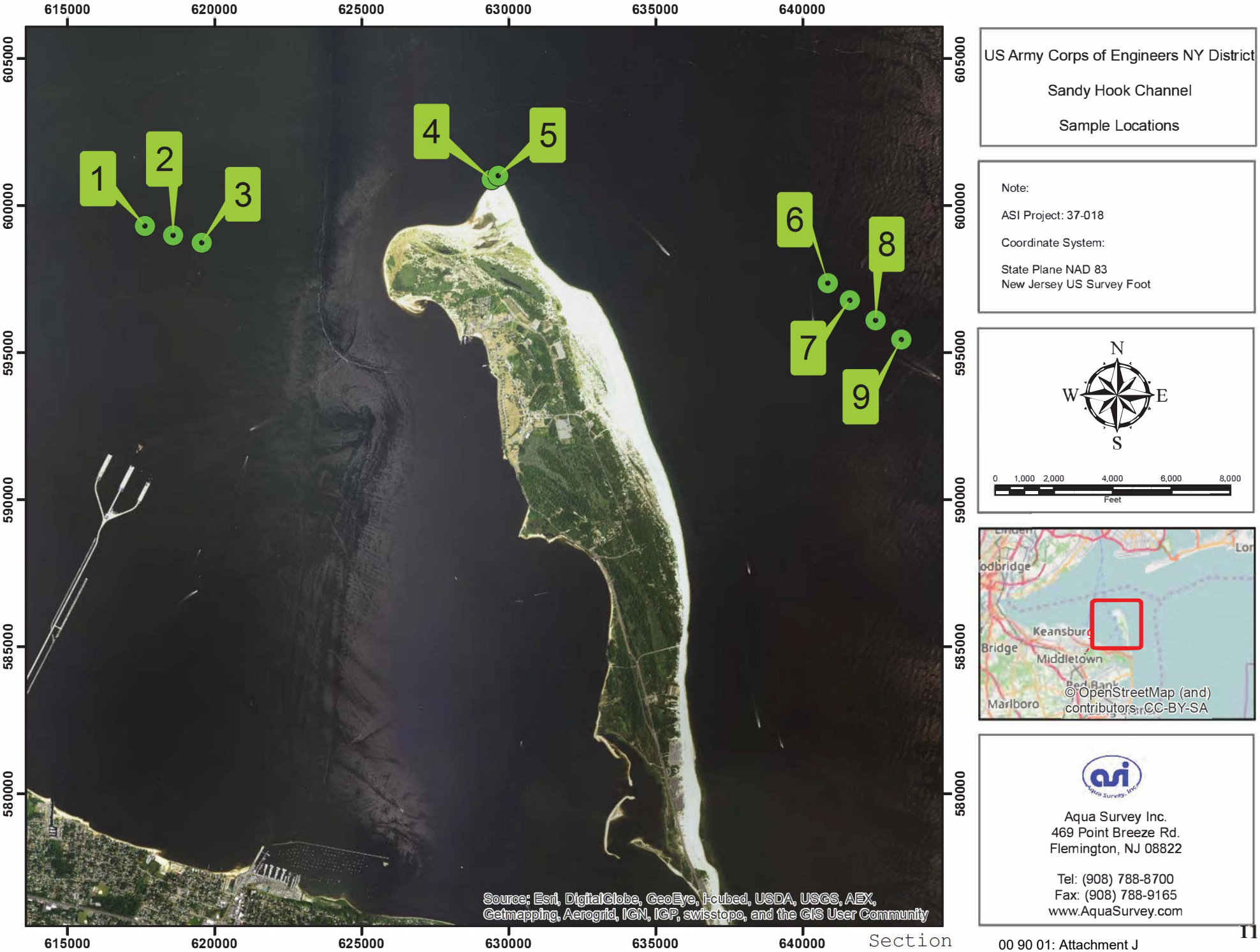


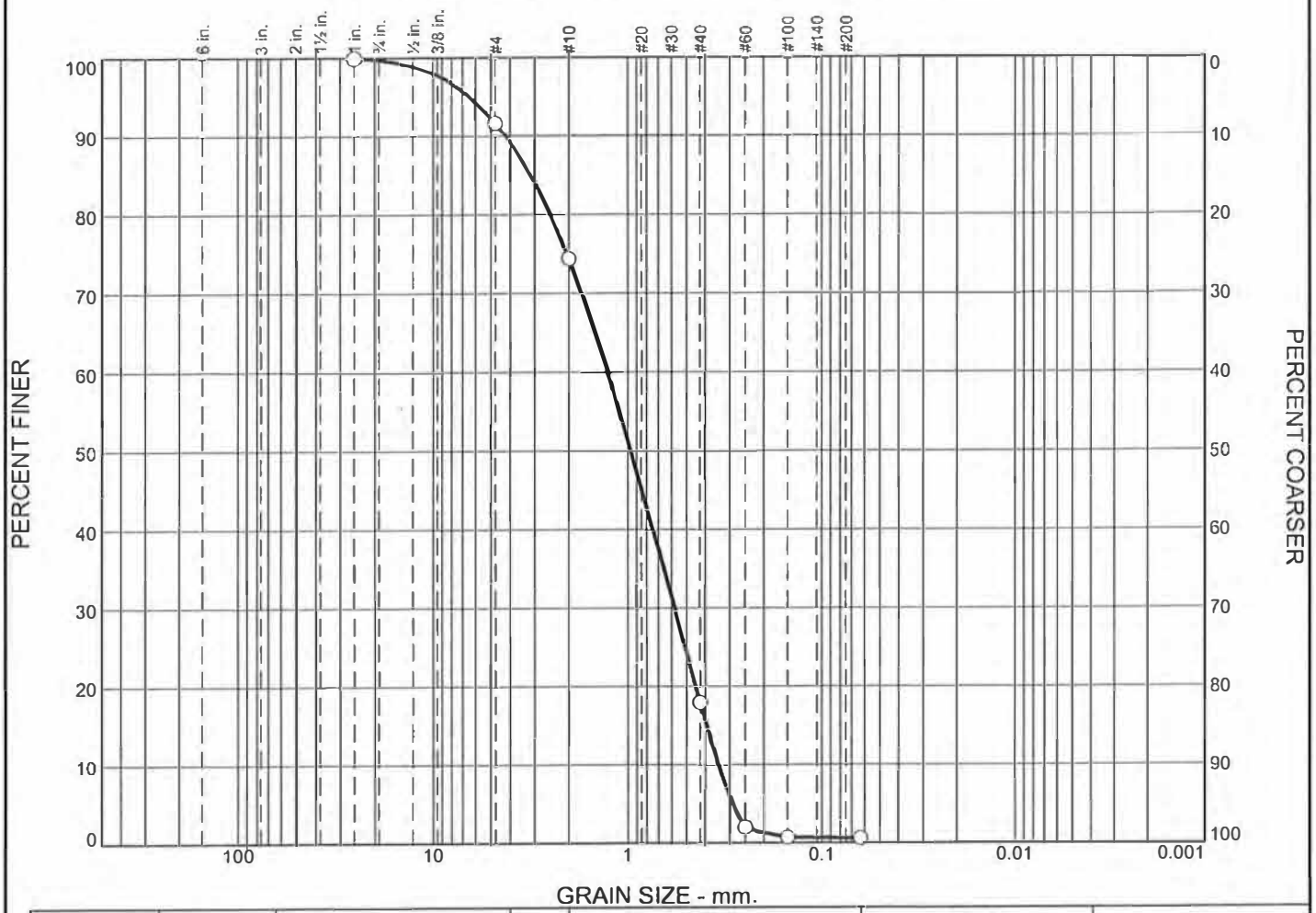
**Table 1 DGPS Coordinates**

| Location | Northings | Eastings |
|---|---|---|
| 1 | 599306.2 | 617607.1 |
| 2 | 598992.2 | 618580.3 |
| 3 | 598738.4 | 619547.9 |
| 4 | 600886.4 | 629406.1 |
| 5 | 601007.8 | 629630.7 |
| 6 | 597375.3 | 640856.2 |
| 7 | 596780.3 | 641612.0 |
| 8 | 596092.5 | 642484.7 |
| 9 | 595459.6 | 643345.1 |

**Table 2 Sample Identification and Compositing Scheme**

| Sample Name | Sample ID No. | Composite ID No. |
|---|---|---|
| #1 | 20170034 | Composite A 20170043 |
| #2 | 20170035 | |
| #3 | 20170036 | |
| #4 | 20170037 | Composite B 20170044 |
| #5 | 20170038 | |
| #6 | 20170039 | Composite C 20170045 |
| #7 | 20170040 | |
| #8 | 20170041 | |
| #9 | 20170042 | |

# Particle Size Distribution Report




| | % Boulders | % +3" | % Pebbles | % Granules | % Sand V. Crs. | % Sand Crs. | % Sand Med. | % Sand Fine | % Sand V. Fine | % Silt Crs. | % Silt Med. | % Silt Fine | % Silt V. Fine | % Clay |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| O | 0.0 | 0.0 | 10.7 | 14.8 | 23.2 | 27.0 | 22.3 | 1.3 | | | | | 0.7 | |

| | LL | PL | $D_{85}$ | $D_{60}$ | $D_{50}$ | $D_{30}$ | $D_{15}$ | $D_{10}$ | $C_c$ | $C_u$ |
|---|---|---|---|---|---|---|---|---|---|---|
| O | | | 3.1287 | 1.2695 | 0.9661 | 0.5787 | 0.3930 | 0.3416 | 0.77 | 3.72 |

| Material Description | USCS | AASHTO |
|---|---|---|
| O Composite Sediment | SP | |

**Project No.** 37-018 **Client:** Army Corps of Engineers

**Project:** Sandy Hook Channel

O **Source of Sample:** Composite B **Sample Number:** #20170044

**Remarks:**
O #10- w/ few shell pieces

**Aqua Survey, Inc.**

**Flemington, NJ**

**Figure**

**Tested By:** M. Thomas **Checked By:** C. Hall

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## GRAIN SIZE DISTRIBUTION TEST DATA

3/11/2017

**Client:** Army Corps of Engineers
**Project:** Sandy Hook Channel
**Project Number:** 37-018
**Location:** Composite B
**Sample Number:** #20170044
**Material Description:** Composite Sediment
**USCS Classification:** SP
**Testing Remarks:** #10- w/ few shell pieces
**Tested by:** M. Thomas **Checked by:** C. Hall

### Sieve Test Data

| Dry Sample and Tare (grams) | Tare (grams) | Sieve Opening Size | Weight Retained (grams) | Sieve Weight (grams) | Percent Finer | Percent Retained |
|---|---|---|---|---|---|---|
| 362.77 | 162.77 | 1 | 0.00 | 0.00 | 100.0 | 0.0 |
| | | #4 | 513.62 | 497.11 | 91.7 | 8.3 |
| | | #10 | 590.18 | 555.59 | 74.5 | 25.5 |
| | | #40 | 449.80 | 336.82 | 18.0 | 82.0 |
| | | #60 | 378.15 | 346.26 | 2.0 | 98.0 |
| | | #100 | 332.37 | 329.73 | 0.7 | 99.3 |
| | | #230 | 299.62 | 299.40 | 0.6 | 99.4 |

### Fractional Components

| Boulders | Cobbles | Pebbles | Granules | Sand | | | | | | Silt | | | | | Clay |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | V. Crs. | Crs. | Med. | Fine | V. Fine | Total | Crs. | Med. | Fine | V. Fine | Total | |
| 0.0 | 0.0 | 10.7 | 14.8 | 23.2 | 27.0 | 22.3 | 1.3 | | | | | | | | |

| $D_5$ | $D_{10}$ | $D_{15}$ | $D_{20}$ | $D_{30}$ | $D_{40}$ | $D_{50}$ | $D_{60}$ | $D_{80}$ | $D_{85}$ | $D_{90}$ | $D_{95}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.2889 | 0.3416 | 0.3930 | 0.4482 | 0.5787 | 0.7458 | 0.9661 | 1.2695 | 2.4815 | 3.1287 | 4.1890 | 6.3940 |

| Fineness Modulus | $C_u$ | $C_c$ |
|---|---|---|
| 3.36 | 3.72 | 0.77 |

CH

**Table 3a** **Grain Size Distribution (NJDEP Classification)**

| Sample Name | ASI ID # | Total % Gravel | Total % Sand | Total % Silt | Total % Clay |
|---|---|---|---|---|---|
| #1 | 20170034 | 0.0 | 14.0 | 62.2 | 23.8 |
| #2 | 20170035 | 0.0 | 17.4 | 61.2 | 21.4 |
| #3 | 20170036 | 0.0 | 14.6 | 60.9 | 24.5 |
| Composite A | 20170043 | 0.0 | 16.1 | 60.1 | 23.8 |
| Composite A Dup | 20170043 dup | 0.0 | 16.3 | 57.1 | 26.6 |
| Composite A Trp | 20170043 trp | 0.0 | 16.2 | 55.3 | 28.5 |

**Table 3b** **Grain Size Distribution (Wentworth Classification)**

| Sample Name | ASI ID # | % Boulder | % Pebble | % Granule | % Sand | | | | | % Fines |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | V. Crs | Crs. | Med. | Fine | V. Fine | |
| #4 | 20170037 | 0.0 | 15.0 | 19.5 | 20.2 | 21.6 | 21.4 | 1.6 | 0.0 | 0.7 |
| #5 | 20170038 | 0.0 | 3.1 | 11.2 | 27.5 | 33.4 | 22.9 | 1.2 | 0.0 | 0.7 |
| #6 | 20170039 | 0.0 | 2.3 | 6.4 | 35.2 | 39.4 | 14.5 | 1.3 | 0.0 | 0.9 |
| #7 | 20170040 | 0.0 | 9.1 | 8.8 | 24.4 | 31.7 | 24.0 | 1.2 | 0.0 | 0.8 |
| #8 | 20170041 | 0.0 | 3.0 | 2.6 | 9.9 | 16.2 | 61.9 | 5.2 | 0.0 | 1.2 |
| #9 | 20170042 | 0.0 | 0.0 | 0.2 | 1.5 | 2.8 | 78.7 | 15.2 | 0.0 | 1.6 |
| #9 Dup | 20170042 dup | 0.0 | 0.0 | 0.2 | 1.7 | 3.0 | 78.9 | 14.6 | 0.0 | 1.6 |
| #9 Trp | 20170042 trp | 0.0 | 0.1 | 0.3 | 1.8 | 3.2 | 79.5 | 13.5 | 0.0 | 1.6 |
| Composite B | 20170044 | 0.0 | 10.7 | 14.8 | 23.2 | 27.0 | 22.3 | 1.3 | 0.0 | 0.7 |
| Composite C | 20170045 | 0.0 | 3.6 | 4.1 | 3.1 | 24.6 | 56.1 | 7.2 | 0.0 | 1.3 |

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
Maint. Dredging of NY Harbor, Sandy Hook Channel, NJ Federal Navigation Project

CONTRACTOR

| ACTIVITY NO | TRANSMITTAL NO | SPEC SECT | DESCRIPTION ITEM SUBMITTED | PARAGRAPH # | CLASSIFICATION | GOVT OR A/E REVWR | CONTRACTOR: SCHEDULE DATES | | | CONTRACTOR ACTION | | | APPROVING AUTHORITY | | | | MAILED TO CONTR/ DATE RCD FRM APPR AUTH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | SUBMIT | APPROVAL NEEDED BY | MATERIAL NEEDED BY | ACTION CODE | DATE OF ACTION | DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR | DATE FWD TO OTHER REVIEWER | DATE RCD FROM OTH REVIEWER | ACTION CODE | DATE OF ACTION | | |
| (a) | (b) | (c) | (d) | (e) | (f) | | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) | (q) | (r) |
| | | 00 73 00 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | | |
| | | | Order of work | 1.35 | | | | | | | | | | | | | | |
| | | | Accident prevention plan | 1.35 | G | | | | | | | | | | | | | |
| | | | Quality control plan | 1.35 | G | | | | | | | | | | | | | |
| | | | Letter appointing superintendent | 1.35 | | | | | | | | | | | | | | |
| | | | List of subcontractors | 1.35 | | | | | | | | | | | | | | |
| | | | Environmental protection plan | 1.35 | G | | | | | | | | | | | | | |
| | | | Progress schedule | 1.35 | G | | | | | | | | | | | | | |
| | | | Submittal register | 1.35 | | | | | | | | | | | | | | |
| | | | List of proposed products | 1.35 | G | | | | | | | | | | | | | |
| | | | Work plan | 1.35 | | | | | | | | | | | | | | |
| | | 01 30 00 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | | |
| | | | Project Schedule | | G | | | | | | | | | | | | | |
| | | | SD-03 Product Data | | | | | | | | | | | | | | | |
| | | | Monthly Progress Report | 1.4 | | | | | | | | | | | | | | |
| | | | Project Schedule Status Report | 1.4 | | | | | | | | | | | | | | |
| | | 01 33 00 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | | |
| | | | Submittal Register | | | | | | | | | | | | | | | |
| | | 01 35 26 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | | |
| | | | Accident Prevention Plan (APP) | 1.6 | G | | | | | | | | | | | | | |
| | | | RO | | | | | | | | | | | | | | | |
| | | | Activity Hazard Analysis (AHA) | 1.7 | G | | | | | | | | | | | | | |
| | | | Crane Critical Lift Plan | 1.6.1 | G | | | | | | | | | | | | | |
| | | | Crane Operators | 1.5.1.3 | G | | | | | | | | | | | | | |
| | | | SD-06 Test Reports | | | | | | | | | | | | | | | |
| | | | Notifications and Reports | 1.11 | | | | | | | | | | | | | | |



EXAMPLE ONLY

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Maint. Dredging of NY Harbor, Sandy Hook Channel, NJ Federal Navigation Project

CONTRACTOR

| ACTIVITY NO | TRANSMITTAL NO | SPEC SECT | DESCRIPTION ITEM SUBMITTED | PARAGRAPH # | CLASSIFICATION | GOVT OR A/E REVWR | CONTRACTOR: SCHEDULE DATES | | | CONTRACTOR ACTION | | | APPROVING AUTHORITY | | | | MAILED TO CONTR/ DATE RCD FRM APPR AUTH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | SUBMIT | APPROVAL NEEDED BY | MATERIAL NEEDED BY | ACTION CODE | DATE OF ACTION | DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR | DATE FWD TO OTHER REVIEWER | DATE RCD FROM OTH REVIEWER | ACTION CODE | DATE OF ACTION | | |
| (a) | (b) | (c) | (d) | (e) | (f) | | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) | (q) | (r) |
| | | 01 35 26 | Accident Reports | 1.11.2 | | | | | | | | | | | | | | |
| | | | Crane Reports | 1.11.3 | | | | | | | | | | | | | | |
| | | | SD-07 Certificates | | | | | | | | | | | | | | | |
| | | | Confined Space Entry Permit | 1.8 | | | | | | | | | | | | | | |
| | | | Certificate of Compliance | 1.11.4 | | | | | | | | | | | | | | |
| | | 01 45 00.00 20 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | | |
| | | | Construction Quality Control (QC) | 1.6.1 | G | | | | | | | | | | | | | |
| | | | Plan | | | | | | | | | | | | | | | |
| | | 01 57 20.00 10 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | | |
| | | | Environmental Protection Plan | 1.7 | G | | | | | | | | | | | | | |
| | | 35 20 23 | SD-02 Shop Drawings | | | | | | | | | | | | | | | |
| | | | Submerged Pipeline | 3.2.6.3 | | | | | | | | | | | | | | |
| | | | Soundings or Sweepings | 3.3.1 | | | | | | | | | | | | | | |
| | | 35 20 29 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | | |
| | | | Vessel Monitoring Equipment | 1.3 | G | | | | | | | | | | | | | |

# Attachment L: Sandy Hook Channel XYZ Data

**District:** CENAN
**Name:** Sandy Hook Channel
**Survey ID:** NY_03_SHC_20250924_BD_5616_60
**Survey Date:** 9/24/2025

Direct Link to Plans and Specifications Survey XYZ data:

https://ehydroprod.blob.core.usgovcloudapi.net/ehydro-surveys/CENAN/CENAN_DIS_NY_03_SHC_20250924_BD_5616_60.ZIP

For additional survey data sets:

https://navigation.usace.army.mil/

THE NEXT 7 PAGES OF THESE SPECIFICATIONS ARE

FOR INFORMATION ONLY.

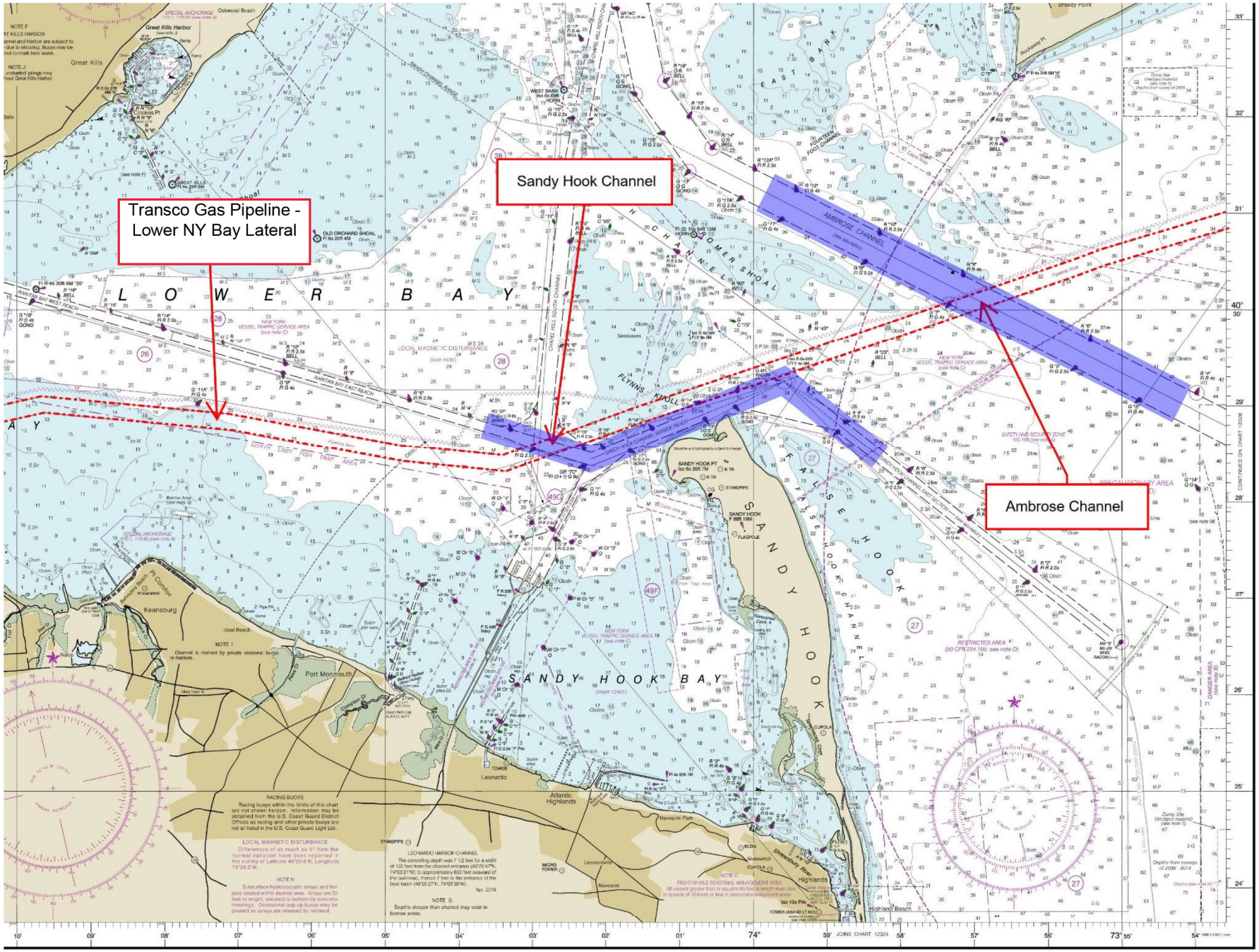
ATTACHMENT M

TRANSCONTINENTAL GAS PIPE LINE COMPANY - LOWER NEW YORK BAY LATERAL

DOCUMENTATION

SECTION 00 90 01, PARA 3.1.12.A.

MAP OF TRANSCONTINENTAL GAS PIPE LINE COMPANY - LOWER NEW YORK BAY LATERAL




mit inquiries, discrepancies or comments
ocharts.noaa.gov/staff/contact.htm

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

SOUNDINGS IN FEET

| | | |

SECTION 00 90 01, PARA 3.1.12.A.

DEPARTMENT OF THE ARMY PERMIT NO. 7447 (1967-06280)

RECEIVED
MAY 1 1967
PIPELINE DESIGN

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
111 EAST 16TH STREET
NEW YORK, N. Y. 10003

IN REPLY REFER TO
NANOP-E
P.N. 5821

28 April 1967

RECEIVED
MAY 1 - 1967
R. H. CROWE

Transcontinental Gas Pipe Line Corporation
3100 Travis Street
P. O. Box 1396
Houston, Texas 77001

Gentlemen:

Reference is made to your application dated 7 July 1966, signed by Mr. R. H. Crowe, Chief Engineer. There is inclosed Department of the Army permit dated 28 April 1967, to install a submarine gas pipeline in a trench with a cover of approximately 4 feet and at a minimum depth of 72 feet below mean low water across Ambrose Channel, 60 feet below mean low water across Bayside and Main Ship Channels, and 50 feet below mean low water across Swash Channel, within the waters of Lower Bay, New York Harbor, Raritan Bay, and Atlantic Ocean, between Morgan, Middlesex County, N. J., and Long Beach, Nassau County, N. Y.

Attention is invited to condition (i) of the permit. Notice of the dates of commencement and completion of the work should be sent to the District Engineer, U. S. Army Engineer District, New York, Corps of Engineers, 111 East 16th Street, New York, N. Y. 10003.

In order that prompt action may be taken toward showing the proposed pipeline on Government charts to prevent fouling of the installation by anchors or interference with navigation, it is requested that the District Engineer be informed promptly when the proposed work is completed.

If any material changes in the location or plans of the work are found necessary on account of unforeseen or altered conditions or other causes, revised plans should be submitted promptly to the District Engineer to the end that these revised plans, if found unobjectionable from the standpoint of navigation, may receive the approval required by law before operations thereunder are begun.

Very truly yours,

for J. GELBERMAN
Chief, Operations Division

1 Incl
Permit w/drawings

A-6280

FILE COPY

# DEPARTMENT OF THE ARMY

NOTE.—It is to be understood that this instrument does not give any property rights either in real estate or material, or any exclusive privileges; and that it does not authorize any injury to private property or invasion of private rights, or any infringement of Federal, State, or local laws or regulations, nor does it obviate the necessity of obtaining *State assent* to the work authorized. IT MERELY EXPRESSES THE ASSENT OF THE FEDERAL GOVERNMENT SO FAR AS CONCERNS THE PUBLIC RIGHTS OF NAVIGATION. (See *Cummings* v. *Chicago*, 188 U. S., 410.) 16—13168-8

NANOP-E

**PERMIT**
Department of the Army, New York District
Corps of Engineers,
111 East 16th Street, New York, N.Y. 10003
28 April, 1967

Transcontinental Gas Pipe Line Corporation
3100 Travis Street
P. O. Box 1396
Houston, Texas 77001

Gentlemen:

Referring to written request dated 7 July 1966, signed by Mr. R. H. Crowe, Chief Engineer, - - -

(a) That the work shall ubject to the supervision and approval of the rict Engineer, Corps of Engineers, in charge of the locality, who may temporarily suspend the work at any time, if in his judgment the interests of navigation so require.

(b) That any material dredged in the prosecution of the work herein authorized shall be removed evenly and no large refuse piles, ridges across the bed of the waterway, or deep holes that may have a tendency to cause injury to navigable channels or to the banks of the waterway shall be left. If any pipe, wire, or cable hereby authorized is laid in a trench, the formation of permanent ridges across the bed of the waterway shall be avoided and the back filling shall be so done as not to increase the cost of future dredging for navigation. Any material to be deposited or dumped under this authorization, either in the waterway or on shore above high-water mark, shall be deposited or dumped at the locality shown on the drawing hereto attached, and, if so prescribed thereon, within or behind a good and substantial bulkhead or bulkheads, such as will prevent escape of the material in the waterway. If the material is to be deposited in the harbor of New York, or in its adjacent or tributary waters, or in Long Island Sound, a permit therefor must be previously obtained from the Supervisor of New York Harbor, New York City.

(c) That there shall be no unreasonable interference with navigation by the work herein authorized.

(d) That if inspections or any other operations by the United States are necessary in the interest of navigation, all expenses connected therewith shall be borne by the permittee.

(e) That no attempt shall be made by the permittee or the owner to forbid the full and free use by the public of all navigable waters at or adjacent to the work or structure.

(f) That if future operations by the United States require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army, it shall cause unreasonable obstruction to the free navigation of said water, the owner will be required upon due notice from the Secretary of the Army, to remove or alter the structural work or obstructions caused thereby without expense to the United States, so as to render navigation reasonably free, easy, and unobstructed; and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners shall, without expense to the United States, and to such extent and in such time and manner as the Secretary of the Army may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable capacity of the watercourse. No claim shall be made against the United States on account of any such removal or alteration.

(g) That the United States shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the Government for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

(h) That if the display of lights and signals on any work hereby authorized is not otherwise provided for by law, such lights and signals as may be prescribed by the U. S. Coast Guard, shall be installed and maintained by and at the expense of the owner.

(i) That the permittee shall notify the said district engineer at what time the work will be commenced, and as far in advance of the time of commencement as the said district engineer may specify, and shall also notify him promptly, in writing, of the commencement of work, suspension of work, if for a period of more than one week, resumption of work, and its completion.

(j) That if the structure or work herein authorized is not completed on or before the 31st day of December, 19 70, this permit, if not previously revoked or specifically extended, shall cease and be null and void.

By authority of the Secretary of the Army:

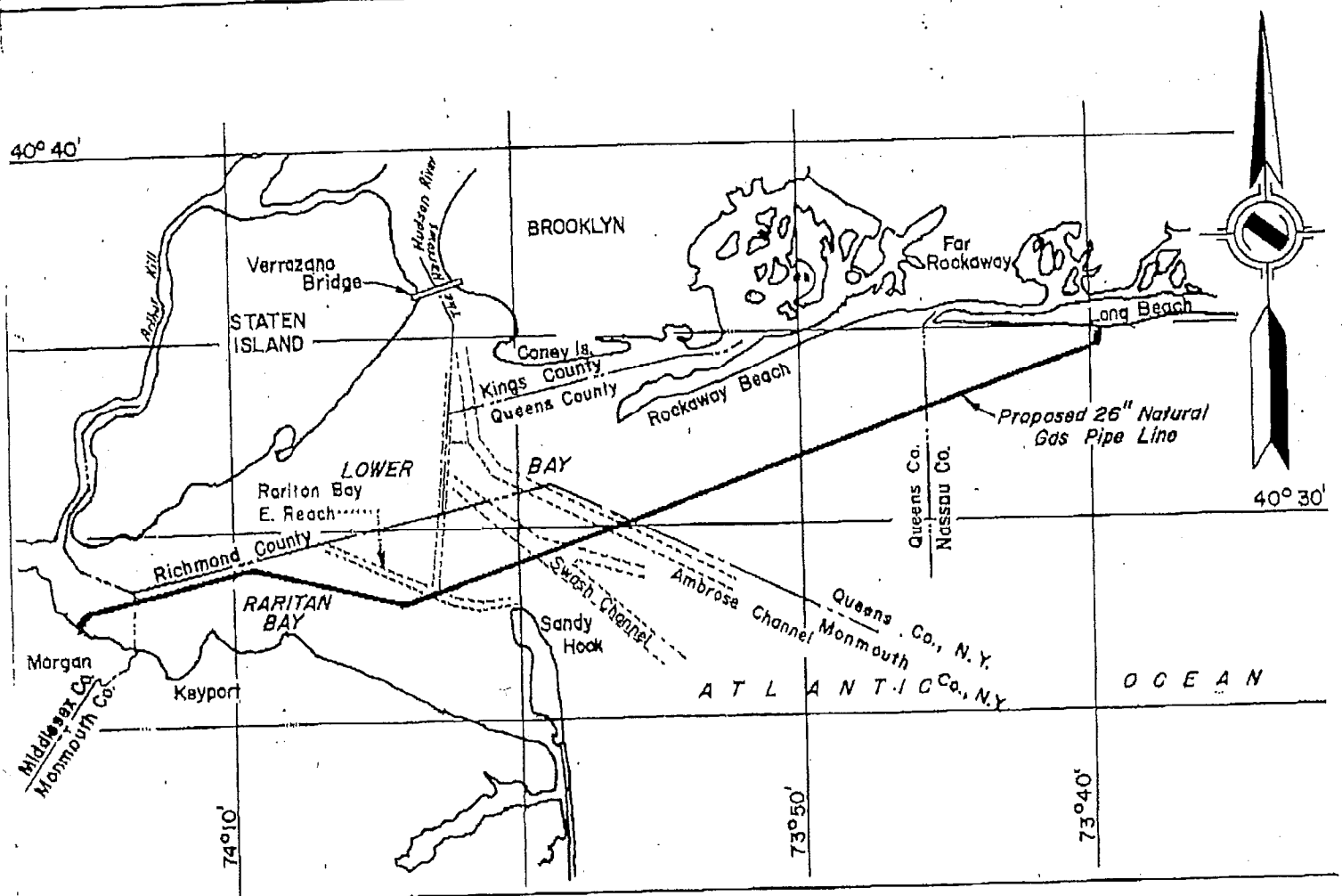
For and in behalf of
R. T. BATSON
Colonel, Corps of Engineers
District Engineer

ENG FORM 1721 (Civil) 1 SEP 48 This form supersedes ED Form 96, dated 1 Apr 48, which may be used until exhausted.

U. S. GOVERNMENT PRINTING OFFICE 16—13168-5

EM 1145-2-303

1507-24 (New York Har - Transcontinental Gas Pipe L Corp - Pipeline between Middlesex & Nassau Counties)




LOCATION MAP

NAUTICAL MILES
3 0 3 6

Note: 1 - This Dwg. Traced from Photostat Copies of C. & G. S. Charts 369 & 1215 reduced to Size.
2 - For Plan See Sheets 2-5 this dwg., for Profiles see Sheets 6-8 this dwg.
3 - Soundings and Elevations are in feet and refer to the Plane of Mean Low Water.
4 - For Geodetic & Coordinate Positions See Sheet 9, this Dwg.
5. Cover Over Pipe Line Will be Four Feet, Except Channel Crossings, Which Will Have Cover as Shown on Sheets 6, 7 & 8, This Dwg.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 3 | 11-8-66 | Title to DISCRS Grid | B.P. |
| 2 | 10-26-66 | Line Change: NJ exit Pt. | B.P. |
| 1 | 4-19-66 | Line Change | B.P. |

CHIEF ENGINEER

**TRANSCONTINENTAL GAS PIPE LINE CORP.**

ENGINEERING DEPARTMENT HOUSTON, TEXAS

PROPOSED 26" NATURAL GAS PIPE LINE
CROSSING
LOWER NEW YORK BAY
NEW JERSEY & NEW YORK

| | | | |
|---|---|---|---|
| DRAWN BY ROG | DATE 3-7-66 | APPROVED BY | DATE |
| CHECKED BY HWJ | DATE 7/1/66 | APPROVED BY | ENGINEER |
| TRACED BY | DATE 7/5/66 | | |
| W.O. NO. 5236.01 | SCALE Shown | DWG. NO. | A-10914 |
| | SHEET 1 OF 9 | | |

SECTION TABLE OF CONTENTS

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 00 90 02

FCD / WATER QUALITY CERTIFICATE

**06/26**

PART 1 GENERAL

1.1 SUBMITTALS

PART 2 PRODUCTS

PART 3 EXECUTION

3.1 DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS
3.1.1 FCD / WATER QUALITY CERTIFICATE(S)
3.1.2 National Park Service Special Use Permit

-- End of Section Table of Contents --

# SECTION 00 90 02

# FCD / WATER QUALITY CERTIFICATE
**06/26**

## PART 1 GENERAL

Not Used.

### 1.1 SUBMITTALS

Not Used.

## PART 2 PRODUCTS

Not Used.

## PART 3 EXECUTION

### 3.1 DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

The following attachments have been provided for reference to the bidder for use in performing the contract requirements.

#### 3.1.1 FCD / WATER QUALITY CERTIFICATE(S)

The New Jersey Department of Environmental Protection (NJDEP) Federal Consistency Determination/Water Quality Certificate (FCD/WQC) for the maintenance dredging of New York Harbor, Sandy Hook Channel, NJ Federal Navigation Project with subsequent placement at SBOBA is enclosed.

The contractor must comply with all conditions of the Water Quality Certificate(s).

A copy of the NJDEP FCD/WQC(s) shall be displayed in a highly visible location on the dredge at all times for the duration of the project.

#### 3.1.2 National Park Service Special Use Permit

The National Park Service Special Use Permit (SUP) for this maintenance dredging cycle of Sandy Hook Channel is enclosed.

The contractor must comply with all conditions of the National Park Service SUP.

-- End of Section --

PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Watershed & Land Management Program
Mail Code 501-02A
P.O. Box 420
Trenton, New Jersey 08625-0420
www.nj.gov/dep/landuse

SHAWN M. LATOURETTE
Commissioner

May 29, 2024

Michael J. Oseback
Chief, Operations Support Branch
US Army Corps of Engineers
26 Federal Plaza
Jacob K Javits Federal Building
New York, New York 10278-0090

RE: Project Description: Federal Consistency Determination/Water Quality Certificate
File and Activity No.: 0000-01-1008.2 CDT240001
Applicant: Army Corps of Engineers – New York District
Project: Sandy Hook Federal Navigation Channel

Dear Mr. Oseback:

This letter is issued in response to your request, received on March 27, 2024, for a Federal Consistency (FC), as per Section 307 of the Federal Coastal Zone Management Act (16 USC 1451 et seq.), and Water Quality Certification (WQC) as required by Section 401 of the Federal Clean Water Act (33 USC 1251 et seq). The request included the specifications for the maintenance dredging of critical shoals in the Sandy Hook Federal Navigation Channel on plans cited below. The proposed maintenance dredging would remove approximately 200,000 cubic yards (CY) of material (approximately 99% sand) to a depth of -35 feet mean lower low water (MLLW) plus 2 foot of allowable overdredge, with placement at the Sea Bright Offshore Borrow Area (SBOBA). This Federal Navigation Project was last dredged in 2023 and involved the removal of 179,000 CY with placement at the SBOBA.

**Federal Consistency and Water Quality Certification**

The Coastal Zone Management Rules (N.J.A.C. 7:7) constitute New Jersey's enforceable policies under its federally approved Coastal Zone Management Program. The Maintenance Dredging of the Sandy Hook Federal Navigation Project has been reviewed under the following Coastal Zone Management Rules: Finfish migratory pathways (7:7-9.5), Navigation Channels (7:7-9.7), Ports (7:7-9.11), Submerged Infrastructure Routes (7:7-9.12), Historic and Archaeological Resources (7:7-9.13), Endangered or threatened wildlife or plant species habitats (7:7-9.36 ), Maintenance dredging (7:7-12.6), Dredged material placement on land (7:7-15.12), Marine Fish and Fisheries (7:7-16.2), and Water Quality (7:7-16.3). **Based on the materials submitted within the subject federal consistency request,** the Department has CONDITIONALLY determined that the dredging of this Contract is consistent with the Coastal Zone Management Rules and New Jersey's federally approved Coastal Management Program.

Provided that the following conditions are met, the Department has determined that this project is not likely to cause a violation of New Jersey's Surface Water Quality Standards (N.J.A.C. 7:9B-1.1 et seq.). Therefore, this determination includes the State's Water Quality Certification pursuant to Section 401 of the federal Water Pollution Control Act (33 USC 1251 et seq.) subject to the following conditions. It is noted that this Water Quality Certificate is valid for a term of five years and expires five years from the date on the first page of this determination.

**PROJECT SPECIFIC CONDITIONS:**

1. Dredged material shall be placed deliberately in the barge in order to prevent spillage of material overboard.

2. All in-water work is prohibited from March 1 through June 30 to protect spawning and migrating anadromous fish.

3. As per a requirement of the United States Fish and Wildlife Service's (USFWS) Programmatic Biological Opinion, at least 75 days prior to dredging, the Corps shall initiate a Tier 2 consultation with the USFWS and receive the Tier 2 formal consultation letter prior to conducting this work.

4. The contractor shall immediately inform NJDEP, Division of Land Resource Protection (DLRP) of any unanticipated adverse effects on the environment not described in the application or in the conditions of this permit.

5. All necessary local, Federal, and other State approvals must be obtained by the applicant prior to the commencement of the herein-permitted activities.

6. The following depuration plants shall be notified via certified mail 30 days prior to dredging:

JT White Shellfish Plant, 76 5th Street, Highlands, NJ 07732
Clean Water Clam Company, 140 Ocean Avenue, Sea Bright, NJ 07760

7. The gunwales of the dredge scows shall not be rinsed or hosed during dredging except to the extent necessary to ensure the safety of workers maneuvering on the dredge scow.

8. The ACOE shall notify the DLRP in writing at least 60 days prior to removing material from the SBOBA for beach replenishment, and additional authorizations may be required from DLRP for removal/placement of the material. Notification shall include the following:

-Hydrographic survey showing the area and volume of material to be removed; and

-Plan showing location of material placement.

9. REPORTING REQUIREMENTS: Within six months of the completion of this contract, the ACOE shall submit the following information to the Department:

-Start and finish date of contract; and

-Post-dredge hydrographic survey.

10. All reports/forms that are required to be submitted to the Department shall be submitted to the following address:

New Jersey Department of Environmental Protection
Division of Land Resource Protection
Office of Dredging and Sediment Technology
P.O. Box 420, Mail Code #501-02A
Trenton, NJ 08625-0420
Attention: Jeffrey Thein

**APPROVED PLAN:**

The drawing hereby approved consists of one (1) sheet dated February 1, 2024 and entitled:

NEW YORK HARBOR
SANDY HOOK CHANNEL

"PLANS & SPECS SURVEY", drawing number VH-103

If you have any questions regarding this letter, please contact Jeff Thein by email at jeff.thein@dep.nj.gov. Please reference the Division's file number in all communication.

Sincerely,

Colleen Keller, Assistant Director
Division of Land Resource Protection

NPS Form 10-114 (Rev. 8/2021)
National Park Service

# SPECIAL USE PERMIT

**GATEWAY NATIONAL RECREATION AREA**
210 New York Avenue
Staten Island, New York 10305
718 354 4665

| **Permittee information** |
|---|
| **Permittee name:** |
| Michael J. Oseback (Permittee) |
| **Company/Organization:** |
| U.S. Army Corps of Engineers, NY District |
| **Street address:** |
| 26 Federal Plaza Room 16-400 |
| **City:** |
| New York |
| **State:** |
| New York |
| **Country:** |
| USA |
| **Zip code:** |
| 10278 |
| **Mobile phone number**: |
| 917-572-8803 |
| **Fax number:** |
| n/a |
| **Email address:** |
| Michael.J.Oseback@usace.army.mil |

**Park alpha code: GATE 1770**

**Permit #** 1770-26-0529 SAHO
Surveying Activities and Maintenance Dredging of NY Harbor, Sandy Hook Channel, NJ Federal Navigation Project

**Type of use:**
☒ Special event
☐ filming or still photography
☐ Demonstration, sale or distribution of printed matter, etc.
☐ Agricultural or grazing
☐Other:

**NEPA compliance:**
☐Categorically excluded
☐EA/FONSI
☐EIS
☐PEPC
☒Other DRM Review on record

**Authorizing legislation or other authority:**
☒54 U.S.C. § 100101
☒54 U.S.C. § 100751(a)
☒54 U.S.C. § 103104
☐54 U.S.C. § 100905 (still photography)
☐Other authority:_____
☒Park-specific legislation: P.L. 92-592

The Permittee is authorized to use the following described lands or facilities in Gateway National Recreation Area (Park): Sandy Hook North Tip "False Tip" as depicted in the map in Attachment A hereto (Permitted Area).

The Permittee may use those lands or facilities for the following purpose (Permitted Activity): Maintenance dredging required to alleviate effects of sand shoaling and restoration of an authorized dredging channel, as described hereto and in Attachment C. Activities may include dredging to authorized depths, placement of dredged material at approved locations, post-dredging beach recovery, required environmental monitoring, non-invasive surveys, and temporary safety closures around active work areas (see attached maps).

Permittee is responsible for monitoring all contractors and sub-contractors in conjunction with this permit, and any monitoring undertaken by NPS will result in additional cost recovery charges.

The permit begins from date of signature and **expires at 5:00 pm on February 28, 2027.**

| | | | |
|---|---|---|---|
| Application fee | Received _____ | Not Required __X____ | Amount $_____ |
| Performance bond | Received _____ | Not Required __X____ | Amount $ N/A |
| Liability insurance | Received _X____ | Not Required ____ | Amount $ Self-insured |
| Cost recovery | Received _X____ | Not Required ____ | Amount $ 176,121.81 (LE) |
| | | | Amount $ 21,775.60 (USFWS BO-Biotech) |
| Location fee | Received _____ | Required _____ | Amount $ _____ |

NPS Form 10-114 (Rev. 8/2021)
National Park Service

## SPECIAL USE PERMIT

**GATEWAY NATIONAL RECREATION AREA**
210 New York Avenue
Staten Island, New York 10305
718 354 4665

Other authorized fee _____ Received _____ Required _____ Amount $ _____

Issuance of the permit is subject to the below-listed general and park-specific terms and conditions. The undersigned hereby accepts this permit subject to those terms and conditions and agrees to be bound by them.

OSEBACK.MICHAEL.J.1384788943 Digitally signed by OSEBACK.MICHAEL.J.1384788943 Date: 2026.06.22 13:43:14 -04'00'

22-Jun-2026

| | | |
|---|---|---|
| Michael J. Oseback, Permittee | Title: Chief, Operations Support Branch, New York District U.S. Army Corps of Engineers | Date: |
| Emina Sendich, Authorizing NPS official | Title: Acting Superintendent, GATE | Date: 6/25/26 |
| Authorizing NPS official (additional, if required) | Title: | Date: |

### General Terms and Conditions

1. The Permittee must perform the work or conduct the activities authorized by this permit in accordance with the permit's terms and conditions and in accordance with all applicable federal, state, or local law, including the regulations in 36 C.F.R. chapter I; the regulations in 43 C.F.R. part 5; and all applicable workplace-safety and public-health orders, rules, and requirements. If the Permittee fails to do so, then the Superintendent of Gateway National Recreation Area (Superintendent) may immediately suspend or revoke this permit without notice

2. The Superintendent may immediately suspend or revoke this permit without notice if destruction of, loss of, or injury to any park property or resource has occurred, is occurring, or appears imminent. In accordance with the System Unit Resource Protection Act, 54 U.S.C. §§ 100721-100725, any person that destroys, causes the loss of, or injures any park system unit resource will be liable to the United States for response costs and damages resulting from the destruction, loss, or injury.

3. The Superintendent may revoke this Permit at any time after providing 24 hours' written notice to the Permittee setting forth the reasons for the revocation.

4. If this permit is revoked for any reason or upon its expiration, the Permittee must repair all damage to park property or resources in accordance with the Superintendent's direction and must restore the Permitted Area to its original, pre-permit condition.

5. The Permittee must obtain all federal, state, or local permits, licenses, inspections, or other reviews or approvals legally required to perform the permitted work or conduct the permitted activities.

6. This permit does not grant the Permittee exclusive use of the Permitted Area. Unless the Superintendent restricts public access to or closes the Permitted Area in accordance with 36 C.F.R. § 1.5, the Permitted Area will remain

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open to the public to the same extent that it is open to the public during regular park visiting hours, and the permitted work or activities may not unduly interfere with the public's use and enjoyment of the Permitted Area.

7. This permit may not be transferred or assigned to another party without the Superintendent's prior written approval.

8. The US Army Corps of Engineers (Permittee) agrees to be responsible for administration and/or payment of any and all claims for property damage or personal injuries which may arise out of the activities authorized by this Agreement in accordance with the provisions of the Federal Tort Claims Act.

9. If the Superintendent requires liability insurance as a condition of issuing this permit, then the Permittee must obtain general liability insurance against claims occasioned by the acts or omissions of the Permittee and its officers, employees, agents, representatives, and contractors while performing the work or conducting the activities authorized by this permit. The policy must be in the amount of **N/A** per occurrence and **N/A** aggregate; must be issued by a company licensed to do business and in good standing in New Jersey; and must name the United States of America as an additional insured. The Permittee must provide the Superintendent with a Certificate of Insurance with the proper endorsements before the permit's effective date.

10. If the Superintendent requires a bond as a condition of issuing this permit, then the Permittee must deposit with the Park, before the effective date of this permit, a bond in the amount of $ N/A from a bonding company licensed to do business and in good standing in the State of New York or in the form of cash or cash equivalent, to guarantee that all financial obligations to the Park will be satisfied

11. As authorized by 54 U.S.C. § 103104 or 54 U.S.C. § 100905 and in accordance with other applicable law and policy, the National Park Service will recover all costs of providing necessary services associated with this permit, including the costs of administering the permit and monitoring the permitted work or activities. The National Park Service may bill the Permittee for either actual costs or estimated costs. Payment is due at the time of billing. If the National Park Service bills the Permittee for estimated costs, and actual costs exceed the estimated amounts, then the National Park Service will bill the Permittee for the excess. If the National Park Service bills the Permittee for estimated costs, and actual costs are less than the estimated amounts, then the National Park Service will refund the difference to the Permittee after the permitted work or activities have concluded and the permit has expired or been terminated. Under no circumstances will the National Park Service be liable for interest on any refunded amount

12. The Permittee designates **Michael Oseback – (telephone: 917-790-8536)** as the on-site person responsible for adherence to the Permit's terms and conditions (the Project Lead). The on-site person must have full authority to make all decisions about the permitted work or Permitted Activities; must be reachable at all times; and is responsible for all persons or entities performing the permitted work or Permitted Activities, including the Permittee's contractors and sub-contractors.

13. Nothing in this permit binds the National Park Service or the United States to expend in any one fiscal year any sum in excess of appropriations made by Congress or allocated by the National Park Service or the United States for the purpose of this permit, or to involve the National Park Service or the United States in any contract or other obligation for the further expenditure of money in excess of such appropriations or allocations.

14. If any provision of this permit is found to be invalid or unenforceable, the remaining provisions of this permit will not be affected and may be enforced to the full extent authorized by applicable law.

15. Use of the National Park Service Arrowhead Symbol is governed by 36 C.F.R. part 11. The Arrowhead Symbol is the official emblem and a registered trademark of the National Park Service. The National Park Service must authorize any use of the Arrowhead Symbol, including incidental use. Using the Arrowhead Symbol for advertising, promotional, or other commercial purposes is prohibited. Unauthorized use of the Arrowhead Symbol may subject an individual to criminal penalties under 18 U.S.C. § 701.

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16. Approval of the Special Use Permit does not constitute and should not be construed as a Government endorsement of the permittee's views, activities, products, goods, services, or enterprise. The permittee shall not refer to Special Use permits awarded by the National Park Service for commercial purposes, in advertising, or in a manner which states or implies that, by issuing the Special Use permit, the views, activities, products, goods, services, or enterprises undertaken pursuant to this permit are approved of or endorsed by the Government.

17. Credit Lines recognizing the NPS issuance of this permit may be approved through additional terms and conditions.

18. Federal regulations prohibit any person from knowingly giving false information on an application for a permit and from knowingly giving a false report for the purpose of misleading a government employee or agent in the conduct of official duties. 36 C.F.R. §§ 2.32(a)(3) and 2.32(a)(4). Any violation of those regulations will result in this permit's immediate revocation.

**Park-specific Terms and Conditions**

19. The permittee shall defer to any determination made by park management as to whether any activity interferes with park operations or with activities scheduled at the park and take action as directed by the NPS.

20. **USACE Point of Contact (POC) for on-site field operations:**

    - Jessica Wong; 917-790-8531, Jessica.J.Wong@usace.army.mil (Project Engineer)
    - Jun Yan; 917-790-8437, Jun.Yan@usace.army.mil (Project Manager)
    - Nicholas Emanuel; 917-790-8069 (Contracting Officer)

21. **NPS Contacts:**

    NPS Permit Administration Contacts
    (All permit modifications and administrative correspondence shall be directed to:)
    - Karen Edelman, Supervisory Business Management Specialist – Karen_Edelman@nps.gov
    - Mimi Berfield, Business Management Specialist – Mimi_Berfield@nps.gov
    - Minka Sendich, Acting Superintendent – Minka_Sendich@nps.gov

    NPS Project Coordination Contacts
    (All meeting invitations, schedules, and coordination related to Permitted Activities shall include:)
    - Minka Sendich, Acting Superintendent – Minka_Sendich@nps.gov
    - Kurt Cheng, Biologist – Kurt_Cheng@nps.gov
    - Ellen Bungard, Chief Ranger (Acting) – Ellen_Bungard@nps.gov, (732) 580-4224
    - Karen Edelman, Supervisory Business Management Specialist – Karen_Edelman@nps.gov

    NPS Operational / Emergency Contacts
    - NPS Dispatch – 718-354-4700
    - Ellen Bungard, Chief Ranger (Acting) – Ellen_Bungard@nps.gov, (732) 580-4224

22. **Coordination Requirements**

    The Permittee shall coordinate with the NPS Project Coordination Contacts listed above for:

    - **Prior Coordination:** The Permittee must coordinate entry with the above identified NPS personnel prior to commencing activities on-site **at least two (2) business days** before the start of each Permitted Activity to alert NPS of the initiation of Permitted Activities:
    - **Prior to Commencing Activity on Site:** Prior to undertaking any work on site, the Permittee must provide:

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- A tentative schedule of work to be undertaken on NPS property not less than **2 weeks prior** to initiating work on NPS property. Deviations and modifications of the schedule must be provided as soon as identified by the Permittee.
- **A pre-construction meeting is required one week prior to commencing any activities authorized under this permit.**

- **Upon Conclusion of Activity:** The Permittee shall notify above identified NPS points of contact within twenty-four (24) hours of completing all Permitted activities. ***Additionally, upon the conclusion of the Permitted Activity, Permittee must provide NPS with written documentation provided showing the beach is safe for visitor use.***

The Permittee shall coordinate with the NPS Operational / Emergency Contacts listed above for:

- **Injury, Incident, Emergency:** In the case of an OSHA-reportable injury, criminal incident, spill, or environmental emergency within the Permitted Area involving the Project, the Permittee or its officers, employees, representatives, agents, contractors, or subcontractors, Park employees or visitors, the Permittee shall notify the NPS within two (2) hours of the event by contacting *Ellen Bungard, Chief Ranger (Acting) – Ellen_Bungard@nps.gov, (732) 580-4224 and NPS Dispatch at 718-354-4700.*
  - Permittee must also submit to the Superintendent (or Acting) within forty-eight (48) hours a full written report of proposed actions and corrections and submit a complete report including the resolution of the situation within ninety (90) days.

23. **Public Access, Closures, and Closure Analysis:**

Pursuant to Condition 6, the Permittee may not restrict public access or exclude the public from the Permitted Area except as authorized by the Superintendent. Any closure, designation, or activity-specific restriction for the Permitted Activity requires a closure analysis conducted in accordance with 36 C.F.R. § 1.5 and may be implemented only after the Superintendent issues a written determination under § 1.5(c).

The Superintendent has determined that temporary closures are appropriate to protect public health and safety, prevent visitor conflicts, and safeguard park resources. All Permitted Activities must be conducted to avoid undue interference with public use.

24. **Fencing and Signage:**

Installation and removal of fencing or fencing enclosures shown in **Attachment A** shall be undertaken at the Permittee's cost and expense as subject to the following requirements:

- To ensure security of the work area for safety purposes, the Permittee will install and conduct daily inspection and maintenance of any temporary construction fence lines.
- Permittee is required to install fences in a manner that restricts visitor access at all tidal levels and ensures visitor safety. Additionally:
  - Waterward (seaward) facing/located fencing must be orange construction fencing supported by metal T posts placed at the low tide terrace on one side of the tip and spanning across the tip to the low tide terrace on the other side of the tip.
  - Landward facing/located fencing must be erected at least 50 yards further inland than the seaward orange construction fence. This is required to provide an adequate buffer area.
  - In order to be acceptable to the NPS, fencing is required to:
    - Have adequate and sufficient reflective markers to provide visibility for safe operation of vehicles on beach at night
    - Contain signs reading "Do Not Enter Unsafe Area" posted at 10' intervals.

- Span the low tide terrace on one side of the tip to the low tide terrace on the other side of the tip.

25. **Additional Signage:**

Installation and removal of signs shall be undertaken at Permittee's cost and expense as follows:

- Signs must be posted at each trail entrance at M lot, J lot, and I lot. Signs must contain the following warning: "False Tip Closure Ahead, Do Not Enter Unsafe Areas".
- Additional signs reading "Do Not Enter- Unsafe Areas" must be posted in areas identified in the **"Sandy Hook Dredging Visitor Safety Plan" visual, Attachment A**, as well as any additional areas identified by NPS.
- Signs and posting locations which are not already identified herein must be approved by NPS in writing.
- USACE shall remove fencing and signage once NPS has accepted the written documentation USACE is required to provide establishing the beach is safe for visitor use.

26. **Managing Safety, On Board Vessel:**

Permittee has represented to NPS that it has contracted for an independent on board safety monitor. Permittee is required to implement the following:

- 24-hour coverage monitoring closed or restricted areas from on board the vessels utilized by Permittee in connection with the authorized activities. The USACE on-board representative is responsible for ensuring that any person entering such areas be told to exit the closed area via the PA system on board the vessel. If violators do not comply, the monitor is required to contact NPS LE Rangers via NPS Dispatch at 718-354-4711.

27. **Access and Restricted Areas:**

The Permitted Activity will take place in areas where vehicles are typically prohibited or restricted (refer to **Attachment A "Map of authorized and prohibited off-road driving."** The Permittee must abide by the below identified restrictions pertaining to vehicular access necessary in connection with the activity:

- Driving onto Fisherman's trail and beach is **authorized only** when fencing and signage is being installed or removed, or for daily maintenance and inspection, and under the following conditions:
    - Permittee is prohibited from entering dune areas or bird nesting areas.
    - Permittee is prohibited from driving on the beach from March 15 to September 15.
    - Permittee is required to notify NPS Dispatch (718-354-4700) each day prior to entering onto Fisherman's trail and upon leaving Fisherman's trail.
    - Permittee is required to utilize either a 4x4 vehicle or UTV. The driver must be experienced in operating a UTV or 4x4. Vehicle must be equipped with tow rope. Permittee is responsible for providing any capacity required for tire inflation.
    - The Permittee must remain within the areas designated by the NPS for off-road vehicle use. While in these areas, vehicle operation is not allowed on or within 30 feet of any vegetation. Additionally, vehicles must not enter any areas marked as closed by stringlines, signage, or other indicators.
    - When on the beach, vehicles should operate as close to the water as safely possible while ensuring safe driving conditions.
    - Access to the beach is only permitted within 3 hours of low tide.
    - Permittee is solely responsible for safe operation of off-road vehicles as well as any and all costs associated with towing, recovery, or salvage that may be required as a result of off-road use.

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28. **Monitoring and Administration - Safety, Enforcement, and Resource Protection:**

    Permittee is obligated to pay for all costs related to Monitoring and Administration (Safety, Enforcement, and Resource Protection). NPS may provide the below identified services at the Permittee's cost and expense. The estimated cost of such services is identified in **Attachment B – Cost Recovery Estimate** and is based on costs incurred in connection with identical activities previously undertaken by Permittee which required additional safety, enforcement and resource protection, additional man hours and corresponding staff. Permittee will also be required to pay for any additional costs incurred by NPS pertaining to Safety, Enforcement and Resource Protection.

    - USACE and/or representatives are not deputized by the Law Enforcement Division and therefore should not be engaging in any law enforcement contacts or actions.
    - This cost recovery fee estimate is only an estimate based on projected NPS labor hours necessary for completion of the Permitted Activity. Actual NPS labor and service costs will be calculated at the conclusion of the Permitted Activity. The NPS will issue a final statement within 30 days of the concluded activity which may result in a balance due from the NPS or the permit holder. If a refund is determined by the NPS, it will be payment though EFT; if a balance is owed to the NPS, it will be noted on the final statement and due to the NPS within 14 business days of receipt.

29. **Dredge Surveys:**
    - Upon providing at least two (2) business days prior written notice to the above identified points of contact, Permittee is authorized to conduct the following in order to support the Permitted Activity:
        - Topographic, geotechnical, bathymetric, shorebird, or other non-destructive surveys
        - Deployment of temporary and reversible marking (such as pin flags or similar). may be temporarily deployed.
        - The following is prohibited:
            - Installation of equipment or devices in the ground or on park signage, fencing, or structures
            - Any ground penetration
            - Trimming or removal of vegetation
    - The Permittee shall notify above identified points of contact within twenty-four (24) hours of completing any survey.

30. The Permittee is prohibited from entering any area closed for shorebird nesting or within 0.25 linear miles along the beach from unfledged shore bird during the period of March 15 to September 15.

31. If insertion of stakes has been approved with this permit, any ground penetration greater than 6 inches below grade requires compliance with "NJ One Call." law, regulation, and policy. Compliance with NJ One Call includes, but is not limited to a utility "mark out" to be completed by the contractor or individual erecting the tent ("Excavator"), completed within the required time frame as outlined on the NJ-1 call website (http://www.nj1-call.org ).

    a. For a water and sewer utility mark-out, the excavator must call the Sandy Hook Water Plant at 732-872-5964. In accordance with the NJ One Call, a utility request must give three (3) full business days' notice before the start of excavation. "Business day" means any day other than Saturday, Sunday or a nationally or State recognized holiday.
    b. The following information must be provided: 1) start date; 2) location; 3) type of work; and 4) maximum depth of excavation; 5) contact information.
    c. The utility mark out confirmation number obtained by the Permittee, or Permittee's representative must be available to NPS upon request. The party requesting the tent installation will take full responsibility of any underground utilities that are impacted during the installation activities. The NJ-1 Call rules and regulations must be obeyed.

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32. The Permittee shall ensure that all individuals using the designated area in connection with the Permitted Activity are informed and comply with park rules, regulations, and all applicable state and federal laws. This includes but is not limited to pedestrian, vehicle traffic, and parking laws which are summarized as follows:

    - Accessing dune areas in any manner is prohibited.
    - No vehicles or motorized equipment are allowed on trails, beaches, off road (as outlined in Condition #27 regarding Access and Restricted Areas and Attachment A "Map of Authorized and Prohibited Off-Road Driving") or on the Multi-Use Path (paved bike path).
    - Parking is only permitted in designated lots.
    - Operation of drones within park boundaries is prohibited.
    - Additional information about park rules and regulations is available in the park compendium: https://www.nps.gov/gate/learn/management/superintendent-s-compendium.htm

33. The Permittee is authorized to conduct activities in the areas designated in this Permit. This Permit does not include permission for activities outside the designated area unless specifically stated. Permittees will comply with the designated area instructions issued and determinations made by NPS personnel. Except in extraordinary situations and with the agreement of the Superintendent, or as determined at or prior to the on-site meeting described below, all work on park lands will be conducted on a Monday through Friday, 8:00 a.m. through 5:00 p.m. basis.

34. Equipment, materials, and all other supplies may be located only within the area identified by NPS and shall be staged or otherwise situated in such a way as to allow for the safe use of the area by park visitors, to the greatest extent possible. All sidewalks, walkways, roadways, and trails must remain unobstructed to allow for the reasonable use of these areas by pedestrians, vehicles, and other park users.

35. This permit may be revoked at the discretion of the Superintendent upon 24 hours' notice, or without notice if damage to resources or facilities occurs or is threatened, notwithstanding any other term or condition of the permit to the contrary.

36. In the event of an emergency, serious incident, or the discovery of any illegal or criminal act by or upon Permittee's or their personal or public property, the Permittee will immediately notify the Sandy Hook Dispatch at **718-354-4700 and 9-1-1.**

37. **Future Considerations for Dredging Activities:**

    In order to ensure projects are managed to the satisfaction of NPS and to adequately plan for protections necessary to both Permittee and NPS, Permittee is required to consult with and coordinate with NPS not less than **six months** prior to any request for related, similar, or additional authorizations. Subsequent requests for authorization to conduct such activities may require the following:

    - A legal authorization other than a Special Use Permit
    - A provision in the authorizing legal instrument that NPS (rather than a contractor selected by Permittee) provide related/required security.

    Permittee's failure to consult with and coordinate with NPS within the above identified lead time may result in NPS inability to issue any corresponding legal authorization going forward.

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## Attachment A: Approximate Permitted Work Area

**Lands and waters which are part of the Sandy Hook Unit of Gateway National Recreation Area**

Figure 1: Dredging and Placement Location Map (Not to scale)

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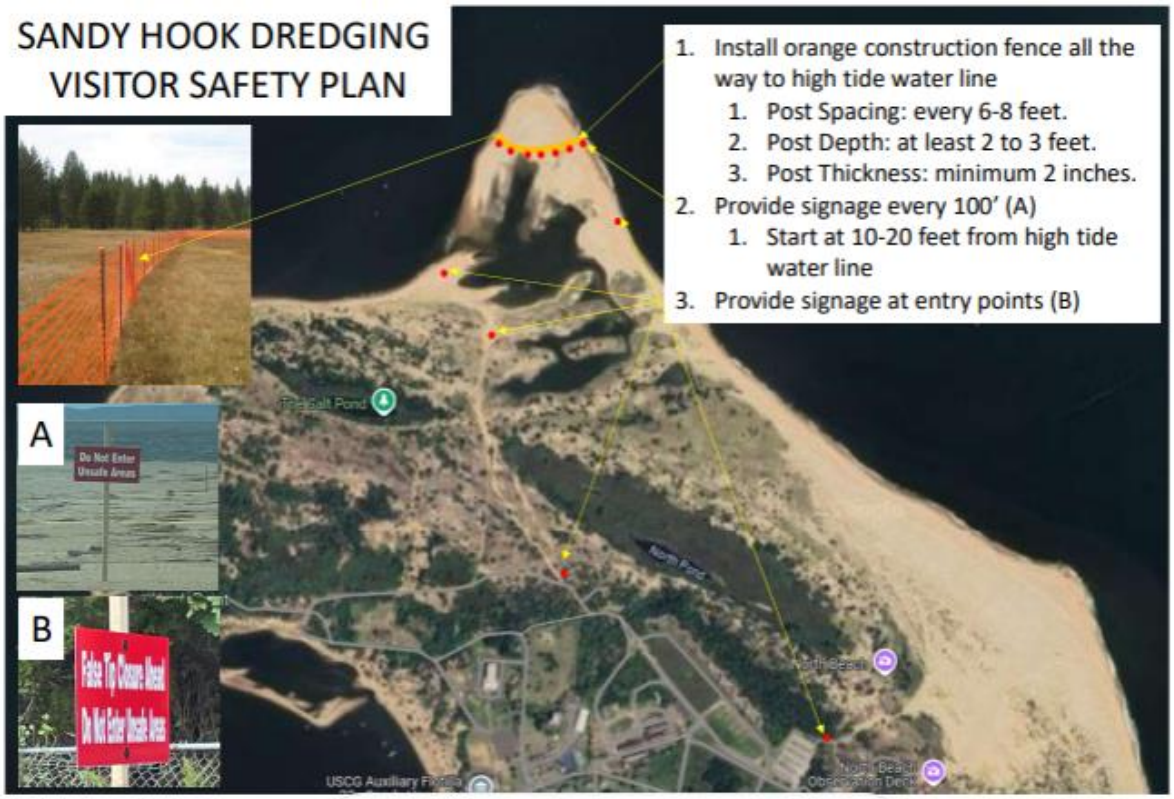

**Approximate Permitted Fencing, Closures, Security**

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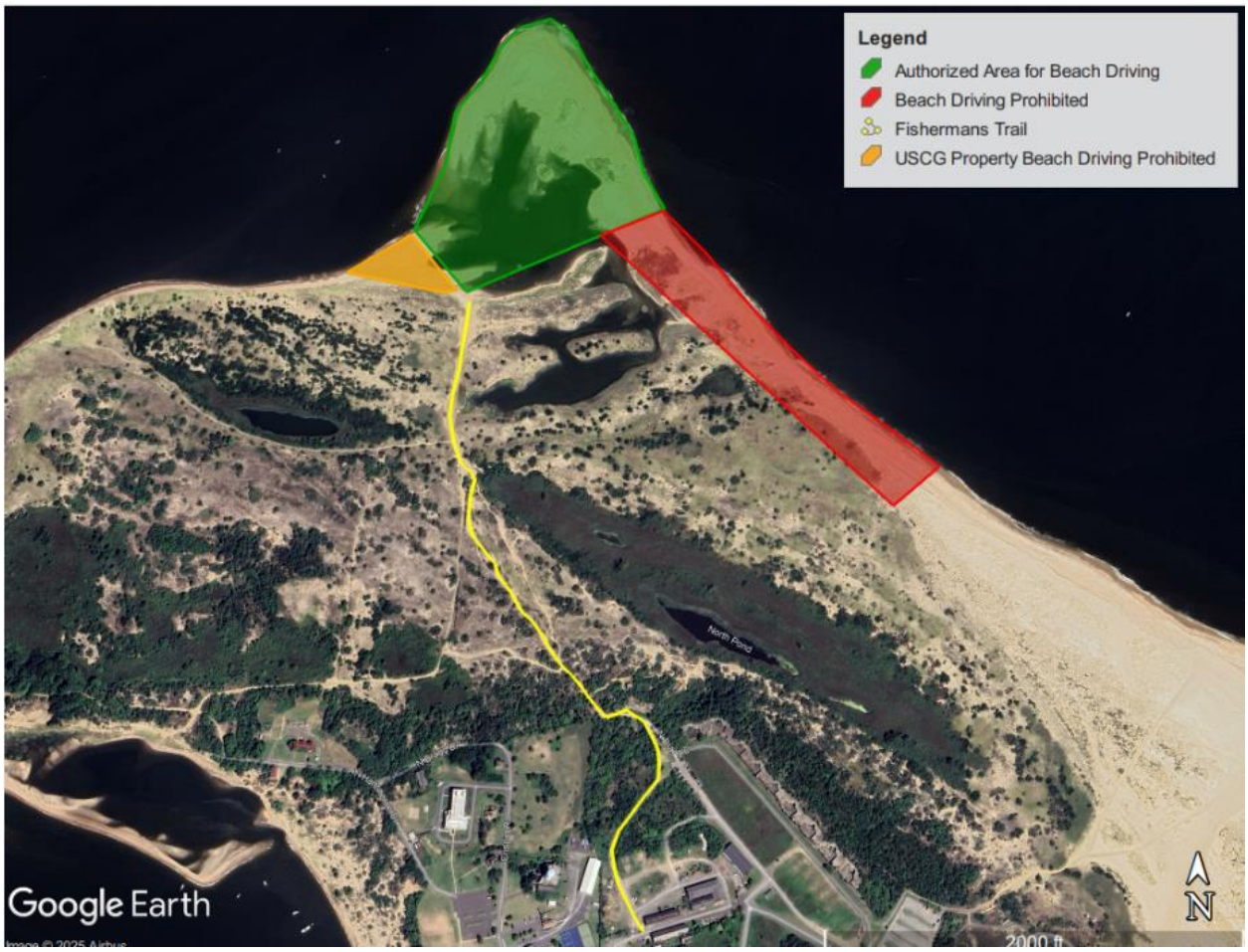


**Map of Authorized and Prohibited Off-Road Driving**

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## Attachment B: Cost Recovery Estimate

**National Park Service**
Gateway National Recreation Area
Cost Recovery Estimate / Tracking
4/15/2026

**Project Description** 2026 USACE Sandy Hook Channel Maintenance Dredge, FY27

| Location | Division | Staff | Wage/Type | Grade | Step | Hourly Rate | Benefits | Admin | Hours | Cost |
|---|---|---|---|---|---|---|---|---|---|---|
| Sandy Hook | Law Enforcement | Ranger | LE-OT | 9 | 4 | $59.25 | 7.7% | 15% | 2400.0 | $176,121.81 |

**Law Enforcement**

*2025 Rate = $174,375.14*

2026 Adjustment due to Federal pay raise = $176,121.81

**Biological Opinion**

*2025 Rate = $21,560*

2026 Adjustment due to Federal pay raise = $21,775.60

**Total Due Prior to Activities start: $197,897.41**

Event Requirements:

- 1 Ranger/s for 3, 8 hours shifts for 24-hour coverage.
  - Approx. 100 Days
- 3-month full-time equivalent biological monitoring position

***This cost recovery fee estimate is only an estimate based on projected NPS labor hours necessary for completion of the Permitted Activity. Actual NPS labor and service costs will be calculated at the conclusion of the Permitted Activity. The NPS will issue a final statement within 30 days of the concluded activity which may result in a balance due from the NPS or the permit holder. If a refund is determined by the NPS, it will be payment though EFT; if a balance is owed to the NPS, it will be noted on the final statement and due to the NPS within 14 business days of receipt.***

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## Attachment C: Description of Permitted Activity

### 1. Project Overview

The New York District, U.S. Army Corps of Engineers (USACE), will perform maintenance dredging of the Sandy Hook Federal Navigation Channel within New York Harbor. The project involves the removal of approximately 190,000 cubic yards (CY) of sand and gravel from shoaled areas within the Sandy Hook Channel, restoring the channel to its authorized depth of -35 feet Mean Lower Low Water (MLLW), with up to 2 feet of allowable over depth.

Dredged material will be transported and placed at the Sea Bright Offshore Borrow Area (SBOBA), an approved offshore placement site.

### 2. Methods and Equipment

#### A. Water-Side Dredging Operations

Dredging will be performed using mechanical dredging methods supported by marine vessels, which may include:

- Approximately three to four tug vessels;
- One or more scow vessels;
- A crew/survey vessel.

Dredged material will be excavated mechanically and loaded onto scows for transport to the designated offshore placement site (SBOBA).

#### B. Land-Side Support Operations (Sandy Hook Beach Spit)

Intermittent land-based activities will occur within designated areas of Sandy Hook Beach Spit to support dredging operations. These activities may include:

- Surveying activities;
- Limited contractor access using authorized 4x4 vehicles operating within approved access routes and areas;
- Installation, maintenance, and removal of temporary construction fencing and signage to delineate work areas and support public safety;
- Use of authorized small utility vehicles for monitoring fencing, signage, and permitted operations.

#### C. Survey Activities

Survey operations will be conducted to support project planning, execution, and verification, and may include:

- Pre-dredge ("BD") surveys;
- Post-dredge surveys to verify achieved depths and channel restoration;
- Supplemental upland and shoreline surveys as needed.

**3. Schedule and Duration**

- Pre-dredge (BD) survey activities are anticipated to occur prior to commencement of dredging operations.
- Dredging operations are anticipated to begin in early fall (approximately October 2026).
- The expected performance period for dredging activities is approximately 25 days under typical conditions, with a possible extension up to approximately 90 days.

Final dredging quantities, schedule, and sequencing will be confirmed during pre-construction coordination and may be adjusted based on pre-dredge survey results.

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## Attachment D: Tally Sheet

National Park Service
Gateway National Recreation Area: Sandy Hook

**Visitor Trail Data Collection Report** Trail Head: M Lot J Lot (Circle One)

| Date: | Time: | Number of People | Decription of each person | Time onto Trail | Time off Trail | Name of Personnel | Initials |
|---|---|---|---|---|---|---|---|
| 09/15/2021 *(example)* | 8:04 AM | 2 | 1: Male, mid 40s, brown hair, black shirts, blue jeans<br>2: Male, mid 60s, white hair, blue shirt, khakis, gray hat | 8:06 AM | 1:33 PM | John Smith | JS |
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SECTION 01 11 00

SUMMARY OF WORK
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PART 1 GENERAL

1.1 FAR 52.211-10, COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK

a. The Contractor shall be required to (i) commence work under this contract within five (5) calendar days after the date the Contractor receives the Notice to Proceed, (ii) prosecute the work diligently, and (iii) complete the basic work ready for use, not later than **51 calendar days**, after the date the Contractor receives the notice to proceed. The time stated for completion shall include final cleanup of the premises. (FAR 52.212-3)

b. All work shall be in accordance with the drawings and specifications or instructions attached hereto and made a part thereof, or to be furnished hereafter by the Contracting Officer or Contracting Officer Representative (COR) and subject, in every detail, to his supervision, direction, and instructions.

1.2 WORK COVERED BY THE CONTRACT DOCUMENTS

1.2.1 Project Description

The work to be performed under this project consists of providing all materials, plant, labor, equipment and services (except those furnished by the Government) to perform maintenance dredging of New York Harbor, Sandy Hook Channel, with placement of the material at the Sea Bright Offshore Borrow Area (SBOBA). Dredged material shall only be placed within the approximately 93-acre placement area in SBOBA with coordinates as identified on the contract plans. The contractor will be solely responsible for coordination and compliance with the transportation, offloading, and placement site(s) requirements. See Section 35 20 23.10 18 entitled "SBOBA DREDGED MATERIAL TRANSPORT AND PLACEMENT MONITORING" for more SBOBA information.

The maintenance for this project consists of dredging approximately **177,130 CY** of basic work material based on the before dredge survey performed in September 2024. For more details, see "ESTIMATED QUANTITIES" in Section 00 30 00 "ADMINISTRATIVE REQUIREMENTS" of these Specifications. The material to be dredged has been determined to be composed of sand and gravel.

A summary of the Dredging Areas is shown in the table below:

| DREDGING AREAS | TOTAL ESTIMATED QUANTITY (CY) |
|---|---|
| BASIC WORK - DREDGING AREA A: (-35' MLLW + 2' OD) | 177,130 |

Contract time for completion is based on a minimum average production rate of **8,000 cubic yards (CY) per day** for dredging, transportation, and

placement at the SBOBA. Should the total quantity of material exceed the estimated quantities within the Solicitation Contract Form, additional time will be allowed at the rate of one (1) calendar day for each 8,000 cubic yards in excess of the established limit. The time stated for completion shall include final clean up.

The contractor must bid on all items of the bid schedule. The following CLINs require dredging of the New York Harbor, Sandy Hook Channel, New Jersey, Federal Navigation Project, with subsequent transportation and placement of the dredged material at the SBOBA:

CLIN 0002 (BASIC WORK) - requires dredging to the plane of -35 feet MLLW plus 2 foot allowable overdepth.

Based on the before dredge survey performed in September 2025, the maximum quantity available to be dredged is 177,130 CY from the contract areas in the basic work contract area of the New York Harbor, Sandy Hook Channel, New Jersey, Federal Navigation Project. For a detailed breakdown of quantity available to be dredged, see paragraph 1.9 "ESTIMATED QUANTITIES" in Section 01 30 00 of the Specifications.

Scow monitoring is required for this project. The contractor is required to comply with Section 35 20 29 entitled "SBOBA DREDGED MATERIAL TRANSPORT AND PLACEMENT MONITORING", of these specifications.

Sampling and testing was conducted by the Government in 2017, and the grain size test results are included in the specifications in Section 00 90 01 as Attachment J. The complete sampling and testing results can be found as attachments to this solicitation on SAM.gov.

The New Jersey Department of Environmental Protection (NJDEP) State Water Quality Certificate (WQC) for the maintenance dredging of New York Harbor, Sandy Hook Channel, New Jersey, Federal Navigation Project is attached in Section 01 90 02 of this solicitation. The contractor must comply with all conditions of the NJDEP WQC.

U.S. Fish and Wildlife Service (USFWS) issued a Programmatic Biological Opinion on October 2017 entitled "Biological Option on The Effects of Recurrent Maintenance Dredging of The Sandy Hook Channel, Monmouth County, New Jersey on Four Federally Listed Species" (PBO).

1. The issued PBO contains dredge window restrictions for the Sandy Hook Federal Navigation Channel. No dredging of beach or any subtidal area within 300 feet of the MLLW lines shall be performed from 1 March 31 August of each year to protect Piping Plovers.

2. No installation or removal of security fencing, pipeling, or any other temporary structures on the beach shall be performed from 1 March to 31 August of each year to protect Piping Plovers.

3. Should dredging occur between 1 September and 30 November, the Corps will arrange for a survey of all beach within the impact area for the presence of seabeach amaranth plants no more than 14 days before the start of each dredging action. The Corps will mark any plants occurring inside the impact area, but outside of the sand removal area, with string-and-post fencing and appropriate signage. Project personnel and vehicles shall not disturb deabeach amaranth plants within the fencing.

4. Due to the recent observance of the Northeastern Beach Tiger Beetles, a pre-dredge northeastern beach tiger beetles survey must be conducted between mid-September and mid-October during fair weather. If any adult or larvae northeastern beach tiger beetles are discovered during the survey, the beetles must be translocated to a USACE, USFWS, and NPS-approved location outside of the dredging footprint. A post-translocation species survey shall be conducted after translocation to ensure no endangered species remain in the dredging foorprint.

As per CLIN 0004 (NORTHEASTERN BEACH TIGER BEETLES SURVEY AND TRANSLOCATION EFFORTS), the contractor shall coordinate with USFWS, NPS and USACE to provide a qualified and approved northeastern beach tiger beetle expert to conduct the pre-dredge species survey, translocation efforts, and a post-translocation species survey. Translocation efforts shall not proceed without the agreement of the USFWS, USACE, and NPS. Dredging shall not commence until USFWS has concurred with the completion of the northeastern beach tiger beetles conservation measure.

The Contractor must erect two (2) orange construction fencing, supported by metal T posts, around the work area that is along the shoreline in order to keep the public from accessing the work area. The contractor is required to abide by any additional fencing requirements as directed by the Contracting Officer and/or Contracting Officer's Representative. Signage shall be placed in accordance to the National Park Service (NPS) Special Use Permit (SUP). See 00 90 02 for NPS SUP requirements.

Security: National Park Service (NPS) shall have Law Enforcement Rangers on premise for 24-hour coverage. The Contractor is required to monitor the fenced work area for public safety via on-board dredge monitor. Personnel providing on-board dredge monitoring shall be clearly identified and assigned the role to monitor the site during work hours. Any unauthorized person entering the fenced work area must be told to exit the closed area via the onboard PA system on the dredge. If violators do not comply, the Contractor must pause dredging work and contact the NPS Dispatch at 718-354-4711. Work cannot resume until violators have exited the fenced work area. The Contractor shall review the requirements set forth in the NPS SUP and ensure all conditions of the SUP shall be followed. The SUP for this maintenance dredging cycle of Sandy Hook Channel can be found in Section 00 90 02.

Fencing and signage shall remain active on site until scarping and overall disturbance of the beach at the dredging area has stabilized and general safety of the area at the dredging location is held to be acceptable. Prior to the expiration of the NPS SUP or at the direction of the USACE and NPS, all fencing, signage, and appurtenances shall be removed from the Project Area.

The Contractor is required to maintain the fencing and signage throughout the duration of the project until the beach at the dredging area is held acceptable by USACE and NPS. If at any time fencing and/or signage have been displaced due to weather and/or unforeseenable conditions, the contractor must rectify the issue within five (5) hours of receipt of notice of the displacement.

The Contractor shall furnish a 4x4 vehicle or UTV to utilize for fencing and signage installation, as well as transporting USACE personnel for beach inspections. The vehicle must be able to accommodate at least two

(2) USACE personnel. The Contractor shall be responsible for the vehicle throughout the duration of this project and abide by any requirements and restrictions as stated in the SUP.

Due to the inability for a hopper dredge to safely complete the work during a previous dredging cycle, it is recommended that a hopper dredge not be used to complete the anticipated work.

The work is anticipated to be performed within the approximate time period of September 2026 - January 2027. Dredging shall begin in October 2026 and cannot commence until USFWS has concurred with the northeastern beach tiger beetles conservation measure.

## 1.3 PERFORMANCE OF WORK BY THE CONTRACTOR

The Contractor shall perform on the site, and with its own organization and equipment, work equivalent to at least forty (40) percent of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performance of the work, the Contractor requests a reduction and the Contracting Officer and/or his Representative determines that the reduction would be to the advantage of the Government. (FAR 52.236-01)

## 1.4 DFARS 236.204, DISCLOSURE OF THE MAGNITUDE OF CONSTRUCTION PROJECTS

The entire work (CLINs 0001 through 0004) is estimated to cost approximately $1,000,000.00 to $5,000,000.00.

## 1.5 DATUM AND BENCH MARKS

Soundings and Elevations shown in the contract drawings are in US Survey Feet and refer to Mean Lower Low Water (MLLW) [epoch 1983-2001]. The Plane of MEAN LOWER LOW WATER (MLLW) is 2.8 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 4.6.1). The following Benchmark information should be referenced for defining local datum and required project depth.

New York Harbor, Sandy Hook Channel, NJ

NSRS Benchmark:
Benchmark: SIMPSON 2
PID: KV0709
Elevation: 6.92' (NAVD88)

Local Control Data:
Benchmark: SIMPSON 2 RM 3
PID: KV0707
Elevation: 6.85' (NAVD88)

All control should be verified prior to utilization.

The contractor may contact the New York District Survey Branch at (201) 333-0284 for assistance in bench mark discrepancies or clarification in benchmark and / or tide gage location.

## 1.6 MISPLACED MATERIAL

Should the Contractor during the progress of the work, lose, dump, throw overboard, sink, or misplace any material, plant, machinery, or appliance,

which in the opinion of the Contracting Officer and/or his Representative may be dangerous to or obstruct navigation, the Contractor shall recover and remove the same with the utmost dispatch. The Contractor shall give immediate notice, with description and location of such obstructions, to the Contracting Officer and/or his Representative or inspector, and when required shall mark or buoy such obstruction until the same are removed. Should he refuse, neglect, or delay compliance with the above requirements, such obstructions may be removed by the Contracting Officer and/or his Representative, and the cost of such removal may be deducted from any money due or to become due to the Contractor, or may be recovered under his bond. The liability of the Contractor for the removal of a vessel wrecked or sunk without fault or negligence shall be limited to that provided in Sections 15, 19, and 20 of the Rivers and Harbors Act of March 3, 1899 (33 USC. 410 et seq.) (DOD FARS SUPPL. 52.236-7006).

## 1.7 AUTHORIZED CONSTRUCTION AREA AND TRESPASSING

Do not inflict damage upon land and properties outside the authorized construction area by unwarranted entry upon, passage through, damage to, or disposal of, material on such land or property. The Contractor may make a separate agreement with any other party, regarding the use of, or right to, land or facilities outside the contract area. If such an agreement is made, it must be in writing and a copy shall be provided to the Contracting Officer. The Contractor must hold and save the Government, its officers, and agents free from liability arising from trespassing or damage occasioned by his operations.

## 1.8 EXISTING WORK

In addition to FAR 52.236-9 Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements:

a. Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work which remain.

b. Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as approved by the Contracting Officer. At the completion of operations, existing work must be in a condition equal to or better than that which existed before new work started.

c. The responsibility for damage to the permanent work must be as set forth in the article of the contract clause entitled "PERMITS AND RESPONSIBILITIES". Except as herein provided, damage to all work, utilities, materials, structures, equipment, and plant, including temporary construction and utilities, pavements, vehicles, vessels, and other property along the routes used by the Contractor's plant, vessels, equipment, pipelines and/or vehicles must be repaired to the satisfaction of the Contracting Officer, at the Contractor's expense, regardless of the cause of such damage.

# PART 2 PRODUCTS

Not used.

# PART 3 EXECUTION

Not used.

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# SECTION 01 20 00

# PRICE AND PAYMENT PROCEDURES
**05/26**

## PART 1 GENERAL

### 1.1 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

### 1.2 CONTRACT COST BREAKDOWN

The Contractor must furnish within 30 days after the date of Notice to Proceed, and prior to the submission of its first partial payment estimate, a breakdown of its single job pay item or items which will be reviewed by the Contracting Officer as to propriety of distribution of the total cost to the various accounts. Any unbalanced items as between early and late payment items or other discrepancies will be revised by the Contracting Officer to agree with a reasonable cost of the work included in the various items. This Contract cost breakdown will then be utilized as the basis for progress payments to the Contractor.

### 1.3 SINGLE JOB PAYMENT ITEMS

Payment items for the work of this Contract for which Contract job payments will be made are listed in the SCHEDULE. All costs for items of work, which are not specifically mentioned to be included in a particular job or unit price payment item, are included in the listed job item most closely associated with the work involved. The job price and payment made for each item listed constitutes 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.

#### 1.3.1 Mobilization and Demobilization

##### 1.3.1.1 Payment

Payment will be made for costs associated with mobilization and demobilization, as defined in "DFARS 252.236-7004 Payment for Mobilization and Demobilization".

Mobilization shall include all costs for operations accomplished prior to commencement of actual dredging operations, such as transfer of dredge and attendant plant and equipment to site and other incidentals in advance of the actual dredging.

Demobilization shall include general preparation for transfer of plant to

home base, removal of equipment / pipelines, cleanup of areas within the limits of construction, and transfer of plant to its home base. The cost of work other than mobilization and demobilization of the Contractor's dredging plant and equipment shall not be included in this item. For payment for Mobilization and Demobilization see contract clause Section 00 70 00 Contract Clauses.

All costs connected with the mobilization and demobilization of all of the contractor's dredging plant and equipment will be paid for at the contract lump sum price for this item. 60 percent of the lump sum price will be paid to the Contractor upon completion of his mobilization to the work site. The remaining forty percent 40 percent will be included in the final payment for work under this contract.

In the event the Contracting Officer and/or his Representative considers that the amount in this item 60 percent, which represents mobilization, does not bear a reasonable relation to the cost of the work in this contract, the Contracting Officer and/or his Representative may require the Contractor to justify this portion of the bid. Failure to justify such price to the satisfaction of the Contracting Officer and/or his representative will result in payment of actual mobilization costs as determined by the Contracting Officer and/or his Representative, at the completion of mobilization and payment of the remainder of this item in the final payment under this contract. The determination of the Contracting Officer and/or his Representative is not subject to appeal.

1.3.1.2 Unit of Measure

Unit of measure: job.

1.3.2 "Black Box" Monitoring Unit

1.3.2.1 Payment

Payment will be made for costs associated with operations necessary for furnishing, and equipping all container vessels used to transport dredged material to designated placement or treatment locations with container Vessel Monitoring Equipment ("Black Box") and software.

1.3.2.2 Unit of Measure

Unit of measure: job.

1.3.3 Northeastern Beach Tiger Beetles Survey and Translocation Efforts

1.3.3.1 Payment

Payment will be made for costs associated with operations necessary for the northeastern beach tiger beetles pre-dredge species survey, translocation efforts, and post-translocation species survey.

1.3.3.2 Unit of Measure

Unit of measure: job.

1.4 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 SCHEDULE and described

below. The unit price and payment made for each item listed constitutes 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.

1.4.1 Dredging

1.4.1.1 Payment

Payment will be made for costs associated with dredging of the project, which includes performing required dredging and other operations incidental there to the disposition of dredged material.

1.4.1.2 Measurement

The total amount of material removed and paid for under the contract will be measured by the cubic yard dredged. Measurement of the number of cubic yards dredged will be made by computing the volume between the bottom surface shown by soundings of the last survey made before dredging and the bottom surface shown by soundings of the survey made as soon as practicable after the entire work specified has been completed. The volume for measurement shall include the material within the limits of the overdepth, side slopes described in SECTION 35 20 23, Paragraph 1.5 Quantity of Material, 1.6 Overdepth Dredging, and 1.7 Side Slopes.

The soundings maps and/or drawings accurately represent the channel conditions existing in September 2025 (Sandy Hook Channel, New York Harbor). The soundings shown on the contract drawings were taken with an electronic depth recorder and/or multi-beam surveying system with a transducer frequency of 200-400 KHz. New soundings will be taken generally two weeks prior to dredging. Soundings after dredging will be made by an electronic depth recorder with a transducer frequency of 200-400 KHz or may be made by using a multi-beam surveying system of the same frequency. Weather dependent, after-dredging-surveys will commence generally within five (5) days of completion of the project. Determination of quantities to be paid in the area specified after having been made once, will not be reopened, except on evidence of collusion, fraud or obvious error. Computations for payment purposes will generally be made by the Corps of Engineers utilizing the Triangulated Irregular Network (TIN) method.

Shoaling in the areas to be dredged on this project does not occur at a rapid rate from existing depths. However, the unit price for dredging based on the above method of computation of the quantity for which payment is to be made shall include the Contractor evaluation of shoaling, changes in the regime of the waterway, or changes caused by the Contractor's operations that may occur during the period between the survey before dredging and the survey for acceptance of work.

Scows and Hopper Dredges: Where scows and hopper dredges are used in performance of work and where the Contractor maintains load measuring devices on such scows or hopper dredges, copies of all recorded measurements made in connection with the work shall be furnished to the Contracting Officer and/or his/her representative. If as the work progresses the Contractor determines that a significant difference exists between the recorded bin or scow quantities and the survey quantities computed from the check surveys described above, he shall immediately notify the the Contracting Officer and/or his/her representative of any

such discrepancies. Such notification shall include a description of the Contractor's methods of measuring scow or bin quantities, certification of measuring techniques, documentation of material sampling and methods used to convert bin or scow measurements to in-place density.

It is emphasized that bin or scow measurements shall not be used as basis for partial or final payments.

14-day partial payments will be based on approximate quantities determined by soundings or sweepings taken behind the dredge by the Contractor. The Contractor soundings are to be used for partial payments only and will not form a basis for the acceptance of the work.

The Contractor must inform the Government, in writing, within three calendar days of completing the work.

The total quantity of excavated material for which payment will be made will be the theoretical quantity between the ground surface as determined by a survey and the grade and slope of the theoretical cross sections indicated. No allowance will be made for the removal of any material outside the required slope lines unless authorized.

When the Government performs surveys using multibeam, the data will be binned using the median soundings for contours and volumes. The maximum bin size will not exceed 3'x 3'.

In the event that unforeseen obstructions or hard material is discovered, shoals in these areas will be assessed using the minimum sounding within the bin. This method will not be used for computation.

#### 1.4.1.3 Unit of Measure

Unit of measure: cubic yard (CY).

## 1.5 CONTRACT MODIFICATIONS

In conjunction with the Contract Clause "DFARS 252.236-7000, Modification Proposals-Price Breakdown," and where actual ownership and operating costs of construction equipment cannot be determined from Contractor accounting records, equipment use rates shall be based upon the applicable provisions of the EP-1110-1-8.

## 1.6 PAYMENTS TO THE CONTRACTOR

Payments will be made on submission of itemized requests by the Contractor which comply with the requirements of this section, and will be subject to reduction for overpayments or increase for underpayments made on previous payments to the Contractor.

### 1.6.1 Obligation of Government Payments

The obligation of the Government to make payments required under the provisions of this contract will, at the discretion of the Contracting Officer, be subject to reductions and/or suspensions permitted under the FAR and agency regulations including the following in accordance with "FAR 32.503-6:

a. Reasonable deductions due to defects in material or workmanship;

b. Claims which the Government may have against the Contractor under or in connection with this contract;

c. Unless otherwise adjusted, repayment to the Government upon demand for overpayments made to the Contractor; and

d. Failure to provide up to date record drawings not current as stated in Contract Clause "FAC 5252.236-9310, Record Drawings.

1.7 SHOALING

If, before the contract is completed, shoaling occurs in the finished channel because of the natural lowering of the side slopes, re-dredging at the contract price, within the limit of available funds, may be done if agreeable to both the Contractor and the Contracting Officer and/or his Representative.

1.8 CONTINUITY OF WORK

No payment will be made for work done in any area designated by the Contracting Officer and/or his Representative until the full depth required under the contract is secured in the whole of such area, unless prevented by ledge rock; nor will payment be made for excavation in any area not adjacent to and in prolongation of areas where full depth has been secured except by decision of the Contracting Officer or Contracting Officer's Representative. Should any such nonadjacent area be excavated to full depth during the operations carried on under the contract, payment for all work therein may be deferred until the required depth has been made in the area intervening. The Contractor may be required to suspend dredging at any time when for any reason the gauges or ranges cannot be seen or properly followed.

PART 2 PRODUCTS

2.1 QUANTITY SURVEYS

a. Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.

b. The Government shall conduct the before-dredge and after-dredge surveys and make the computations based on them. The Contractor shall conduct the survey for any periods for which progress payments are requested and shall make the computations based on these surveys. These surveys conducted by the Contractor shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance.

c. Promptly upon completing a survey, the Contractor shall furnish the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer and/or his Representative, who shall use them as necessary to determine the amount of progress payments. Raw data, edited survey data with all supporting files and documentation, and all data generated during such work shall be furnished by the Contractor to the Contracting Officer and/or his Representative. The Contractor shall retain copies of all such material furnished to the Contracting Officer and/or his Representative. (FAR 52.236-16). The Government will not commence work on the after-dredge survey until the Contractor has furnished the

originals of all field notes, all other records relating to the Contractor’s final survey or to the layout of the work, and all data generated during such work, to the Contracting Officer and/or his Representative.

d. Contractor's participation in surveys: In accordance with agency policy guidance, the preferred methods of performance of all hydrographic quantity surveys shall be (in descending order):

(1) The Government will perform quantity surveys by using qualified in-house crews, if available.

(2) The Government will provide quantity surveys by contracting directly with qualified independent hydrographic survey contractors.

(3) The Government will permit, only in exceptional circumstances, the use of dredging contractor's surveys if the Contracting Officer and/or his Representative determine that such surveys are adequate and reasonable for payment purposes and a Government inspector, qualified in hydrographic surveying, is present during the collection of the survey data. Raw data, edited survey data with all supporting files and documentation, and all data generated during such work shall be furnished by the Contractor to the Contracting Officer and/or his Representative.

If it is determined by the Contracting Officer that it is impractical for Government personnel to perform the before-dredge and after-dredge surveys and the Government wishes the Contractor's surveys to be used, the following will be required from the Contractor:

(1) Acceptance of all monumentation and transponder locations.

(2) Witness by a Corps of Engineers representative of all calibration procedures such as vertical and horizontal control.

(3) Corps of Engineers observation of raw data collection.

(4) Submittal of both unedited as well as edited versions of survey maps.

(5) Subsequent acceptance of edited survey map after determination by Corps survey personnel that editing was conducted in accordance with U.S. Army Corps of Engineers specifications and guidelines. (FAR 52.236-16 - ALTERNATE I, APR 1984)

e. Any disagreements with the data collection process, and / or any data generated during such work shall be brought to the attention of the Contracting Officer or his representative within five (5) business days of the data collection process. The Contracting Officer or his representative will then determine the necessary corrective measures, if any. Failure to notify the Contracting Officer or his representative within 5 business days of the data collection process disqualifies the Contractor from any such related claims.

f. Any survey related disagreement(s) as it pertains to this contract must be submitted in writing to the Contracting Officer or his representative within 5 business days of occurrence of such survey related event. Failure to notify the Contracting Officer or his

representative within 5 business days of such survey related event disqualifies the Contractor from any such related claims.

PART 3 EXECUTION

Not Used

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SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS
**06/26**

PART 1 GENERAL

1.1 SUMMARY

The requirements of these section apply to, and are component part of, each section of the project specifications.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation, submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Pre-Construction Submittals, G

Preconstruction Submittals shall be submitted to the Contracting Officer or Contracting Officer Representative at least seven (7) days prior to the preconstruction conference. Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following:

Certification of Insurance; G

Surety Bond; G

List Of Proposed Subcontractors; G

Order of Work; G The Contractor's order of work for dredging and performing other work, including disposal area plan.

Work To Be Performed By The Contractor; G,

Subcontracting Plan; G

Progress Schedule; G
A Project Schedule shall be submitted in accordance with the paragraph entitled "Project Meetings", of this section.

Submittal Register; G

Letter Appointing Superintendent; G

Activity Hazard Analysis; G See Section 01 35 26, GOVERNMENTAL SAFETY REQUIREMENTS

Accident Prevention Plan; G See Section 01 35 26, GOVERNMENTAL SAFETY REQUIREMENTS

Work Plan; G

Quality Control (QC) plan, G See Section 01 45 00.00 20

Environmental Protection Plan; G

Notice to Mariners; G

SD-03 Product Data G

Monthly Progress Report; G

Project Schedule Status Report; G

The Contractor shall submit an updated Monthly Progress Report at the first meeting of each month, including a Project Schedule Status Report and if no meeting is in the agenda, these items shall be submitted to the Contracting Officer Representative when requested.

SD-11 Closeout Submittals

As-Built Drawings; G

## 1.3 PRECONSTRUCTION CONFERENCE

Work shall not commence prior to the conference.

After award of contract, a pre-construction conference will be held at such time and location as determined by the Contracting Officer for purposes of discussing and developing mutual understanding between the Contracting Officer or his authorized representative and the Contractor's Representatives regarding the terms, conditions, and requirements of the contract. Members of the conference from the Government will include the quality assurance staff, the Contracting Officer or his authorized representative, and construction staff. Members from the Contractor shall include the site superintendent, project safety officer, and the quality control staff. The discussion will include, and may not be limited to, the following:

-Contractor Supervisory and Quality Control staff.
-Correspondence Procedures
-Accident Prevention Plan
-Pollution Control Plan
-Quality Control
-Project Scheduling and Payment Procedures
-Other subjects that may be of interest to the contracting parties
-Schedule of Weekly Meeting

## 1.4 PROJECT MEETINGS

The Contractor and/or Contractor Representatives shall attend Weekly Project Meetings (or as otherwise mutually agreed to) scheduled by the Government in accordance with Section 01 32 01.00 10 PROJECT SCHEDULE. The Contractor's Superintendent shall be in attendance at these scheduled project meetings.

A Monthly Progress Report shall include a Project Schedule Status Report per requirement of Section 01 32 01.00 10 PROJECT SCHEDULE.

## 1.5 SUBMITTAL OF WORK TO BE PERFORMED BY THE CONTRACTOR

Provide the Contracting Officer, within five (5) days after award, items of work to be performed by contractor's employees and the estimated cost of those items. For the purposes of this contract, the percentage of work that must be performed by the Contractor is stated in Section 00 70 00 Contract Clauses, FAR Clause 52.236-01, and in Section 01 11 00 SUMMARY OF WORK, paragraph 1.3 entitled: "PERFORMANCE OF WORK BY THE CONTRACTOR" of these specifications.

## 1.6 LIQUIDATED DAMAGES-CONSTRUCTION

a. If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of $3,260 for each calendar day of delay until the work is completed or accepted.

b. If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

## 1.7 PHYSICAL CONDITIONS

The information and data furnished or referred to below are not intended as representations or warranties but are furnished for information only. It is expressly understood that the Government will not be responsible for the accuracy thereof or for any deduction, interpretation or conclusion drawn by the Contractor.

a. WEATHER CONDITIONS. The site of the work is not exposed to severe wind and wave action and the Contractor's operations are not likely to be affected by ordinary storms. Real-time data are available on the World Wide Web at http://www.ndbc.noaa.gov/index.shtml.

(1) Fog. An examination of the records of the Unedited Local Climatological Data of the National Oceanic and Atmospheric Administration's (NOAA) Climatic Data Center at Newark Liberty International Airport, New Jersey, discloses an average of 31 days per year on which dense fog (visibility of 1/4 mile or less) occurs in the New York Harbor area. The maximum number of days in which dense fog occurred in any year was 45 in 1959. The maximum number of days in which dense fog occurred in any month was 4 days in June.

Visibility data are available on the Internet at https://www.ncdc.noaa.gov

(2) Winds. Wind conditions in the project area, based on the records of the National Climatic Data Center's Local Climatological Data for Newark International Airport, are as follows:

Wind Conditions for Sandy Hook, NJ, based on 8 years of data.

| MONTH | AVE WIND SPEED (MPH) | PEAK WIND GUST (MPH) |
|---|---|---|

| | | |
|---|---|---|
| JAN | 10.5 | 45.9 |
| FEB | 10.7 | 46.5 |
| MAR | 9.8 | 52.7 |
| APR | 8.8 | 42.0 |
| MAY | 7.7 | 42.6 |
| JUN | 7.2 | 36.7 |
| JUL | 7.0 | 48.4 |
| AUG | 7.1 | 50.0 |
| SEP | 7.9 | 94.3 |
| OCT | 9.3 | 130.1 |
| NOV | 9.1 | 45.7 |
| DEC | 11.0 | 83.8 |

(3) Weather conditions exceeding in severity the fog conditions described above or average wind speeds exceeding 25 mph, or wave heights exceeding 3 feet will be considered unusually severe if delays are caused thereby to operations for more than 50% of the day under this contract.

(4) ICE. Icing within the project vicinity during the contract period is not anticipated. However, in the event that icing does occur, this will be considered to be unusually severe weather if delays are caused thereby to operations for more than 50% of the day under this contract.

(5) TIDES The mean range of tide at Elm Park, Staten Island, NY is 4.9 feet and the mean range of spring tides is 5.9 feet. Irregular fluctuations due to wind and atmospheric pressure have varied from about 10.9 feet above mean low water to about 3.5 feet below mean low water. (Means based on 24 years 1938 - 1961).

b. BRIDGE AND UTILITY CROSSINGS.

| NO. | PERMIT NO. | DESCRIPTION |
|---|---|---|
| 1 | 1291/15 | 29 February 1923; Armored submarine cables In the cable area between Charted Buoys 16 and 17. |
| 2 | 1361 | 24 May 1923; Submarine cable between Fort Hancock, NJ. And Fort Tilden, NY, on the natural bottom. In the cable area between Charted Buoys 16 and 17. |
| 3 | 1291/3 (628) | 21 April 1924 Submarine cable between Fort Hancock, NJ. And Fort Tilden, NY, on the natural bottom. In the cable area between Charted Buoys 16 and 17. |

| NO. | PERMIT NO. | DESCRIPTION |
|---|---|---|
| 4 | 1291/18 | 28 February 1928; Armored submarine cables In the cable area between Charted Buoys 16 and 17 |
| 5 | 4016/2,3,4, 5,6 (1942-04016) | 5 March 1942, rerouted: 29 July 1954 ; Five submarine cables between Fort Hancock, NJ. and Roamer Shoals Light, NJ, on the natural bottom. Crossing Sandy Hook Channel at right angles 200 yards east of Charted Buoy 16. |
| 6 | 3992 | 1 March 1951 Two submarine cables between Fort Hancock, NJ. and 346 Broadway, New York, NY, on the natural bottom. In the cable area between Charted Buoys 16 and 17. |
| 7 | 7447 (1967-06280) | 28 April 1967; 26-inch Submarine gas pipeline crossing Main Ship Channel between buoys Red Nun #4 and Red Bell #18, minimum depth of 60 ft MLW. |
| 8 | 1362 | 28 February 1928; Lay submarine cable on exisiting bottom in Atlantic Ocean and Lower New York Bay between cable "b" Fort Hancock, Sandy Hook, NJ and Cable "R" Fort Tilden near Rockaway Pt,L.I, NY |
| 9 | 2155 | 25 June 1940: Placing and maintaning a temporary anti-submarine net for experimental and training puposes until 15 Sept 1940. |
| 10 | 3852 | 6 May 1943: Replacement of the exisiting submarine cable between Monmouth Beach at Elberon, NJ with two submarine cables on natural bottom, in Atlantic Ocean between Monmouth Beach and Elberon, NJ. |
| 11 | NAN-2014-01066 | 30 Oct 2014: Transcontinental Gas Pipeline Company LLC; activity involved lowering 215 linear feet of an exisiting natural gas pipline by 3.2 feet and cover the pipeline with the excavated material, approximately 700 CY. in Atlantic Ocean, off the coast of Sandy Hook Penninsula, Monmouth County, NJ. |
| 12 | 2002-00134 | 16 Feb 2005: Installation of Neptune Regional Transmission 600 MW (500kV) high voltage direct-current (HVDC) submarine transmission cable that connects load centers in L.I. with transmission and generation resource in NJ. From Borough of Sayerville, Middlesex County NJ to Town of North Hempstead, Nassau County, NY. |
| 13 | CENAP -OP-R 2012-0310-39 | 3 June 2014: Geotechnical/geophysical tests for 56 sites along the NJ coastline. The work will include vibracoring in both state and federal waters. Sampling will be completed from Atlantic County, NJ to Hudson County, NJ. |
| 14 | 2246 | 30 Nov 1940: Harbor Defenses of Sandy Hook, Installation of cable from Ft Tilden to Sandy Hook |

| NO. | PERMIT NO. | DESCRIPTION |
|---|---|---|
| 15 | 1122 | 21 Aug 1929: Borough of Highlands, sewer pipeline across Shrewsbury River and into Atlantic Ocean |
| 16 | 1980-00508 | 9 Dec 1980: Monmouth County Bayshore Outfall Authority, buoy installation in Atlantic Ocean at end of sewer outfall |
| 17 | 2014-00280 | 29 May 2014: Monmouth County Bayshore Outfall Authority, sewer outfall maintenance |
| 18 | 8471 | 3 May 1972: Monmouth County Bayshore Outfall Authority, sewer groin construction in Atlantic Ocean |
| 19 | 8472 | 3 May 1972: Monmouth County Bayshore Outfall Authority, sewer installation Atlantic Ocean |
| 20 | 2013-01644 | 22 Apr 2013: Atlantic Wind Connection, core sample in Atlantic Ocean near Sandy Hook |
| 21 | 2016-00908 | 2 June 2020: Withdrawn application for TRANSCO for Northeast Supply Enhancement Project (NESE) |
| 22 | 2019-01368 | 7 Nov 2019: Boardwalk Power Link, offshore power transmission system |
| 23 | 2020-00287 | Pending permit: Transcontinental Gas Pipe Line Company LLC, Maintenance of existing Lower New York Bay Lateral gas transmission pipeline |
| 24 | 3995 | 2 Mar 1951, US Coast Guard, Third District, laying of submarine cable to Breakwater Light, Atlantic Ocean |
| 25 | | A sewer pipeline line is located within the southwest quadrant of SBOBA. Dredged material shall not be placed near the sewer pipeline. |
| 26 | NAN-2023-00338-EMI | Public Notice dated 09 August 2023 thru 08 September 2023: Transcontinental Gas Pipe Line Company LLC, Maintenance of existing Lower New York Bay Lateral (LNYBL) pipeline. |

| NO. | PERMIT NO. | DESCRIPTION |
|---|---|---|
| 27 | NAN-2023-00338-M1 | 18 Sept 2024:<br>Modification to Permit NAN-2023-00338, Transcontinental Gas Pipe Line Company LLC requested allowance to work past environmental window of 15 Nov to 30 Nov due to construction delays. |

UTILITY CROSSINGS:

Verify the locations and depths of all utility crossings within the channel and placement site and take precautions against damages which might result from the operations, especially the sinking of dredge spuds and/or anchors into the channel bottom, in the vicinity of utility crossings. If any damage occurs as a result of the operations, suspend dredging and/or placement until the damage is repaired and approved by the Contracting Officer. Costs of such repairs and downtime of the dredge and attendant plant will be at the Contractor's expense.

A map of the Transcontinental Gas Pipe Line Company Lower New York Bay Lateral corridor is included as Attachment L in Section 00 90 01.

BRIDGES:

The contractor shall exercise the utmost caution when dredging in the vicinity of any bridge, pier, abutment, or bulkhead to prevent the collapse, undermining or damage to these structures. In no case shall the contractor moor any plant to or tie any line, cable, chain or anchor line around any part of a bridge structure, pier, abutment or bulkhead connected therewith.

c. LOCATION. The location of the work to be done under these specifications is at the New York Harbor, Sandy Hook Channel, New Jersey, with placement at SBOBA. Sandy Hook Channel is located in Monmouth County, New Jersey.

d. CHANNEL AND TRANSPORTATION FACILITIES. Sandy Hook Channel, New Jersey: Based on a before dredge survey performed in September 2025, a controlling depth of approximately +9.1 feet MLLW is present at the site of the work. Channel users consist of military vessel, bulk and general cargo freighters, tank vessels, tows and scows and barges, and miscellaneous small craft. Vessel traffic may cause some delay to the dredging required in these specifications. Railroads and first class highways serve the locality / project vicinity.

e. CHANNEL TRAFFIC. Vessel traffic in upper New York Harbor, which includes Sandy Hook Channel, is heavy. Traffic consists of military vessels, bulk and general cargo freighters, tank vessels, tows and scows and barges, and miscellaneous small craft. Vessel traffic may cause some delay to the dredging required in these specifications.

f. OBSTRUCTION OF CHANNEL. The Government will not undertake to

keep the area free from vessels or other obstructions except to the extent of such regulations, if any, as may be prescribed by the Secretary of the Army in accordance with the provisions of Section 7 of the Rivers and Harbors Act in such 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, buoys, piles and other marks placed by him under the contract in navigable waters or on shore.

g. BRIDGE-TO-BRIDGE RADIO-TELEPHONE EQUIPMENT. In order that radio-telephone communication may be made with passing vessels, all dredges engaged in work under the contract shall be equipped with and operate bridge-to-bridge radio-telephone equipment on VHF Channel 13 (156.65 MHz with low power output having a communication range of approximately ten (10) miles). The Federal Communication Commission has approved the frequency.

## 1.8 ESTIMATED QUANTITIES

The total estimated quantities of material necessary to be removed from the specified limits to complete the work described in this specifications are computed from the before dredge survey performed in the Sandy Hook Channel project area in September 2025.

Distribution of volumes is summarized below:

| DREDGING AREA | REQUIRED DREDGING DEPTH (FT.) MLLW | CHANNEL TO GRADE (CY) | CHANNEL OVERDEPTH (CY) | SLOPE TO GRADE (CY) | SLOPE OVERDEPTH (CY) | TOTAL ESTIMATED QUANTITY (CY) |
|---|---|---|---|---|---|---|
| BASIC WORK -35' MLLW + 2' OD) | 35 | 92,975 | 10,190 | 65,580 | 8,385 | 177,130 |

Total Estimated Quantity Available: **177,130 CY**

The Government will survey the project prior to starting work.

Above estimated quantities were computed from the data shown on the contract drawings. The quantities that may be removed and paid for will be computed by the Triangulated Irregular Network (TIN) method or average end area method as indicated in the Technical Specifications, Section 01 20 00, entitled "PRICE AND PAYMENT PROCEDURES."

## 1.9 VARIATION IN ESTIMATED QUANTITIES

Where the quantity of a pay item in this contract is an estimated quantity and where the actual quantity of material within the required dredging prism varies more than fifteen percent (15%) above or below the stated estimated quantity within the required dredging prism, an equitable adjustment in the contract unit price will be made upon the demand of either party. The equitable adjustment will be based upon any increase or

decrease in costs due solely to the variations above one-hundred fifteen percent (115%) or below eighty-five percent (85%) of the estimated quantity. An adjustment in the contract unit price will also apply to that part of the actual quantity of allowable overdepth material above one-hundred fifteen percent (115%) or below eighty-five percent (85%) of the estimated quantity. (UAI 52.211-5001 Variation in Estimated Quantities MAR 1995)

## 1.10 FINAL EXAMINATION AND ACCEPTANCE

a. As soon as practicable after the completion of the entire work, as in the opinion of the Contracting Officer and/or his Representative, will not be subject to damage by further operation under the contract, such work will be thoroughly examined at the cost and expense of the Government by sounding or by sweeping, or both, as determined by the Contracting Officer and/or his Representative. Only after the contractor has submitted a complete survey of the entire contract area(s), and submitted mapping and all data acquired to create such map, will the government perform its survey. Raw data, edited survey data with all supporting files and documentation, and all data generated during such work shall be furnished by the Contractor to the Contracting Officer and/or his Representative. Should any shoals, lumps, or other lack of contract depth be disclosed by this examination, the Contractor will be required to remove same by dredging at the contract rate for dredging or by other method approved by the Contracting Officer, but if the bottom is soft and the shoal areas are small and form no material obstruction to navigation, the removal of such shoals may be waived by the discretion of the Contracting Officer and/or his Representative. The Contractor or his authorized representative will be notified when soundings and/or sweepings are to be made, and will be required to accompany the survey party. When the entire contract area(s) is found to be in a satisfactory condition, it will be accepted as final. Should more than two soundings or sweeping operations by the Government over an area be necessary by reason of work for the removal of shoals disclosed at a prior sounding or sweeping operations, this work will be charged against the Contractor. The rate for each day in which the Government plant is engaged in such sounding or sweeping operations and/or is en route to or from the site or held, for the Contractor's convenience, at or near the site for these operations shall be $12,500.

b. Final acceptance of the entire work and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error, and the acceptance of the entire work shall not change the time of payment of the retained percentages of the whole or any part of the work.

c. The entire area within the contract limits will be surveyed for final examination and acceptance. This contract has no partial acceptance areas.

d. All hydrographic survey data is to be collected in accordance with the Army Corps of Engineers manual EM-1110-2-1003.

e. Any survey related disagreement(s) as it pertains to this contract must be submitted in writing to the Contracting Officer or his Representative within 5 business days of occurrence of such survey related event. Failure to notify the Contracting Officer or his representative within 5 business days of such survey related event disqualifies the Contractor from any such related claims.

## 1.11 PERFORMANCE EVALUATION OF CONTRACTOR

a. As a minimum, the Contractor's performance will be evaluated upon final acceptance of the work. However, interim evaluation may be prepared at any time during contract performance when determined to be in the best interest of the Government.

b. The Contractor will be rated either Exceptional, Very Good, Satisfactory, Marginal, or Unsatisfactory in the areas of Contractor Quality Control, Timely Performance, Effectiveness of Management, Compliance with Labor Standards, and Compliance with Safety Standards. The Contractor will be advised of any unsatisfactory rating, either in an individual element or in the overall rating, prior to completing the evaluation, and all Contractor comments will be maintained as part of the official record. Performance Evaluation Reports will be available to all DOD contracting offices for their future use in determining Contractor responsibility, in compliance with FAR 36.201 (c).

c. The Federal Acquisition Regulation (FAR) requires that Past Performance Information (PPI) be collected on DoD contracts. The Contractor Performance Assessment Reporting System (CPARS) is a web-enabled application the supports the completion, distribution and retrieval of all contract performance evaluations. Contractor Representative is responsible for reviewing and commenting on evaluations submitted on the Contractor Performance Assessment Reporting System (CPARS) website at https://www.cpars.gov/index.htm.

## 1.12 CERF IMPLEMENTATION

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 of Engineers. 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 and/or his Representative is notified of the decision to activate the 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 contract shall also be subject to the following condition:

a. 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.

b. 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.

c. The CERF shall be activated by the Chief of Engineers or the Director of Civil Works; then the Ordering Contracting Officer and/or

his Representative 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.

d. A confirming delivery order will be issued pursuant to the Basic Ordering Agreement (BOA) by the Ordering Contracting Officer and/or his Representative. Such delivery order shall utilize the schedule of rates in the BOA for the specific hopper dredges(s).

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

## 1.13 THE SEAGOING BARGE ACT (46 USC 395 ET SEQ)

The Seagoing Barge Act applies to this project. In the event the Apparent Low Bidder contemplates using plant that requires U.S. Coast Guard certification to comply with this Act, the Apparent Low Bidder shall within five (5) calendar days after bid opening submit a copy of said certificate to the Contracting Officer and/or his Representative. Failure to produce the certificate within the required time shall subject the bidder to a determination of non-responsibility.

## 1.14 PRICING OF ADJUSTMENTS

When costs are a factor in any determination of a contract price adjustment pursuant to the Changes clause or any other clause of this contract, such costs shall be in accordance with Part 31 of the Federal Acquisition Regulation and the DOD FAR Supplement in effect on the date of this contract (DOD FAR SUPP 52.243.7001) costs shall be in accordance with Part 31 of the Federal Acquisition Regulation.

## 1.15 BID GUARANTEE

a. The offeror (bidder) shall furnish a separate bid bond, or United States bonds, Treasury notes or other public debt obligation of the United States, in the proper amount, by the time set for opening of bids. Failure to do so may be cause for rejection of the bid. The Contracting Officer and/or his Representative will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.

b. If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or give a bond(s) as required by the solicitation within the time specified, the Contracting Officer and/or his Representative may terminate the contract for default.

c. Unless otherwise specified in the bid, the bidder will (1) allow the number of days as indicated in paragraph 13D of Standard Form 1442 for acceptance of its bid and (2) give bond within 5 days after receipt of the forms by the bidder.

d. In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount

of its bid. The bid bond, or bonds or notes of the United States, is available to offset the difference.

1.16 EQUAL OPPORTUNITY PREAWARD CLEARANCE OF SUBCONTRACTORS

Notwithstanding the clause of this contract entitled "Subcontracts," the Contractor shall not enter into a first-tier subcontract for an estimated or actual amount of $1 million or more without obtaining in writing from the Contracting Officer and/or his Representative a clearance that the proposed subcontractor is in compliance with the equal opportunity requirements and therefore is eligible for award.

1.17 SPECIAL PROHIBITION ON EMPLOYMENT

a. Definitions: "Arising out of a contract with the Department of Defense," as used in this clause, means any act in connection with (1) attempting to obtain, (2) obtaining, or (3) performing a contract or subcontract of any agency, department or component of the Department of Defense.

b. "Convictions of fraud or any other felony," as used in this clause, means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of nol contendere, for which sentence has been imposed.

c. Section 941, Title IX, Pub. L. 99-500 (10 U.S.C. 2408) prohibits a person who is convicted of fraud or any other felony arising out of a contract with the Department of Defense from working in a management or supervisory capacity on any defense contract, or serving on the board of directors of any defense contractor, for a period, as determined by the Secretary of Defense, of not less than one (1) year from the date of conviction. Defense contractors are subject to a criminal penalty of not more than $500,000 if they are convicted of knowingly employing a person under a prohibition or allowing such person to serve on their board of directors.

d. The Contractor agrees not to knowingly employ any person, convicted of fraud or any other felony arising out of a contract with the Department of Defense contract or subcontract or allow such person to serve on its board of directors from the date the Contractor learns of the conviction until one (1) year has expired from the date of conviction. However, if the person has also been debarred pursuant to FAR subpart 9.4, the above prohibition shall extend for the period of debarment, but in no event shall the prohibition be less than (1) year from the date of conviction.

e. If the Contractor knowingly employs a convicted person in a management or supervisory capacity on any defense contract or subcontract or knowingly allows such person to serve on its board of directors within the prohibited period, the Government may consider, in addition to the criminal penalties contained in Section 941 of Pub. L. 99-500, other available remedies, such as suspension or debarment and may direct the cancellation of this contract at no cost to the Government, or terminate this contract for default.

f. The Contractor agrees to include the substance of this clause, including this paragraph (e), appropriately modified to reflect the identity and relationship of the parties, in all subcontracts

exceeding $25,000.

1.18 SUPERINTENDENCE OF SUBCONTRACTS

a. The Contractor shall be required to furnish the following, in addition to the superintendence required by the Contract Clauses entitled: "Superintendence by the Contractor."

(1) If more than 50% and less than 70% of the value of the contract work is subcontracted, one superintendent shall be provided at the site and on the Contractor's payroll to be responsible for coordinating, directing, inspecting and expediting the subcontract work.

(2) If 70% or more of the value of the work is subcontracted, the Contractor shall be required to furnish two such superintendents to be responsible for coordinating, directing, inspecting and expediting the subcontract work.

b. If the Contracting Officer, at any time after 50% of the subcontracted work has been completed, finds that satisfactory progress is being made, he may waive all or part of the above requirement for additional superintendence subject to the right of the Contracting Officer to reinstate such requirement if at any time during the progress of the remaining work he finds that satisfactory progress is not being made. (DOD FAR Supplement 52.236-7008)

1.19 PROCEDURES FOR SUBMISSION & CONTRACT PAYMENTS

In addition to the requirements contained in the Contract Clause entitled "Payments Under Fixed-Price Construction Contracts" and to implement the requirements of the Prompt Payment Act Amendments of 1988, P.L. 100-496, the following shall apply to all payments made under this contract:

a. At the time of submission of the progress chart, the contractor shall submit for approval by the Contracting Officer or his authorized representative a breakdown of the contract work which shall be to the degree of detail required by the Contracting Officer or his representative to effect reasonable progress payments. The Contracting Officer or his representative shall review this breakdown within 30 calendar days after receipt and either advise the contractor that it is approved or disapproved, and if disapproved the reasons for disapproval. Only after the breakdown is approved shall any payment invoice be accepted from the contractor and any payment made to him. The Contracting Officer can determine it is in the best interest of the Government to make payment without an approved breakdown, however, in no case shall more than 10% of the contract amount be paid unless the breakdown is approved.

b. The contractor shall submit his request for payment by submission of a proper invoice to the office or person(s) designated in paragraph "c". For purposes of payment a "proper invoice" is defined as the following:

(1) An estimate of the work completed in accordance with the approved breakdown indicating the percentage of work of each item and the associated costs.

(2) A properly completed ENG Form 93 and 93a (where required).

(3) All contractual submissions indicated elsewhere in this contract to be submitted with payment, such as updated progress schedules, updated submittal registers, etc.

The following certification executed by a responsible official of the organization authorized to bind the firm. A "responsible official" would be either a corporate officer, partner, or owner, in the case of a sole proprietorship:

I hereby certify, to the best of my knowledge and belief, that:

(1) The amounts requested are only for performance in accordance with the specifications, terms and conditions of the contract;

(2) Payments to subcontractors and suppliers have been made from previous payments received under the contract and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract requirements and the requirements of Chapter 39 of Title 31, United States Code; and

(3) This request for progress payments does not include any amounts, which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.

(4) All required prime and subcontractor payrolls have been submitted.

_____
(Name)

_____
(Title)

_____
(Date)

c. The Government shall designate the office or person(s) who shall first receive the invoice submissions and the Contractor shall be notified at the preconstruction conference. In addition, the contractor shall at the same time submit one copy of the detailed breakdown and the ENG Form 93 and 93a Form to the Project Engineer.

d. The Government representative shall return any request for payment, which is deemed defective within 7 days of receipt and shall specify the defects. Telephone calls with MFR or E-mail notification of the contractor about the defective invoice shall be considered sufficient notice to the contractor. If the defect concerns a disagreement as to the amount of work performed and or the amount of the payment being submitted, the Government and the contractor's representative should meet to resolve the differences and reach agreement. Upon agreement, the contractor shall submit a new breakdown and ENG Form 93 (and 93a) and any other submissions requiring correction. These will be incorporated with the previous

submittal and will then constitute a proper invoice.

e. If agreement cannot be reached, the Government shall determine the proper amount per Contract Clause entitled: "Payments Under Fixed-Price Construction Contracts" and process the payment accordingly. In this event, "a proper invoice" for Prompt Payment Act purposes will not have been submitted to the Government.

f. The Government shall pay the contractor in accordance with the following time frames:

(1) Progress Payments. From the date a "Proper invoice" is received, in accordance with subparagraphs "b" and "d" of this clause, the Government will issue a check within 14 calendar days.

(2) Reduction in Retaining Payment. If during the course of the contract, a reduction in retainage payment is required, the Government shall issue a check within 30 calendar days after the approval of the release to the contractor by the Contracting Officer or his authorized representative.

(3) Final Payment. A final payment request shall not be considered valid until the contractor has fulfilled all contract requirements including all administrative items, payrolls, warranties, etc. and has submitted a release of claims. When the contractor has fulfilled all contract requirements and a "proper invoice" has been submitted, the Government shall issue a check within 30 days from the date of acceptance of the project by the Contracting Officer.

## 1.20 SUBMISSION OF CLAIMS

The following shall be submitted to the Contracting Officer at the following address: U.S. Army Corps of Engineers, New York District, 26 Federal Plaza, New York, New York 10278-0090:

a. Claims referencing or mentioning the Contact Disputes Act of 1978.

b. Requests for a written decision by the Contracting Officer.

c. Claims certified in accordance with the Contract Disputes Act of 1978.

No other Government representative is authorized to accept such requests. A copy shall also be provided to the Authorized Representative of the Contracting Officer.

The Contractor shall also provide the Contracting Officer with a copy of any requests for additional time, money or interpretation of contract requirements which were provided to the Authorized Representative of the Contracting Officer and which have not been resolved after 90 days.

## 1.21 OPERATOR QUALIFICATIONS FOR FLOATING CRANES & FLOATING DERRICKS

All floating cranes and floating derricks may be only operated by qualified operators. Operators shall be designated as qualified by a source which qualifies crane and derrick operators (e.g. an independent testing and qualifying company, a union, a governmental agency, a qualified consultant (can be an in-house resource)). Qualification shall

be written (or oral) and practical operating examination unless the operator is licensed by a state or city licensing agency for the particular type of crane or derrick. Proof of qualification of crane and derrick operators shall be provided to the Contracting Officer's representative prior to the start of work.

## 1.22 EQUIPMENT OWNERSHIP & OPERATING EXPENSE SCHEDULE

a. Allowable costs for construction of marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data when the Government can determine both ownership and operating costs for each piece of equipment or equipment groups of similar serial and series from the contractor's accounting records. When both ownership and operating costs cannot be determined from the contractor's accounting records, equipment costs shall be based upon the applicable provision of EP 1110-1-8, "Construction Equipment Ownership and Operating Expense Schedule," Region I.
Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule effect at the time of negotiations shall apply. For retrospective pricing, the schedule in effect at the time the work was performed shall apply.

b. Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36 substantiated by certified copies of paid invoices. Rates for equipment rented from an organization under common control, lease-purchase or sale-leaseback arrangements will be determined using the schedule except that rental costs leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated leases are allowable. Costs for major repairs and overhaul are unallowable.

c. When actual equipment costs are proposed and the total amount of the pricing action is over $25,000, cost or pricing data shall be submitted on Standard Form 1411, "Contract Pricing Proposal Cover Sheet." By submitting cost or pricing data, the contractor grants to the contracting officer or an authorizing representative the right to examine those books, records, documents and other supporting data that will permit evaluation of the proposed equipment costs. After price agreement the contractor shall certify that the equipment costs or pricing data submitted are accurate, complete and current.(UAI 31.105-101 Equipment Ownership & Operating Expense Schedule MAR 1995)

## 1.23 WAGE RATES

The schedule of wage rates contains rates applicable to all work under this contract (see Section 00 90 00).

## 1.24 LABOR-ADDITIONAL REQUIREMENTS

Fringe benefits statement: The method of payment of applicable fringe benefits will be indicated on DD Form 879, Statement of Compliance, and attached to each weekly payroll.

## 1.25 NOTICE TO MARINERS

The Contractor shall, prior to commencement of work, notify the 1st Coast Guard District, Aids to Navigation Officer, of his proposed operations including location and duration of operations and request that the information be published in the "Notice to Mariners." This notification must be in sufficient time so that it appears in the Notice at least 30 days prior to the commencement of the dredging operation.

## 1.26 ENVIRONMENTAL LITIGATION

a. If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer and/or his Representative, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor or a Subcontractor at any tier not required by the terms of this contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor or a Subcontractor at any tier other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Contracting Officer and/or his Representative in the administration of this contract under the terms of Section I, contract clause entitled "SUSPENSION OF WORK." The period of such suspension, delay or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

b. The term "environmental litigation," as used herein, means a lawsuit alleging that the work will have an adverse effect on the environment or that the Government has not duly considered, either substantively or procedurally, the effect of the work on the environment.

## 1.27 PATENTS

All potential bidders need to be aware of the following patents, which may be related to performance of this contract.

Patent 6,293,731
Patent 5,007,590
Patent 5,028,010
Patent 5,353,998
Patent 5,542,614
Patent 5,794,862
Patent 5,931,605
Patent 6,017,169

The foregoing patents, and any others which may be applicable to activities performed under this contract, are neither required nor prohibited. However, if you use the methods or technology described in these or other patents, please factor license costs into your bid. The successful bidder needs to obtain the proper license(s) if he wishes to use the methods, processes, or technology described in any applicable patents.

1.28 VERIFICATION OF SMALL BUSINESS UTILIZATION

a. This clause is applicable to small business concerns whose contracts exceed $1,000,000.

b. In accordance with the clause at FAR 52.219-8, entitled Utilization of Small Business Concerns, in effect on the date of this contract, the Contracting Officer may survey the extent of small and small disadvantaged business utilization under this contract. The Contractor may be required to report to the Contracting Officer statistical data on the number and dollar amounts of subcontracting awards with small businesses and small disadvantaged businesses.

c. As appropriate, the Contracting Officer may require one or more follow-up reports to the initial report.

d. The Contractor agrees to insert this clause in any subcontract that may exceed $1,000,000, including this subparagraph (d).

1.29 CONTRACT INFORMATION RELEASE

This constitutes notification that, pursuant to CECW-OD Memo, 5 February 1996, "Release of Information - Dredging Projects", plant operation reports, including Engineer Form 27/27A , Report of Operations - Hopper Dredges and Engineer Form 4267, Daily Report of Operations - Pipeline, Dipper or Bucket Dredges, are public information and shall be provided upon proper FOIA request for active and completed contract information.

1.30 ALTERATIONS IN CONTRACT

Portions of the contract are altered as follows:

a. The following clause is incorporated as part of the contract: "By entering into this contract the Contractor certifies that neither it, nor any person or firm who has an interest in the Contractor's firm, is a person, or firm ineligible in accordance with FAR subpart "9.4" (DEAN-PRP EFAR Acquisition Letter 85-1 dated 11 Sept 85)

1.31 CONTRACTOR SUPPLY AND USE OF ELECTRONIC SOFTWARE FOR PROCESSING DAVIS-BACON ACT CERTIFIED LABOR PAYROLLS

The contractor is encouraged to use a commercially-available electronic system to process and submit certified payrolls electronically to the Government. The requirements for preparing, processing and providing certified labor payrolls are established by the Davis-Bacon Act as stated in FAR 52.222-8, PAYROLLS AND BASIC RECORDS and FAR 52.222-13, COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS. If the contractor elects to use an electronic Davis-Bacon payroll processing system, then the contractor shall be responsible for obtaining and providing for all access, licenses, and other services required to provide for receipt, processing, certifying, electronically transmitting to the Government, and storing weekly payrolls and other data required for the contractor to comply with Davis-Bacon and related Act regulations. When the contractor uses an electronic Davis-Bacon payroll system, the electronic payroll service shall be used by the contractor to prepare, process, and maintain the relevant payrolls and basic records during all work under this construction contract and the electronic payroll service shall be capable of preserving these payrolls and related basic records for the required 3 years after contract completion. If the contractor chooses to use an

electronic Davis-Bacon payroll system, then the contractor shall obtain and provide electronic system access to the Government, as required to comply with the Davis-Bacon and related Act regulations over the duration of this construction contract. The access shall include electronic review access by the Government contract administration office to the electronic payroll processing system used by the contractor. The contractor's provision and use of an electronic payroll processing system shall meet the following basic functional criteria: commercially available; compliant with appropriate Davis Bacon Act payroll provisions in the FAR; able to accommodate the required numbers of employees and subcontractors planned to be employed under the contract; capable of producing an Excel spreadsheet compatible electronic output of weekly payroll records (format at http://www.rmssupport.com/guides.aspx) for export in an Excel spreadsheet to be imported into the contractor's Quality Control System (QCS) version of Resident Management System (RMS), that in turn shall export payroll data to the Government's Resident Management System (RMS); demonstrated security of data and data entry rights; ability to produce contractor-certified electronic versions of weekly payroll data; ability to identify erroneous entries and track the data/time of all versions of the
certified Davis Bacon payrolls submitted to the government over the life of the contract; capable of generating a durable record copy, that is, a CD or DVD and PDF file record of data from the system database at end of the contract closeout. This durable record copy of data from the electronic Davis-Bacon payroll processing system shall be provided to the Government during contract closeout. All contractor-incurred costs related to the contractor's provision and use of an electronic payroll processing service shall be included in the contractor's price for the overall work under the contract. The costs for Davis-Bacon Act compliance using electronic payroll processing services shall not be a separately bid/proposed or reimbursed item under this contract.

## 1.33 FUEL USAGE

The Contractor shall furnish the Contracting Officer and/or his Representative a report, to be received on or before the last day of the calendar month, listing the totals of fuels consumed by the dredging plant, supporting vessels, and other construction equipments. The report shall list the quantities of different fuels separately. The report shall cover the period from the 25th of the preceding month to the 25th of the current month.

# PART 2 PRODUCTS

Not Used.

# PART 3 EXECUTION

Not Used.

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PROJECT SCHEDULE
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## 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 within the text by the basic designation only.

AACE INTERNATIONAL (AACE)

| | |
|---|---|
| AACE 29R-03 | (2011) Forensic Schedule Analysis |
| AACE 52R-06 | (2006) Time Impact Analysis - As Applied in Construction |
| AACE 84R-13 | (2015) Planning and Accounting for Adverse Weather |

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

| | |
|---|---|
| ASCE 67-17 | (2017) Schedule Delay Analysis |

U.S. ARMY CORPS OF ENGINEERS (USACE)

| | |
|---|---|
| ER 1-1-11 | (2017) Administration -- Project Schedules |

### 1.2 SUBMITTALS

Government approval is required for submittals with a "G" classification. Submittals not having a "G" classification are for information only. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals; G

Preliminary Project Schedule; G

Initial Project Schedule; G

SD-03 Product Data

Periodic Schedule Update; G

### 1.3 PROJECT SCHEDULER QUALIFICATIONS

Designate an authorized representative to be responsible for the preparation of the schedule and all required updating and production of reports. The Designated Project Scheduler must have prepared and maintained previous construction schedules for projects of similar size and complexity to this contract, using Primavera P6. Representative must have a suitable knowledge of CPM scheduling principles and application.

# PART 2 PRODUCTS

## 2.1 SOFTWARE

The scheduling software utilized to produce and update the schedules required herein must be capable of meeting all requirements of this specification.

### 2.1.1 Government Default Software

The Government uses Primavera P6. Ensure exported schedule files are compatible with the version of P6 used by the Government.

### 2.1.2 Contractor Software

Scheduling software used by the contractor must be commercially available from the software vendor for purchase with vendor software support agreements available. The software routine used to create the required sdef file must be created and supported by the software manufacturer.

#### 2.1.2.1 Primavera

If Primavera P6 is selected for use, provide the "xer" export file in a version of P6 importable by the Government system. Verify at the SEKO meeting which version of P6 is in use by the Government. Export the schedule in a version of P6 no newer than that used by the Government.

# PART 3 EXECUTION

## 3.1 GENERAL REQUIREMENTS

Prepare for approval a Project Schedule, as specified herein, pursuant to FAR Clause 52.236-15 Schedules for Construction Contracts. Show in the schedule the proposed sequence to perform the work and dates contemplated for starting and completing all schedule activities. The scheduling of the entire project is required. The scheduling of construction is the responsibility of the Contractor. Contractor management personnel must actively participate in its development. Subcontractors, and suppliers working on the project must also contribute in developing and maintaining an accurate Project Schedule. Provide a schedule that is a forward planning as well as a project monitoring tool. Use the Critical Path Method (CPM) of network calculation to generate all Project Schedules. Prepare each Project Schedule using the Precedence Diagram Method (PDM).

## 3.2 BASIS FOR PAYMENT AND COST LOADING

The schedule is the basis for determining contract earnings during each update period and therefore the amount of each progress payment. The aggregate value of all activities coded to a contract CLIN must equal the value of the CLIN. Match the progress payment "Pay Period Thru" date in RMS to the schedule data date.

### 3.2.1 Activity Cost Loading

Activity cost loading must be reasonable and without front-end loading. Activities with a negative cost loading is not allowed. Provide additional documentation to demonstrate reasonableness if requested by the Contracting Officer.

### 3.2.2 Cost Loading of Submittals

No costs are to be assigned to activities for the preparation, review, or approval of submittals, except as described under paragraph COST LOADING OF CLOSEOUT ACTIVITIES, paragraph AS-BUILT DRAWINGS, and paragraph O&M MANUALS.

### 3.2.3 Withholdings / Payment Rejection

Failure to meet the requirements of this specification may result in the disapproval of the preliminary, initial, or periodic schedule updates and subsequent rejection of payment requests until compliance is met.

In the event that the Contracting Officer directs schedule revisions and those revisions have not been included in subsequent Project Schedule revisions or updates, the Contracting Officer may withhold 10 percent of pay request amount from each payment period until such revisions to the project schedule have been made.

## 3.3 PROJECT SCHEDULE DETAILED REQUIREMENTS

### 3.3.1 Level of Detail Required

Develop the Project Schedule to the appropriate level of detail to address major milestones and to allow for satisfactory project planning and execution. Failure to develop the Project Schedule to an appropriate level of detail will result in its disapproval. The Contracting Officer will consider, but is not limited to, the following characteristics and requirements to determine appropriate level of detail:

### 3.3.2 Activity Durations

Reasonable activity durations are those that allow the progress of ongoing activities to be accurately determined between update periods. Non-procurement activities Original Durations (OD) are not to exceed 20 workdays or 30 calendar days.

### 3.3.3 Procurement Activities

Include in the schedule activities associated with the critical submittals and their approvals, procurement, fabrication, and delivery of long lead materials, equipment, fabricated assemblies, and supplies. Long lead procurement activities are those with an anticipated procurement sequence of over 90 calendar days.

### 3.3.4 Mandatory Activities

Include the following activities in the initial project schedule and all updates.

a. Submission, review and acceptance of SD-01 Preconstruction Submittals (individual activity for each).

b. Mobilization Completion

c. Individual Dredging Area Completion (e.g. CLIN X - Dredging Area Y Completion)

d. Project Physical Completion

e. Final inspection.

f. Demobilization Completion

3.3.5 Government Activities

Show in schedule, Government and other agency activities that could impact progress. These activities include, but are not limited to environmental permit approvals by State regulators, inspections, utility tie-in, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements.

3.3.6 Standard Activity Coding Dictionary

Use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11. This exact structure is mandatory. Develop and assign all Activity Codes to activities as detailed herein.

The SDEF format is as follows:

| Field | Activity Code | Length | Description |
|---|---|---|---|
| 1 | WRKP | 3 | Workers per day |
| 2 | RESP | 4 | Responsible party |
| 3 | AREA | 4 | Area of work |
| 4 | MODF | 6 | Modification Number |
| 5 | BIDI | 6 | Bid Item (CLIN) |
| 6 | PHAS | 2 | Phase of work |
| 7 | CATW | 1 | Category of work |
| 8 | FOW | 20 | Feature of work* |

*Some systems require that FEATURE OF WORK values be placed in several activity code fields. The notation shown is for Primavera P6. Refer to the specific software guidelines with respect to the FEATURE OF WORK field requirements.

3.3.6.1 Workers Per Day (WRKP)

Assign Workers per Day for all field construction or direct work activities, if directed by the Contracting Officer. Workers per day is based on the average number of workers expected each day to perform a task for the duration of that activity.

3.3.6.2 Responsible Party Coding (RESP)

Assign responsibility code for all activities to the Prime Contractor,

Subcontractor(s) or Government agency(ies) responsible for performing the activity.

a. Activities coded with a Government Responsibility code include, but are not limited to: Government approvals, Government design reviews, environmental permit approvals by State regulators, Government Furnished Property/Equipment (GFP) and Notice to Proceed (NTP) for phasing requirements.

b. Activities cannot have more than one Responsibility Code. Examples of acceptable activity code values are: DOR (for the designer of record); ELEC (for the electrical subcontractor); MECH (for the mechanical subcontractor); and GOVT (for USACE).

3.3.6.3 Area of Work Coding (AREA)

Assign Work Area code to activities based upon the work area in which the activity occurs. Define work areas based on resource constraints or space constraints that would preclude a resource, such as a particular trade or craft work crew from working in more than one work area at a time due to restraints on resources or space.

3.3.6.4 Modification Number (MODF)

Assign a Modification Number Code to any activity or sequence of activities added to the schedule as a result of a Contract Modification, when approved by Contracting Officer. Key all Code values to the Government's modification numbering system. An activity can have only one Modification Number Code.

3.3.6.5 Bid Item Coding (BIDI)

Assign a Bid Item Code to all activities using the Contract Line Item Number (CLIN) to which the activity belongs, even when an activity is not cost loaded. An activity can have only one BIDI Code.

3.3.6.6 Phase of Work Coding (PHAS)

Assign Phase of Work Code to all activities. Examples of phase of work are procurement phase and construction phase. Each activity can have only one Phase of Work code.

a. Code proposed fast track design and construction phases proposed to allow filtering and organizing the schedule by fast track design and construction packages.

b. If the contract specifies phasing with separately defined performance periods, identify a Phase Code to allow filtering and organizing the schedule accordingly.

3.3.6.7 Category of Work Coding (CATW)

Assign a Category of Work Code to all activities. Category of Work Codes include, but are not limited to construction submittal, procurement, fabrication, weather sensitive installation, non-weather sensitive installation, start-up, and testing activities. Each activity can have no more than one Category of Work Code.

3.3.6.8 Feature of Work Coding (FOW)

Assign a Feature of Work Code to appropriate activities based on the Definable Feature of Work to which the activity belongs based on the approved QC plan.

Definable Feature of Work is defined in Section 01 45 00 QUALITY CONTROL. An activity can have only one Feature of Work Code.

3.3.7 Contract Milestones and Constraints

Milestone activities are to be used for significant project events including, but not limited to, project phasing, project start and end activities, or interim completion dates. The use of artificial float constraints such as "zero free float" or "zero total float" are prohibited.

Mandatory constraints that ignore or affect network logic are prohibited. No constrained dates are allowed in the schedule other than those specified herein. Submit additional constraints to the Contracting Officer for approval on a case by case basis.

3.3.7.1 Project Start Date Milestone and Constraint

The first activity in the project schedule must be a start milestone titled "NTP Acknowledged," which must have a "Start On" constraint date equal to the date that the NTP is acknowledged.

3.3.7.2 End Project Finish Milestone and Constraint

The last activity in the schedule must be a finish milestone titled "End Project."

Constrain the project schedule to the Contract Completion Date in such a way that if the schedule calculates an early finish, then the float calculation for "End Project" milestone reflects positive float on the longest path. If the project schedule calculates a late finish, then the "End Project" milestone float calculation reflects negative float on the longest path.

3.3.7.3 Interim Completion Dates and Constraints

Constrain contractually specified interim completion dates to show negative float when the calculated late finish date of the last activity in that phase is later than the specified interim completion date.

3.3.7.3.1 Start Phase

Use a start milestone as the first activity for a project phase. Call the start milestone "Start Phase X" where "X" refers to the phase of work.

3.3.7.3.2 End Phase

Use a finish milestone as the last activity for a project phase. Call the finish milestone "End Phase X" where "X" refers to the phase of work.

3.3.8 Adverse Weather

Ensure anticipated adverse weather is accounted for in the Project

Schedule. AACE 84R-13 provides methodologies for techniques in planning for adverse weather. The preferred methodology is the use of a weather calendar. If a method other than a weather calendar is proposed, discuss the reason during the SEKO meeting.

### 3.3.9 Calendars

Schedule activities on a Calendar to which the activity logically belongs. Develop calendars to accommodate any contract defined work period such as a 7-day calendar for Government Acceptance activities, concrete cure times, etc. Develop the default Calendar to match the physical work plan with non-work periods identified including weekends and holidays. Develop Seasonal Calendar(s) and assign to seasonally affected activities as applicable.

If a weather calendar is used its implementation and execution is to be in accordance with AACE 84R-13

### 3.3.10 Open Ended Logic

Only two open ended activities are allowed: the first activity "NTP Acknowledged" is to have no predecessor logic, and the last activity -"End Project" is to have no successor logic. Except as noted above, each activity must have at least a start-to-start or finish-to-start relationship with its predecessor and a finish-to-finish or finish-to-start relationship with its successor.

Predecessor open ended logic may be allowed in a time impact analyses upon the Contracting Officer's approval.

### 3.3.11 Default Progress Data Disallowed

Actual Start and Finish dates must not automatically update with default mechanisms included in the scheduling software. Updating of the percent complete and the remaining duration of any activity must be independent functions. Disable program features that calculate one of these parameters from the other. Activity Actual Start (AS) and Actual Finish (AF) dates assigned during the updating process must match those dates provided in the Contractor Quality Control Reports. Failure to document the AS and AF dates in the Daily Quality Control report will result in disapproval of the Contractor's schedule.

### 3.3.12 Out-of-Sequence Progress

Activities that have progressed before all preceding logic has been satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case basis subject to approval by the Contracting Officer. Propose logic corrections to eliminate out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule. Address out of sequence progress or logic changes in the Narrative Report and in the periodic schedule update meetings.

### 3.3.13 Added and Deleted Activities

Do not delete activities from the project schedule or add new activities to the schedule without approval from the Contracting Officer. Activity ID and description changes are considered new activities and cannot be changed without Contracting Officer approval.

### 3.3.14 Original Durations

Activity Original Durations (OD) must be reasonable to perform the work item. OD changes are prohibited unless justification is provided and approved by the Contracting Officer.

### 3.3.15 Leads, Lags, and Start to Finish Relationships

Lags must be reasonable as determined by the Government and not used in place of realistic original durations, must not be in place to artificially absorb or create float, or to replace proper schedule logic.

a. Leads (negative lags) are prohibited.

b. Start to Finish (SF) relationships are prohibited.

### 3.3.16 Retained Logic

Schedule calculations must retain the logic between predecessors and successors ("retained logic" mode) even when the successor activity(s) starts and the predecessor activity(s) has not finished (out-of-sequence progress). Software features that in effect sever the tie between predecessor and successor activities when the successor has started and the predecessor logic is not satisfied ("progress override") are not be allowed.

### 3.3.17 Percent Complete

Update the percent complete for each activity started, based on the realistic assessment of earned value. Activities which are complete but for remaining minor punch list work and which do not restrain the initiation of successor activities may be declared 100 percent complete to allow for proper schedule management. Budgeted cost of activity is to be reduced by the amount needed to correct deficiency. The activity referenced in paragraph COST LOADING of CLOSEOUT ACTIVITIES must have its budgeted cost increased by this amount.

### 3.3.18 Remaining Duration

Update the remaining duration for each activity based on the number of estimated workdays it will take to complete the activity. Remaining duration may not mathematically correlate with percentage found under paragraph entitled Percent Complete. The remaining duration for unstarted activities are not to be less than its orginal duration.

### 3.3.19 Early Completion Schedule and the Right to Finish Early

An Early Completion Schedule is an Initial Project Schedule (IPS) that indicates all scope of the required contract work will be completed before the contractually required completion date.

a. No IPS indicating an Early Completion will be accepted without being fully resource-loaded (including crew sizes and hours) and the Government agreeing that the schedule is reasonable and achievable.

b. The Government is under no obligation to accelerate work items it is responsible for to ensure that the early completion is met nor is it responsible to modify incremental funding (if applicable) for the project to meet the contractor's accelerated work.

## 3.4 PROJECT SCHEDULE SUBMISSIONS

Provide the submissions as described below. The data reports and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS. If the Contractor fails or refuses to furnish the information and schedule updates as set forth herein, the Contractor will be deemed not to have provided an estimate upon which a progress payment can be made.

Review comments made by the Government on the schedule(s) do not relieve the Contractor from compliance with requirements of the Contract Documents.

### 3.4.1 Preliminary Project Schedule Submission

Submit the Preliminary Project Schedule in either completed or draft form no later than 7 days prior to the Preconstruction Conference; defining the planned operations detailed for the first 90 calendar days for approval. The approved Preliminary Project Schedule will be used for payment purposes not to exceed 90 calendar days after NTP. Completely cost load the Preliminary Project Schedule to balance the contract award CLINS shown on the Price Schedule. The Preliminary Project Schedule may be summary in nature for the remaining performance period. It must be early start and late finish constrained and logically tied as specified. The Preliminary Project Schedule forms the basis for the Initial Project Schedule specified herein and must include all of the required plan and program preparations, submissions and approvals identified in the contract (for example, Quality Control Plan, Safety Plan, and Environmental Protection Plan) as well as design activities, planned submissions of all early design packages, permitting activities, design review conference activities, and other non-construction activities intended to occur within the first 90 calendar days. Government acceptance of the associated design package(s) and all other specified Program and Plan approvals must occur prior to any planned construction activities. Code activities that are summary in nature, after the first 90 calendar days, with the following activity codes: Bid Item (CLIN) code (BIDI), Responsibility Code (RESP), and Feature of Work code (FOW)..

### 3.4.2 Initial Project Schedule Submission

Submit the Initial Project Schedule for approval within 5 calendar days after notice to proceed is issued. The schedule must demonstrate a reasonable and realistic sequence of activities which represent all work through the entire contract performance period. No payment will be made for work items not fully detailed in the Project Schedule.

### 3.4.3 Periodic Schedule Updates

Update the Project Schedule on a regular basis, monthly at a minimum. Provide a draft Periodic Schedule Update for review at the schedule update meetings as prescribed in the paragraph PERIODIC SCHEDULE UPDATE MEETINGS. These updates will enable the Government to assess Contractor's progress.

a. Update information including Actual Start Dates (AS), Actual Finish Dates (AF), Remaining Durations (RD), and Percent Complete. Updated information is subject to the approval of the Government at the meeting.

b. AS and AF dates must match the date(s) reported on the Contractor's Quality Control Report for an activity start or finish.

## 3.5 SUBMISSION REQUIREMENTS

Submit the following items for the Preliminary Schedule, Initial Schedule, and every Periodic Schedule Update throughout the life of the project:

### 3.5.1 Electronic Scheduling Data

Provide electronic scheduling data containing the current project schedule and all previously submitted schedules in the format of the scheduling software (e.g. .xer). Also include the Narrative Report and all required Schedule Reports. The electronic file is to identify the type of schedule (Preliminary, Initial, Update), full contract number, Data Date and schedule file name. Each schedule must have a unique file name and use project specific settings.

### 3.5.2 Narrative Report

Provide a Narrative Report with each schedule submission. The Schedule Narrative Report is a "stand alone" report in PDF or Word format. Title the report "Schedule Narrative Report". Show the Report date, schedule name, and contract number on the first page. Indicate who is responsible for the schedule update and narrative report. Provide a brief description of the Project Scope. The Narrative Report is expected to communicate to the Government the thorough analysis of the schedule output and the plans to compensate for problems, either current or potential, which are revealed through that analysis. Include the following information at a minimum in the Narrative Report:

a. Identify and discuss the work scheduled to start in the next update period.

b. Describe activities along the critical path in addition to activities on the next float path after the critical path.

c. Describe current and anticipated problem areas, delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. Identify the party responsible for delay, if applicable.

d. Identify and explain why activities, based on their calculated late dates, should have either started or finished during the update period but did not.

e. Identify and discuss all schedule changes by activity ID and activity name including what specifically was changed and why the change was needed. Include at a minimum new and deleted activities, logic changes, duration changes, calendar changes, lag changes, resource changes, and actual start and finish date changes.

f. Identify and discuss out-of-sequence work.

g. If the longest path changes from a monthly update to the next, provide an explanation of the factors driving the change.

h. Respond to USACE Schedule Review Comments from the previous update(s).

### 3.5.3 Schedule Reports

The format, filtering, organizing, and sorting for each schedule report will be as directed by the Contracting Officer. Typically, reports contain Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float, Actual Start Date, Actual Finish Date, and Percent Complete. Provide the reports electronically in .pdf format. The following lists typical reports that will be requested:

#### 3.5.3.1 Activity Report

List of all activities sorted according to activity number.

#### 3.5.3.2 Logic Report

List of detailed predecessor and successor activities for every activity in ascending order by activity number.

#### 3.5.3.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. List activities which have the same amount of total float in ascending order of Early Start Dates. Do not show completed activities on this report.

#### 3.5.3.4 Earnings Report by CLIN

A compilation of the Total Earnings on the project from the NTP to the data date, which reflects the earnings of activities based on the agreements made in the schedule update meeting defined herein. Provided a complete schedule update has been furnished, this report serves as the basis of determining progress payments. Group activities by CLIN number and sort by activity number. Provide a total CLIN percent earned value, CLIN percent complete, and project percent complete. The printed report must contain the following for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Earnings to Date, Earnings this period, Total Quantity, Quantity to Date, and Percent Complete (based on cost).

#### 3.5.3.5 Scheduling and Leveling Report

Provide a Scheduling/Leveling Report generated from the current project schedule being submitted.

### 3.5.4 Network Diagram

The Network Diagram is required for the Preliminary, Initial and Periodic Updates. Depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

#### 3.5.4.1 Continuous Flow

Show a continuous flow from left to right with no arrows from right to left. Show the activity number, description, duration, and estimated earned value on the diagram.

#### 3.5.4.2 Project Milestone Dates

Show dates on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

#### 3.5.4.3 Critical Path

Show all activities on the critical path. The critical path is defined as the longest path.

#### 3.5.4.4 Grouping and Sorting

Group and sort activities as directed to assist in the understanding of the activity sequence. Typically, this flow will group activities by major elements of work, category of work, work area and/or responsibility.

#### 3.5.4.5 Cash Flow / Schedule Variance Control (SVC) Diagram

With each schedule submission, provide a SVC diagram showing 1) Cash Flow S-Curves indicating planned project cost based on projected early and late activity finish dates, and 2) Earned Value to-date.

## 3.6 PERIODIC SCHEDULE UPDATE

### 3.6.1 Periodic Schedule Update Meetings

Conduct periodic schedule update meetings for the purpose of reviewing the proposed Periodic Schedule Update, Narrative Report, Schedule Reports, and progress payment. Conduct meetings at least monthly (or as otherwise mutually agreed to) . Following the schedule update meeting, make corrections to the schedule and resubmit. Include only those changes approved by the Government in the schedule review meeting. Only approved schedules may be used to generate invoices for payment.

### 3.6.2 Update Submission Following Progress Meeting

Submit the complete Periodic Schedule Update of the Project Schedule containing all approved progress, revisions, and adjustments, pursuant to paragraph SUBMISSION REQUIREMENTS not later than 4 workdays after the periodic schedule update meeting.

## 3.7 WEEKLY PROGRESS MEETINGS

Conduct a weekly meeting with the Government (or as otherwise mutually agreed to) between the meetings described in paragraph entitled PERIODIC SCHEDULE UPDATE MEETINGS for the purpose of jointly reviewing the actual progress of the project as compared to the as planned progress and to review planned activities for the upcoming two weeks. Use the current approved schedule update for the purposes of this meeting and for the production and review of reports. At the weekly progress meeting, address the status of RFIs, RFPs and Submittals.

## 3.8 REQUESTS FOR TIME EXTENSIONS

ASCE 67-17 provides delay analysis guidelines. If there is a conflict between the contract and guidance provided in ASCE 67-17, the contract will govern. Provide justification of delay to the Contracting Officer in accordance with the contract provisions and clauses for approval, within 10 days of a delay occuring. Also prepare a time impact analysis for each

Government request for proposal (RFP).

### 3.8.1 Time Extension 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)".

Upon acknowledgment of the notice to proceed and continuing throughout the contract on a monthly basis, adverse weather days shall be recorded by the contractor on a calendar day basis (include weekends and holidays) within the Daily QC Report in RMS (SECTION 01 45 00.15 10 par. 1.6.3.1). The number of adverse weather days shall be calculated chronologically from the first to the last day in each month. At the end of each calendar month, the Contracting Officer or his/her Representative will examine the recorded adverse weather days to determine whether a contractor is entitled to a time extension. These adverse weather days must prevent work for 50 percent or more of the Contractor's work day and delay work critical to the timely completion of the project. The Contracting Officer or his/her Representative will convert any delays meeting the above requirement to calendar days and issue a modification in accordance with the general provision entitled "Termination for Default - Damages for Delay - Time Extensions"

The Contractor's schedule must reflect anticipated adverse weather delays on all weather dependent activities.

### 3.8.2 Justification of Delay

Provide a description of the event(s) that caused the delay and/or impact to the work. As part of the description, identify all schedule activities impacted. Show that the event that caused the delay/impact was the responsibility of the Government. Provide a time impact analysis that demonstrates the effects of the delay or impact on the project completion date, or interim completion date(s). Evaluate multiple impacts chronologically; each with its own justification of delay. With multiple impacts consider any concurrency of delay. A time extension and the schedule fragnet becomes part of the project schedule and all future schedule updates upon approval by the Contracting Officer.

### 3.8.3 Changes That Do Not Cause Delay

If it is determined that a change does not constitute a schedule time extension, a fragnet as described in paragraph FRAGMENTARY NETWORK, is to be created and inserted into the Project schedule.

### 3.8.4 Time Impact Analysis (Prospective Analysis)

Submit requests for time extensions based on a prospective analysis if the work involved or the impact identified has not already occurred. Where the impact is ongoing a prospective analysis may be considered. However, the Government reserves the right to require a retrospective analysis be prepared after the impact has ended.

Prepare a time impact analysis for approval by the Contracting Officer based on industry recommended practice AACE 52R-06. Utilize a copy of the last approved schedule prior to the first day of the impact or delay for the time impact analysis. If Contracting Officer determines the time frame between the last approved schedule and the first day of impact is

too great, prepare an interim updated schedule to perform the time impact analysis. Unless approved by the Contracting Officer, no other changes may be incorporated into the schedule being used to justify the time impact.

### 3.8.5 Forensic Schedule Analysis (Retrospective Analysis)

Submit requests for time extensions based on a retrospective analysis if the work involved or the impact identified has already occurred. The analysis must account for the actual performance of both the impacted work and all other contract work in the schedule.

If a methodology is chosen from AACE 29R-03, the method must adhere to the principles identified in ASCE 67-17. If there is a conflict with the methodology chosen from AACE 29R-03 and ASCE 67-17, ASCE 67-17 will govern. Choice of methodology should be discussed prior to submission to Government.

### 3.8.6 Fragmentary Network (Fragnet)

Prepare a proposed fragnet for time impact analysis consisting of a sequence of new activities that are proposed to be added to the project schedule to demonstrate the influence of the delay or impact to the project's contractual dates. Clearly show how the proposed fragnet is to be tied into the project schedule including all predecessors and successors to the fragnet activities. The proposed fragnet must be approved by the Contracting Officer prior to incorporation into the project schedule.

### 3.8.7 Time Extension

The Contracting Officer must approve the Justification of Delay including the time impact analysis before a time extension will be granted. No time extension will be granted unless the delay consumes all available Project Float and extends the projected finish date ("End Project" milestone) beyond the Contract Completion Date. The time extension will be in calendar days.

Actual delays that are found to be caused by the Contractor's own actions, which result in a calculated schedule delay, are not a cause for an extension to the performance period, completion date, or any interim milestone date.

### 3.8.8 Impact to Early Completion Schedule

No extended overhead will be paid for delay prior to the original Contract Completion Date for an Early Completion IPS unless the Contractor actually performed work in accordance with that Early Completion Schedule. The Contractor must show that an early completion was achievable had it not been for the impact.

## 3.9 FAILURE TO ACHIEVE PROGRESS

Should the progress fall behind the approved project schedule for reasons other than those that are excusable within the terms of the contract, the Contracting Officer may require provision of a written recovery plan for approval. The plan must detail how progress will be made-up to include which activities will be accelerated by adding additional crews, longer work hours, extra workdays, etc.

### 3.9.1 Artificially Improving Progress

Artificially improving progress by means such as, but not limited to, revising the schedule logic, modifying, or adding constraints, shortening activity durations, or changing calendars in the project schedule is prohibited. Indicate assumptions made and the basis for any logic, constraint, duration, and calendar changes used in the creation of the recovery plan. Any additional resources, manpower, or daily and weekly work hour changes proposed in the recovery plan must be evident at the work site and documented in the daily report along with the Schedule Narrative Report.

### 3.9.2 Failure to Perform

Failure to perform work and maintain progress in accordance with the supplemental recovery plan may result in an interim and final unsatisfactory performance rating and may result in corrective action directed by the Contracting Officer pursuant to FAR 52.236-15 Schedules for Construction Contracts, FAR 52.249-10 Default (Fixed-Price Construction), and other contract provisions.

### 3.9.3 Recovery Schedule

Should the Contracting Officer find it necessary, submit a recovery schedule pursuant to FAR 52.236-15 Schedules for Construction Contracts.

## 3.10 OWNERSHIP OF FLOAT

Except for the provision given in the paragraph IMPACT TO EARLY COMPLETION SCHEDULE, float available in the schedule, at any time, belongs to the Project and is available for Contractor and Government use. This includes activity and project float. Activity float is the number of workdays that an activity can be delayed without causing a delay to the "End Project" finish milestone. Project float (if applicable) is the number of work days between the projected early finish and the "End Project" finish.

## 3.11 TRANSFER OF SCHEDULE DATA INTO RESIDENT MANAGEMENT SYSTEM

Ensure schedule data is uploaded to RMS. This data is additional supporting data in a form and detail required by the Contracting Officer pursuant to FAR 52.232-5 Payments under Fixed-Price Construction Contracts. The receipt of a proper payment request pursuant to FAR 52.232-27 Prompt Payment for Construction Contracts is contingent upon the Government receiving both acceptable and approvable hard copies and matching electronic versions of the application for progress payment.

## 3.12 PRIMAVERA P6 MANDATORY REQUIREMENTS

Ensure Primavera P6 settings provide a schedule capable of fulfilling the requirements of the contract. The following settings are mandatory and required in all schedule submissions to the Government:

a. Activity Codes must be Project Level, not Global or EPS level.

b. Calendars must be Project Level, not Global or Resource level.

c. Activity Duration Types must be set to "Fixed Duration & Units".

d. Percent Complete Types must be set to "Physical".

e. Time Period Admin Preferences must remain the default "8.0 hr/day, 40 hr/week, 172 hr/month, 2000 hr/year". Set Calendar Work Hours/Day to 8.0 Hour days.

f. Set Schedule Option for defining Critical Activities to "Longest Path".

g. Set Schedule Option for defining progressed activities to "Retained Logic".

h. Set up cost loading using a single lump sum non-labor resource. The Price/Unit must be $1/hr, Default Units/Time must be "8h/d", and settings "Auto Compute Actuals" and "Calculate costs from units" un-selected.

i. Activity ID's must not exceed 10 characters.

j. Activity Names must have a verb-noun structure and contain the most defining and detailed description within the first 30 characters.

k. The daily ending hour for all work calendars must be the same.

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SECTION 01 33 00

SUBMITTAL PROCEDURES
**08/18, CHG 4: 02/21**

# PART 1 GENERAL

## 1.1 SUMMARY

### 1.1.1 Submittal Information

The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

Units of weights and measures used on all submittals are to be the same as those used in the contract drawings.

### 1.1.2 Submission of Submittals

Schedule and provide submittals requiring Government approval before acquiring the material or equipment covered thereby. Pick up and dispose of samples not incorporated into the work in accordance with manufacturer's Safety Data Sheets (SDS) and in compliance with existing laws and regulations.

## 1.2 DEFINITIONS

### 1.2.1 Submittal Descriptions (SD)

Submittal requirements are specified in the technical sections. Examples and descriptions of submittals identified by the Submittal Description (SD) numbers and titles follow:

SD-01 Preconstruction Submittals

Submittals that are required prior to or at the start of construction (work) or the next major phase of the construction on a multiphase contract.

Preconstruction Submittals include schedules and a tabular list of locations, features, and other pertinent information regarding products, materials, equipment, or components to be used in the work.

SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project.

Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.

### SD-03 Product Data

Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials, systems or equipment for some portion of the work.

Samples of warranty language when the contract requires extended product warranties.

### SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. Unless specified in another section, testing must have been within three years of date of contract award for the project.

Report that includes findings of a test required to be performed on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report that includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports

Daily logs and checklists

Final acceptance test and operational test procedure

### SD-07 Certificates

Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that the product, system, or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a manufacturer, supplier, installer or Subcontractor through Contractor. The document purpose is to further promote the orderly progression of a portion of the work by documenting procedures, acceptability of methods, or personnel qualifications.

Confined space entry permits

Text of posted operating instructions

### SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

Submittals required for Guiding Principle Validation (GPV) or Third Party Certification (TPC).

Special requirements necessary to properly close out a construction contract. For example, Record Drawings and as-built drawings. Also, submittal requirements necessary to properly close out a major phase of construction on a multi-phase contract.

1.2.2 Approving Authority

Office or designated person authorized to approve the submittal.

1.2.3 Work

As used in this section, on-site and off-site construction required by contract documents, including labor necessary to produce submittals, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction. In exception, excludes work to produce SD-01 submittals.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or “S” classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Preconstruction Submittals shall be submit to the Contracting Officer or Contracting Officer Representative at least seven (7) days prior to the preconstruction conference. Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following:

Submittal Register; G

Certification of Insurance; G

Surety Bond; G

List of Proposed Subcontractors; G

Work Plan; G

Work to be Performed by the Contractor; G

Subcontracting Plan; G

Order of Work; G The Contractor's order of work for dredging and performing other work, including disposal area plan / processing material

Preliminary Project Schedule; G See 01 32 01.00 10 PROJECT SCHEDULE

Letter Appointing Superintendent; G

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Accident Prevention Plan; G See 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS

Quality Control (QC) Plan; G See 01 45 00 QUALITY CONTROL

Environmental Protection Plan; G

Notice to Mariners; G

## 1.4 SUBMITTAL CLASSIFICATION

### 1.4.1 Government Approved (G)

Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, submittals are considered to be "shop drawings."

### 1.4.2 For Information Only

Submittals not requiring Government approval will be for information only. Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, they are not considered to be "shop drawings."

## 1.5 PREPARATION

### 1.5.1 Transmittal Form

Use the ENG Form 4025-R transmittal form for submitting both Government-approved and information-only submittals. Submit in accordance with the instructions on the reverse side of the form. These forms or similar forms are included in the RMS CM software that the Contractor is required to use for this contract. Properly complete this form by filling out all the heading blank spaces and identifying each item submitted. Exercise special care to ensure proper listing of the specification paragraph and sheet number of the contract drawings pertinent to the data submitted for each item.

### 1.5.2 Submittal Format

#### 1.5.2.1 Format of SD-01 Preconstruction Submittals

When the submittal includes a document that is to be used in the project, or is to become part of the project record, other than as a submittal, do not apply the Contractor's approval stamp to the document itself, but to a separate sheet accompanying the document.

Provide data in the unit of measure used in the contract documents.

#### 1.5.2.2 Format for SD-02 Shop Drawings

Provide shop drawings not less than 8 1/2 by 11 inches nor more than 30 by 42 inches, except for full-size patterns or templates. Prepare drawings to accurate size, with scale indicated, unless another form is required. Ensure drawings are suitable for reproduction and of a quality to produce clear, distinct lines and letters, with dark lines on a white background.

a. Include the nameplate data, size, and capacity on drawings. Also include applicable federal, military, industry, and technical society

publication references.

b. Dimension drawings, except diagrams and schematic drawings. Prepare drawings demonstrating interface with other trades to scale. Use the same unit of measure for shop drawings as indicated on the contract drawings. Identify materials and products for work shown.

1.5.2.2.1 Drawing Identification

Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to information required in paragraph IDENTIFYING SUBMITTALS.

Number drawings in a logical sequence. Each drawing is to bear the number of the submittal in a uniform location next to the title block. Place the Government contract number in the margin, immediately below the title block, for each drawing.

1.5.2.3 Format of SD-03 Product Data

Present product data submittals for each section. Include a table of contents, listing the page and catalog item numbers for product data.

Indicate, by prominent notation, each product that is being submitted; indicate the specification section number and paragraph number to which it pertains.

1.5.2.3.1 Product Information

Supplement product data with material prepared for the project to satisfy the submittal requirements where product data does not exist. Identify this material as developed specifically for the project, with information and format as required for submission of SD-07 Certificates.

Provide product data in units used in the Contract documents. Where product data are included in preprinted catalogs with another unit, submit the dimensions in contract document units, on a separate sheet.

1.5.2.3.2 Standards

Where equipment or materials are specified to conform to industry or technical-society reference standards of such organizations as the American National Standards Institute (ANSI), ASTM International (ASTM), National Electrical Manufacturer's Association (NEMA), Underwriters Laboratories (UL), or Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance. In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and approved by the Contracting Officer. State on the certificate that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

1.5.2.3.3 Data Submission

Collect required data submittals for each specific material, product, unit of work, or system into a single submittal that is marked for choices, options, and portions applicable to the submittal. Mark each copy of the

product data identically. Partial submittals will not be accepted for expedition of the construction effort.

Submit the manufacturer's instructions before installation.

1.5.2.4 Format of SD-04 Samples

1.5.2.4.1 Sample Characteristics

Furnish samples in the following sizes, unless otherwise specified or unless the manufacturer has prepackaged samples of approximately the same size as specified:

a. Sample of Equipment or Device: Full size.

b. Sample of Materials Less Than 2 by 3 inches: Built up to 8 1/2 by 11 inches.

c. Sample of Materials Exceeding 8 1/2 by 11 inches: Cut down to 8 1/2 by 11 inches and adequate to indicate color, texture, and material variations.

d. Sample of Linear Devices or Materials: 10 inch length or length to be supplied, if less than 10 inches. Examples of linear devices or materials are conduit and handrails.

e. Sample Volume of Nonsolid Materials: Pint. Examples of nonsolid materials are sand and paint.

f. Color Selection Samples: 2 by 4 inches. Where samples are specified for selection of color, finish, pattern, or texture, submit the full set of available choices for the material or product specified. Sizes and quantities of samples are to represent their respective standard unit.

g. Sample Panel: 4 by 4 feet.

h. Sample Installation: 100 square feet.

1.5.2.4.2 Sample Incorporation

Reusable Samples: Incorporate returned samples into work only if so specified or indicated. Incorporated samples are to be in undamaged condition at the time of use.

Recording of Sample Installation: Note and preserve the notation of any area constituting a sample installation, but remove the notation at the final clean-up of the project.

1.5.2.4.3 Comparison Sample

Samples Showing Range of Variation: Where variations in color, finish, pattern, or texture are unavoidable due to nature of the materials, submit sets of samples of not less than three units showing extremes and middle of range. Mark each unit to describe its relation to the range of the variation.

When color, texture, or pattern is specified by naming a particular manufacturer and style, include one sample of that manufacturer and style,

for comparison.

1.5.2.5 Format of SD-05 Design Data

Provide design data and certificates on 8 1/2 by 11 inch paper.

1.5.2.6 Format of SD-06 Test Reports

By prominent notation, indicate each report in the submittal. Indicate the specification number and paragraph number to which each report pertains.

1.5.2.7 Format of SD-07 Certificates

Provide design data and certificates on 8 1/2 by 11 inch paper.

1.5.2.8 Format of SD-08 Manufacturer's Instructions

Present manufacturer's instructions submittals for each section. Include the manufacturer's name, trade name, place of manufacture, and catalog model or number on product data. Also include applicable federal, military, industry, and technical-society publication references. If supplemental information is needed to clarify the manufacturer's data, submit it as specified for SD-07 Certificates.

Submit the manufacturer's instructions before installation.

1.5.2.8.1 Standards

Where equipment or materials are specified to conform to industry or technical-society reference standards of such organizations as the American National Standards Institute (ANSI), ASTM International (ASTM), National Electrical Manufacturer's Association (NEMA), Underwriters Laboratories (UL), or Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance. In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and approved by the Contracting Officer. State on the certificate that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

1.5.2.9 Format of SD-09 Manufacturer's Field Reports

By prominent notation, indicate each report in the submittal. Indicate the specification number and paragraph number to which each report pertains.

1.5.2.10 Format of SD-10 Operation and Maintenance Data (O&M)

Comply with the requirements specified in Section 01 78 23 OPERATION AND MAINTENANCE DATA for O&M Data format.

1.5.2.11 Format of SD-11 Closeout Submittals

When the submittal includes a document that is to be used in the project or is to become part of the project record, other than as a submittal, do not apply the Contractor's approval stamp to the document itself, but to a

separate sheet accompanying the document.

Provide data in the unit of measure used in the contract documents.

### 1.5.3 Source Drawings for Shop Drawings

#### 1.5.3.1 Source Drawings

The entire set of source drawing files (DWG) will not be provided to the Contractor. Request the specific Drawing Number for the preparation of shop drawings. Only those drawings requested to prepare shop drawings will be provided. These drawings are provided only after award.

#### 1.5.3.2 Terms and Conditions

Data contained on these electronic files must not be used for any purpose other than as a convenience in the preparation of construction data for the referenced project. Any other use or reuse is at the sole risk of the Contractor and without liability or legal exposure to the Government. The Contractor must make no claim, and waives to the fullest extent permitted by law any claim or cause of action of any nature against the Government, its agents, or its subconsultants that may arise out of or in connection with the use of these electronic files. The Contractor must, to the fullest extent permitted by law, indemnify and hold the Government harmless against all damages, liabilities, or costs, including reasonable attorney's fees and defense costs, arising out of or resulting from the use of these electronic files.

These electronic source drawing files are not construction documents. Differences may exist between the source drawing files and the corresponding construction documents. The Government makes no representation regarding the accuracy or completeness of the electronic source drawing files, nor does it make representation to the compatibility of these files with the Contractor hardware or software. The Contractor is responsible for determining if any conflict exists. In the event that a conflict arises between the signed and sealed construction documents prepared by the Government and the furnished source drawing files, the signed and sealed construction documents govern. Use of these source drawing files does not relieve the Contractor of the duty to fully comply with the contract documents, including and without limitation the need to check, confirm and coordinate the work of all contractors for the project. If the Contractor uses, duplicates or modifies these electronic source drawing files for use in producing construction data related to this contract, remove all previous indication of ownership (seals, logos, signatures, initials and dates).

## 1.6 QUANTITY OF SUBMITTALS

### 1.6.1 Number of SD-01 Preconstruction Submittal Copies

Unless otherwise specified, submit two sets of administrative submittals.

### 1.6.2 Number of SD-04 Samples

a. Submit two samples, or two sets of samples showing the range of variation, of each required item. One approved sample or set of samples will be retained by the approving authority and one will be returned to the Contractor.

b. Submit one sample panel or provide one sample installation where directed. Include components listed in the technical section or as directed.

c. Submit one sample installation, where directed.

d. Submit one sample of nonsolid materials.

## 1.7 INFORMATION ONLY SUBMITTALS

Submittals without a "G" designation must be certified by the QC manager and submitted to the Contracting Officer for information-only. Provide information-only submittals to the Contracting Officer a minimum of 14 calendar days prior to the Preparatory Meeting for the associated Definable Feature of Work (DFOW). Approval of the Contracting Officer is not required on information only submittals. The Contracting Officer will mark "receipt acknowledged" on submittals for information and will return only the transmittal cover sheet to the Contractor. Normally, submittals for information only will not be returned. However, the Government reserves the right to return unsatisfactory submittals and 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.

## 1.8 PROJECT SUBMITTAL REGISTER

A sample Project Submittal Register showing items of equipment and materials for when submittals are required by the specifications is provided as "Attachment K - Submittal Register."

### 1.8.1 Submittal Management

Prepare and maintain a submittal register, as the work progresses. Do not change data that is output in columns (c), (d), (e), and (f) as delivered by Government; retain data that is output in columns (a), (g), (h), and (i) as approved. As an attachment, provide a submittal register showing 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. Maintain a submittal register for the project in accordance with Section 01 45 00.15 10 RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE(RMS CM). The Government will provide the initial submittal register in electronic format.

Column (c): Lists specification section in which submittal is required.

Column (d): Lists each submittal description (SD Number. and type, e.g., SD-02 Shop Drawings) required in each specification section.

Column (e): Lists one principal paragraph in each specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting the project

requirements.

Thereafter, the Contractor is to track all submittals by maintaining a complete list, including completion of all data columns and all dates on which submittals are received by and returned by the Government.

1.8.2 Preconstruction Use of Submittal Register

Submit the submittal register. Include the QC plan and the project schedule. Verify that all submittals required for the project are listed and add missing submittals. Coordinate and complete the following fields on the register submitted with the QC plan and the project schedule:

Column (a) Activity Number: Activity number from the project schedule.

Column (g) Contractor Submit Date: Scheduled date for the approving authority to receive submittals.

Column (h) Contractor Approval Date: Date that Contractor needs approval of submittal.

Column (i) Contractor Material: Date that Contractor needs material delivered to Contractor control.

1.8.3 Contractor Use of Submittal Register

Update the following fields in the Government-furnished submittal register program or equivalent fields in the program used by the Contractor with each submittal throughout the contract.

Column (b) Transmittal Number: List of consecutive, Contractor-assigned numbers.

Column (j) Action Code (k): Date of action used to record Contractor's review when forwarding submittals to QC.

Column (l) Date submittal transmitted.

Column (q) Date approval was received.

1.8.4 Approving Authority Use of Submittal Register

Update the following fields:

Column (b) Transmittal Number: List of consecutive, Contractor-assigned numbers.

Column (l) Date submittal was received.

Column (m) through (p) Dates of review actions.

Column (q) Date of return to Contractor.

### 1.8.5 Action Codes

### 1.8.6 Delivery of Copies

Submit an updated electronic copy of the submittal register to the Contracting Officer with each invoice request. Provide an updated Submittal Register monthly regardless of whether an invoice is submitted.

## 1.9 VARIATIONS

Variations from contract requirements require Contracting Officer approval pursuant to contract Clause FAR 52.236-21 Specifications and Drawings for Construction, and will be considered where advantageous to the Government.

### 1.9.1 Considering Variations

Discussion of variations with the Contracting Officer before submission of a variation submittal will help ensure that functional and quality requirements are met and minimize rejections and resubmittals. For variations that include design changes or some material or product substitutions, the Government may require an evaluation and analysis by a licensed professional engineer hired by the contractor.

Specifically point out variations from contract requirements in a transmittal letter. Failure to point out variations may cause the Government to require rejection and removal of such work at no additional cost to the Government.

### 1.9.2 Proposing Variations

When proposing variation, deliver a submittal, clearly marked as a "VARIATION" to the Contracting Officer, with documentation illustrating the nature and features of the variation including any necessary technical submittals and why the variation is desirable and beneficial to Government. If lower cost is a benefit, also include an estimate of the cost savings. In addition to documentation required for variation, include the submittals required for the item. Clearly mark the proposed variation in all documentation.

The Contracting Officer will indicate an approval or disapproval of the variation request; and if not approved as submitted, will indicate the Government's reasons therefore. Any work done before such approval is received is performed at the Contractor's risk.

Specifically point out variations from contract requirements in a transmittal letter. Failure to point out variations may cause the Government to require rejection and removal of such work at no additional cost to the Government.

Check the column "variation" of ENG Form 4025 for submittals that include variations proposed by the Contractor. Set forth in writing the reason for any variations and note such variations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted variations.

### 1.9.3 Warranting that Variations are Compatible

When delivering a variation for approval, the Contractor warrants that this contract has been reviewed to establish that the variation, if

incorporated, will be compatible with other elements of work.

1.9.4 Review Schedule Extension

In addition to the normal submittal review period, a period of 14 calendar days will be allowed for the Government to consider submittals with variations.

1.10 SCHEDULING

Schedule and submit concurrently product data and shop drawings covering component items forming a system or items that are interrelated. Submit pertinent certifications at the same time. No delay damages or time extensions will be allowed for time lost in late submittals.

a. Coordinate scheduling, sequencing, preparing, and processing of submittals with performance of work so that work will not be delayed by submittal processing. The Contractor is responsible for additional time required for Government reviews resulting from required resubmittals. The review period for each resubmittal is the same as for the initial submittal.

b. Submittals required by the contract documents are listed on the submittal register. If a submittal is listed in the submittal register but does not pertain to the contract work, the Contractor is to include the submittal in the register and annotate it "N/A" with a brief explanation. Approval by the Contracting Officer does not relieve the Contractor of supplying submittals required by the contract documents but that have been omitted from the register or marked "N/A."

c. Resubmit the submittal register and annotate it monthly with actual submission and approval dates. When all items on the register have been fully approved, no further resubmittal is required.

Contracting Officer review will be completed within 7 calendar days after the date of submission.

1.11 GOVERNMENT APPROVING AUTHORITY

When the approving authority is the Contracting Officer, the Government will:

a. Note the date on which the submittal was received.

b. Review submittals for approval within the scheduling period specified and only for conformance with project design concepts and compliance with contract documents.

c. Identify returned submittals with one of the actions defined in paragraph REVIEW NOTATIONS and with comments and markings appropriate for the action indicated.

Upon completion of review of submittals requiring Government approval, stamp and date submittals. A copy of the submittal will be retained by the Contracting Officer and a copy of the submittal will be returned to the Contractor.

### 1.11.1 Review Notations

Submittals will be returned to the Contractor with the following notations:

a. Submittals marked "approved" or "accepted" authorize proceeding with the work covered.

b. Submittals marked "approved as noted" or "approved, except as noted, resubmittal not required," authorize proceeding with the work covered provided that the Contractor takes no exception to the corrections.

c. Submittals marked "not approved," "disapproved," or "revise and resubmit" indicate incomplete submittal or noncompliance with the contract requirements or design concept. Resubmit with appropriate changes. Do not proceed with work for this item until the resubmittal is approved.

d. Submittals marked "not reviewed" indicate that the submittal has been previously reviewed and approved, is not required, does not have evidence of being reviewed and approved by Contractor, or is not complete. A submittal marked "not reviewed" will be returned with an explanation of the reason it is not reviewed. Resubmit submittals returned for lack of review by Contractor or for being incomplete, with appropriate action, coordination, or change.

e. Submittals marked "receipt acknowledged" indicate that submittals have been received by the Government. This applies only to "information-only submittals" as previously defined.

## 1.12 DISAPPROVED SUBMITTALS

Make corrections required by the Contracting Officer. If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract drawings or specifications, give notice to the Contracting Officer as required under the FAR clause titled CHANGES. The Contractor is responsible for the dimensions and design of connection details and the construction of work. Failure to point out variations may cause the Government to require rejection and removal of such work at the Contractor's expense.

If changes are necessary to submittals, make such revisions and resubmit in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are approved.

## 1.13 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals is not to be construed as a complete check, and indicates only that

Approval or acceptance by the Government for a submittal does not relieve the Contractor of the responsibility for meeting the contract requirements or for any error that may exist, because under the Quality Control (QC) requirements of this contract, the Contractor is responsible for ensuring information contained with in each submittal accurately conforms with the requirements of the contract documents.

After submittals have been approved or accepted 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.

## 1.14 APPROVED SAMPLES

Approval of a sample is only for the characteristics or use named in such approval and is not be construed to change or modify any contract requirements. Before submitting samples, provide assurance that the materials or equipment will be available in quantities required in the project. No change or substitution will be permitted after a sample has been approved.

Match the approved samples for materials and equipment incorporated in the work. If requested, approved samples, including those that may be damaged in testing, will be returned to the Contractor, at its expense, upon completion of the contract. Unapproved samples will also be returned to the Contractor at its expense, if so requested.

Failure of any materials to pass the specified tests will be sufficient cause for refusal to consider, under this contract, any further samples of the same brand or make as that material. The Government reserves the right to disapprove any material or equipment that has previously proved unsatisfactory in service.

Samples of various materials or equipment delivered on the site or in place may be taken by the Contracting Officer for testing. Samples failing to meet contract requirements will automatically void previous approvals. Replace such materials or equipment to meet contract requirements.

## 1.15 WITHHOLDING OF PAYMENT

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

## 1.16 CERTIFICATION OF SUBMITTAL DATA

Certify the submittal data as follows on Form ENG 4025: "I certify that the above submitted items had been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

_____NAME OF CONTRACTOR _____ SIGNATURE OF CONTRACTOR

# PART 2 PRODUCTS

Not Used

# PART 3 EXECUTION

Not Used

-- End of Section --

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# SECTION 01 35 26

# GOVERNMENTAL SAFETY REQUIREMENTS
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## 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 within the text by the basic designation only.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

| | |
|---|---|
| ASME B30.3 | (2020) Tower Cranes |
| ASME B30.5 | (2021) Mobile and Locomotive Cranes |
| ASME B30.7 | (2021) Winches |
| ASME B30.8 | (2020) Floating Cranes and Floating Derricks |
| ASME B30.9 | (2018) Slings |
| ASME B30.20 | (2018) Below-the-Hook Lifting Devices |
| ASME B30.22 | (2023) Articulating Boom Cranes |
| ASME B30.23 | (2022) Personnel Lifting Systems Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings |
| ASME B30.26 | (2015; R 2020) Rigging Hardware |

AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)

| | |
|---|---|
| ASSP A10.22 | (2007; R 2017) Safety Requirements for Rope-Guided and Non-Guided Workers' Hoists |
| ASSP A10.34 | (2021) Protection of the Public on or Adjacent to Construction Sites |
| ASSP A10.44 | (2020) Control of Energy Sources (Lockout/Tagout) for Construction and Demolition Operations |
| ASSP Z244.1 | (2016) The Control of Hazardous Energy Lockout, Tagout and Alternative Methods |
| ASSP Z359.0 | (2018) Definitions and Nomenclature Used for Fall Protection and Fall Arrest |
| ASSP Z359.1 | (2020) The Fall Protection Code |
| ASSP Z359.2 | (2017) Minimum Requirements for a |

| | |
|---|---|
| | Comprehensive Managed Fall Protection Program |
| ASSP Z359.3 | (2019) Safety Requirements for Lanyards and Positioning Lanyards |
| ASSP Z359.4 | (2013) Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components |
| ASSP Z359.6 | (2016) Specifications and Design Requirements for Active Fall Protection Systems |
| ASSP Z359.7 | (2019) Qualification and Verification Testing of Fall Protection Products |
| ASSP Z359.11 | (2014) Safety Requirements for Full Body Harnesses |
| ASSP Z359.12 | (2019) Connecting Components for Personal Fall Arrest Systems |
| ASSP Z359.13 | (2013) Personal Energy Absorbers and Energy Absorbing Lanyards |
| ASSP Z359.14 | (2014) Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and Rescue Systems |
| ASSP Z359.15 | (2014) Safety Requirements for Single Anchor Lifelines and Fall Arresters for Personal Fall Arrest Systems |
| ASSP Z359.16 | (2016) Safety Requirements for Climbing Ladder Fall Arrest Systems |
| ASSP Z359.18 | (2017) Safety Requirements for Anchorage Connectors for Active Fall Protection Systems |

ASTM INTERNATIONAL (ASTM)

| | |
|---|---|
| ASTM F855 | (2019) Standard Specifications for Temporary Protective Grounds to Be Used on De-energized Electric Power Lines and Equipment |

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

| | |
|---|---|
| IEEE 1048 | (2016) Guide for Protective Grounding of Power Lines |
| IEEE C2 | (2023) National Electrical Safety Code |

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

| | |
|---|---|
| NFPA 10 | (2022; ERTA 1 2021) Standard for Portable Fire Extinguishers |

| | |
|---|---|
| NFPA 51B | (2024) Standard for Fire Prevention During Welding, Cutting, and Other Hot Work |
| NFPA 70 | (2023; ERTA 4 2023; ERTA 5 2023; ERTA 6 2023) National Electrical Code |
| NFPA 70E | (2024) Standard for Electrical Safety in the Workplace |
| NFPA 241 | (2022) Standard for Safeguarding Construction, Alteration, and Demolition Operations |
| NFPA 306 | (2024) Standard for the Control of Gas Hazards on Vessels |

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA)

| | |
|---|---|
| TIA-222 | (2018H; Add 1 2019) Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures |
| TIA-1019 | (2012; R 2016) Standard for Installation, Alteration and Maintenance of Antenna Supporting Structures and Antennas |

U.S. ARMY CORPS OF ENGINEERS (USACE)

| | |
|---|---|
| EM 385-1-1 | (2024) Safety and Health Requirements Manual |

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

| | |
|---|---|
| 10 CFR 20 | Standards for Protection Against Radiation |
| 29 CFR 1910 | Occupational Safety and Health Standards |
| 29 CFR 1910.146 | Permit-required Confined Spaces |
| 29 CFR 1910.147 | The Control of Hazardous Energy (Lock Out/Tag Out) |
| 29 CFR 1910.333 | Selection and Use of Work Practices |
| 29 CFR 1915 | Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment |
| 29 CFR 1915.89 | Control of Hazardous Energy (Lockout/Tags-Plus) |
| 29 CFR 1926 | Safety and Health Regulations for Construction |
| 29 CFR 1926.16 | Rules of Construction |
| 29 CFR 1926.450 | Scaffolds |

| | |
|---|---|
| 29 CFR 1926.500 | Fall Protection |
| 29 CFR 1926.552 | Material Hoists, Personal Hoists, and Elevators |
| 29 CFR 1926.553 | Base-Mounted Drum Hoists |
| 29 CFR 1926.1400 | Cranes and Derricks in Construction |
| 49 CFR 173 | Shippers - General Requirements for Shipments and Packagings |
| CPL 02-01-056 | (2014) Inspection Procedures for Accessing Communication Towers by Hoist |
| CPL 2.100 | (1995) Application of the Permit-Required Confined Spaces (PRCS) Standards, 29 CFR 1910.146 |

## 1.2 DEFINITIONS

### 1.2.1 Competent Person (CP)

The CP is a person designated in writing, who, through training, knowledge and experience, is capable of identifying, evaluating, and addressing existing and predictable hazards in the working environment or working conditions that are dangerous to personnel, and who has authorization to take prompt corrective measures with regards to such hazards.

### 1.2.2 Competent Person, Confined Space

The CP, Confined Space, is a person meeting the competent person requirements as defined EM 385-1-1 Chapter 34, with thorough knowledge of OSHA’s Confined Space Standard, 29 CFR 1910.146, and designated in writing to be responsible for the immediate supervision, implementation and monitoring of the confined space program, who through training, knowledge and experience in confined space entry is capable of identifying, evaluating and addressing existing and potential confined space hazards and, who has the authority to take prompt corrective measures with regard to such hazards.

### 1.2.3 Competent Person, Cranes and Rigging

The CP, Cranes and Rigging, as defined in EM 385-1-1 Chapters 15 and 16, is a person meeting the competent person requirements, who has been designated in writing to be responsible for the immediate supervision, implementation and monitoring of the Crane and Rigging Program, who through training, knowledge and experience in crane and rigging is capable of identifying, evaluating and addressing existing and potential hazards and, who has the authority to take prompt corrective measures with regard to such hazards.

### 1.2.4 Competent Person, Excavation/Trenching

A CP, Excavation/Trenching, is a person meeting the competent person requirements as defined in EM 385-1-1 Chapter 25 and 29 CFR 1926, who has been designated in writing to be responsible for the immediate supervision, implementation and monitoring of the excavation/trenching

program, who through training, knowledge and experience in excavation/trenching is capable of identifying, evaluating and addressing existing and potential hazards and, who has the authority to take prompt corrective measures with regard to such hazards.

1.2.5 Competent Person, Fall Protection

The CP, Fall Protection, is a person meeting the competent person requirements as defined in EM 385-1-1 Chapter 21 and in accordance with ASSP Z359.0, who has been designated in writing by the employer to be responsible for immediate supervising, implementing and monitoring of the fall protection program, who through training, knowledge and experience in fall protection and rescue systems and equipment, is capable of identifying, evaluating and addressing existing and potential fall hazards and, who has the authority to take prompt corrective measures with regard to such hazards.

1.2.6 Competent Person, Scaffolding

The CP, Scaffolding is a person meeting the competent person requirements in EM 385-1-1 Chapter 22, and designated in writing by the employer to be responsible for immediate supervising, implementing and monitoring of the scaffolding program. The CP for Scaffolding has enough training, knowledge and experience in scaffolding to correctly identify, evaluate and address existing and potential hazards and also has the authority to take prompt corrective measures with regard to these hazards. CP qualifications must be documented including experience on the specific scaffolding systems/types being used, assessment of the base material that the scaffold will be erected upon, load calculations for materials and personnel, and erection and dismantling. The CP for scaffolding must have a documented minimum of 8-hours of scaffold training to include training on the specific type of scaffold being used (e.g. mast-climbing, adjustable, tubular frame), in accordance with EM 385-1-1 paragraph 22-2.a.

1.2.7 Competent Person (CP) Trainer

A competent person trainer as defined in EM 385-1-1 Chapter 2, who is qualified in the training material presented, and who possesses a working knowledge of applicable technical regulations, standards, equipment and systems related to the subject matter on which they are training Competent Persons. A competent person trainer must be familiar with the typical hazards and the equipment used in the industry they are instructing. The training provided by the competent person trainer must be appropriate to that specific industry. The competent person trainer must evaluate the knowledge and skills of the competent persons as part of the training process.

1.2.8 High Risk Activities

High Risk Activities are activities that involve work at heights, crane and rigging, excavations and trenching, scaffolding, electrical work, and confined space entry.

1.2.9 High Visibility Accident

A High Visibility Accident is any mishap which may generate publicity or high visibility.

1.2.10 Load Handling Equipment (LHE)

LHE is a term used to describe cranes, hoists and all other hoisting equipment (hoisting equipment means equipment, including crane, derricks, hoists and power operated equipment used with rigging to raise, lower or horizontally move a load).

1.2.11 Medical Treatment

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

1.2.12 Near Miss

A Near Miss is a mishap resulting in no personal injury and zero property damage, but given a shift in time or position, damage or injury may have occurred (e.g., a worker falls off a scaffold and is not injured; a crane swings around to move the load and narrowly misses a parked vehicle).

1.2.13 Operating Envelope

The Operating Envelope is the area surrounding any crane or load handling equipment. Inside this "envelope" is the crane, the operator, riggers and crane walkers, other personnel involved in the operation, rigging gear between the hook, the load, the crane's supporting structure (i.e. ground or rail), the load's rigging path, the lift and rigging procedure.

1.2.14 Qualified Person (QP)

The QP is a person designated in writing, who, by possession of a recognized degree, certificate, or professional standing, or extensive knowledge, training, and experience, has successfully demonstrated their ability to solve or resolve problems related to the subject matter, the work, or the project.

1.2.15 Qualified Person, Fall Protection (QP for FP)

A QP for FP is a person meeting the definition requirements of EM 385-1-1 Chapter 21, and ASSP Z359.2 standard, having a recognized degree or professional certificate and with extensive knowledge, training and experience in the fall protection and rescue field who is capable of designing, analyzing, and evaluating and specifying fall protection and rescue systems.

1.2.16 Recordable Injuries or Illnesses

Recordable Injuries or Illnesses are any work-related injury or illness that results in:

a. Death, regardless of the time between the injury and death, or the length of the illness;

b. Days away from work (any time lost after day of injury/illness onset);

c. Restricted work;

d. Transfer to another job;

e. Medical treatment beyond first aid;

f. Loss of consciousness; or

g. A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (a) through (f) above

1.2.17 Government Property and Equipment

Interpret "USACE" property and equipment specified in USACE EM 385-1-1 as Government property and equipment.

1.2.18 Load Handling Equipment (LHE) Accident or Load Handling Equipment Mishap

A LHE accident occurs when any one or more of the eight elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; material or equipment damage; dropped load; derailment; two-blocking; overload; or collision, including unplanned contact between the load, crane, or other objects. A dropped load, derailment, two-blocking, overload and collision are considered accidents, even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, or roll over). Document an LHE mishap using the Crane High Hazard working group mishap reporting form.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Accident Prevention Plan (APP); G

APP - Construction; G

Dive Operations Plan; G

SD-06 Test Reports

Monthly Exposure Reports

Notifications and Reports

Accident Reports; G

LHE Inspection Reports

SD-07 Certificates

Crane Operators/Riggers

Standard Lift Plan; G

Critical Lift Plan ; G

Naval Architecture Analysis; G

Activity Hazard Analysis (AHA)

Confined Space Entry Permit

Hot Work Permit

Certificate of Compliance

License Certificates

Radiography Operation Planning Work Sheet; G

Portable Gauge Operations Planning Worksheet; G

## 1.4 MONTHLY EXPOSURE REPORTS

Provide a Monthly Exposure Report and attach to the monthly billing request. This report is a compilation of employee-hours worked each month for all site workers, both Prime and subcontractor. Failure to submit the report may result in retention of up to 10 percent of the voucher.

## 1.5 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this Contract, comply with the most recent edition of USACE EM 385-1-1, and the following federal, state, and local laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern.

## 1.6 SITE QUALIFICATIONS, DUTIES, AND MEETINGS

### 1.6.1 Personnel Qualifications

#### 1.6.1.1 Site Safety and Health Officer (SSHO)

Provide an SSHO that meets the requirements of EM 385-1-1 Chapter 2 paragraph 3. The SSHO must ensure that the requirements of 29 CFR 1926.16 are met for the project. Provide a Safety oversight team that includes a minimum of one person at each project site to function as the Site Safety and Health Officer (SSHO). The SSHO or an equally-qualified Alternate SSHO must be at the work site at all times to implement and administer the Contractor's safety program and Government-accepted Accident Prevention Plan. The SSHO and Alternate SSHO must have the required training, experience, and qualifications in accordance with EM 385-1-1 Chapter 2 paragraph 3, and all associated sub-paragraphs.

1.6.1.1.1 Additional Site Safety and Health Officer (SSHO) Requirements and Duties

The SSHO may not serve as the Quality Control Manager. The SSHO may not serve as the Superintendent.

1.6.1.2 Competent Person Qualifications

Provide Competent Persons in accordance with EM 385-1-1, Chapter 2 paragraph 3 and herein. Competent Persons for high risk activities include confined space, cranes and rigging, excavation/trenching, fall protection, and electrical work. The CP for these activities must be designated in writing, and meet the requirements for the specific activity (i.e. competent person, fall protection).

The Competent Person identified in the Contractor's Safety and Health Program and accepted Accident Prevention Plan, must be on-site at all times when the work that presents the hazards associated with their professional expertise is being performed. Provide the credentials of the Competent Persons(s) to the Contracting Officer for information in consultation with the Safety Office.

1.6.1.2.1 Competent Person for Confined Space Entry

Provide a Confined Space (CP) Competent Person who meets the requirements of EM 385-1-1, Chapter 34, and herein. The CP for Confined Space Entry must supervise the entry into each confined space in accordance with EM 385-1-1, Chapter 34.

Since this work involves operations that handle combustible or hazardous materials, this person must have the ability to understand and follow through on the air sampling, Personal Protective Equipment (PPE), and instructions of a Marine Chemist, Coast Guard authorized persons, or Certified Industrial Hygienist. Confined space and enclosed space work must comply with NFPA 306, OSHA 29 CFR 1915, Subpart B, "Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment," or as applicable, 29 CFR 1910.146 for general industry.

1.6.1.2.2 Competent Person for Scaffolding

Provide a Competent Person for Scaffolding who meets the requirements of EM 385-1-1, Chapter 22 and herein.

1.6.1.2.3 Competent Person for Fall Protection

Provide a Competent Person for Fall Protection who meets the requirements of EM 385-1-1, Chapters 21 and 22, and herein.

1.6.1.3 Qualified Trainer Requirements

Individuals qualified to instruct the 40 hour contract safety awareness course, or portions thereof, must meet the definition of a Competent Person Trainer, and, at a minimum, possess a working knowledge of the following subject areas: EM 385-1-1, Electrical Standards, Lockout/Tagout, Fall Protection, Confined Space Entry for Construction; Excavation, Trenching and Soil Mechanics, and Scaffolds in accordance with 29 CFR 1926.450, Subpart L.

Instructors are required to:

a. Prepare class presentations that cover construction-related safety requirements.

b. Ensure that all attendees attend all sessions by using a class roster signed daily by each attendee. Maintain copies of the roster for at least five years. This is a certification class and must be attended 100 percent. In cases of emergency where an attendee cannot make it to a session, the attendee can make it up in another class session for the same subject.

c. Update training course materials whenever an update of the EM 385-1-1 becomes available.

d. Provide a written exam of at least 50 questions. Students are required to answer 80 percent correctly to pass.

e. Request, review and incorporate student feedback into a continuous course improvement program.

1.6.1.4 Dredging Contract Requirements

1.6.1.4.1 Dredging Safety Personnel Requirements

a. Provide a minimum of one full-time SSHO assigned per project site for the primary working shift.

b. For a project involving multiple work shifts, provide one full-time SSHO for each additional shift.

c. An example of one dredging project site is reflected in each of the following:

(1) a mechanical dredge, tug(s) and scow(s), scow route, and material placement site; or

(2) a hydraulic pipeline dredge, attendant plant, and material placement site; or,

(3) a hopper dredge (include land-based material placement site - if applicable.)

1.6.1.4.2 SSHO Requirements for Dredging

a. In addition to requirements stated elsewhere in this specification, an individual serving as a SSHO must be present at the construction work site, located so that they have full mobility and access to all major work operations when work is being performed. The SSHO must be available during their shift for immediate verbal consultation and notification, either by phone or radio.

b. The SSHO must report to a senior project (or corporate) official.

c. The SSHO must inspect all work areas and operations during initial set-up. For additional shifts, the SSHO must inspect all work areas and operations and provide personal oversight during dredge operations.

1.6.1.4.3 Collateral Duty Safety Officer (CDSO) Requirements for Dredging

a. A CDSO is an individual who is assigned collateral duty safety responsibilities in addition to their full-time occupation, and who supports and supplements the SSHO efforts in managing, implementing and enforcing the Contractor's Safety and Health Program. An assigned CDSO must be an individual(s) with work oversight responsibilities, such as master, mate, fill foreman, or superintendent. A CDSO must not be an employee responsible for continuous mechanical or equipment operations, such as an equipment operator.

b. A CDSO must perform safety program tasks as assigned by the SSHO and must report safety findings to the SSHO. The SSHO must document results of safety findings and provide information for inclusion in the CQC reports to the Contracting Officer.

1.6.1.4.4 Safety Personnel Training Requirements for Dredging

A SSHO and a CDSO for dredging Contracts must take either a formal classroom or online OSHA 30-hour Construction Safety Course, or an equivalent 30 hours of formal classroom or online safety and health training covering the subjects of the OSHA 30-hour Course in accordance with EM 385-1-1 section 2-3, applicable to dredging work, and given by qualified instructors. In exception to EM 385-1-1 paragraph 2-4.b, comply with the following:

a. The SSHO must maintain competency through having taken 24 hours of formal classroom or online safety and health related coursework every year for, at minimum, the last 3 years. Hours spent as an instructor in such courses will be considered the same as attending them, but each course only gets credit once (for example, instructing a 1-hour asbestos awareness course five times in a year provides one hour credit for training).

b. The SSHO and a CDSO must have a minimum of five years of experience within the past ten years in one of the following:

(1) Supervising/managing dredging activities (managing safety programs or processes and conducting hazard analyses and developing controls in activities or environments with similar hazards)

(2) Supervising/managing marine construction activities (managing safety programs or processes and conducting hazard analyses and developing controls in activities or environments with similar hazards)

(3) Supervising/managing land-based construction activities (managing safety programs or processes and conducting hazard analyses and developing controls in activities or environments with similar hazards)

1.6.1.5 Crane Operators/Riggers

Provide Operators, Signal Persons, and Riggers meeting the requirements in EM 385-1-1, Chapter 15 for Riggers and Chapter 16 for Crane Operators and Signal Persons. In addition, for mobile cranes with Original Equipment Manufacturer (OEM) rated capacities of 50,000 pounds or greater, designate crane operators qualified by a source that qualifies crane operators (i.e., union, a Government agency, or an organization that tests and

qualifies crane operators). Provide proof of current qualification.

1.6.2 Personnel Duties

1.6.2.1 Duties of the Site Safety and Health Officer (SSHO)

The SSHO must:

a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Attach safety inspection logs to the Contractors' daily production report.

b. Conduct mishap investigations and complete required accident reports. Report mishaps and near misses.

c. Use and maintain OSHA's Form 300 to log work-related injuries and illnesses occurring on the project site for Prime Contractors and subcontractors, and make available to the Contracting Officer upon request. Post and maintain the Form 300A on the site Safety Bulletin Board.

d. Maintain applicable safety reference material on the job site.

e. Attend the pre-construction conference, pre-work meetings including preparatory meetings, and periodic in-progress meetings.

f. Review the APP and AHAs for compliance with EM 385-1-1, and approve, sign, implement and enforce them.

g. Establish a Safety and Occupational Health (SOH) Deficiency Tracking System that lists and monitors outstanding deficiencies until resolution.

h. Ensure subcontractor compliance with safety and health requirements.

i. Maintain a list of hazardous chemicals on site and their material Safety Data Sheets (SDS).

j. Maintain a weekly list of high hazard activities involving energy, equipment, excavation, entry into confined space, and elevation, and be prepared to discuss details during QC Meetings.

k. Provide and keep a record of site safety orientation and indoctrination for Contractor employees, subcontractor employees, and site visitors.

Superintendent, QC Manager, and SSHO are subject to dismissal if the above or any other required duties are not being effectively carried out. If either the Superintendent, QC Manager, or SSHO are dismissed, project work will be stopped and will not be allowed to resume until a suitable replacement is approved and the above duties are again being effectively carried out.

### 1.6.3 Meetings

#### 1.6.3.1 Preconstruction Conference

a. Contractor representatives who have a responsibility or significant role in accident prevention on the project must attend the preconstruction conference. This includes the project superintendent, Site Safety and Occupational Health Officer, quality control manager, or any other assigned safety and health professionals who participated in the development of the APP (including the Activity Hazard Analyses (AHAs) and special plans, program and procedures associated with it).

b. Discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the Contract. This list of proposed AHAs will be reviewed and an agreement will be reached between the Contractor and the Contracting Officer as to which phases will require an analysis. In addition, establish a schedule for the preparation, submittal, and Government review of AHAs to preclude project delays.

c. Deficiencies in the submitted APP, identified during the Contracting Officer's review, must be corrected, and the APP re-submitted for review prior to the start of construction. Work is not permitted to begin until an APP is established that is acceptable to the Contracting Officer.

#### 1.6.3.2 Safety Meetings

Conduct safety meetings to review past activities, plan for new or changed operations, review pertinent aspects of appropriate AHA (by trade), establish safe working procedures for anticipated hazards, and provide pertinent Safety and Occupational Health (SOH) training and motivation. Conduct meetings at least once a month for all supervisors at the project location. The SSHO, supervisors, foremen, or CDSOs must conduct meetings at least once a week for the trade workers. Document meeting minutes to include the date, persons in attendance, subjects discussed, and names of individual(s) who conducted the meeting. Maintain documentation on-site and furnish copies to the Contracting Officer on request. Notify the Contracting Officer of all scheduled meetings 7 calendar days in advance.

#### 1.6.3.3 Daily Toolbox Safety Talks

Conduct daily "Toolbox Safety Talks" or "Toolbox Talks" to reinforce key safety procedures and involve workers in discussion of safety and health procedures and program requirements. Document meeting with meeting agenda or discussion summary, to include the date, persons in attendance, subjects discussed, and names of individual(s) who conducted the meeting. Maintain documentation on-site and attach documentation to the Contractors' daily safety inspection logs in accordance with paragraph 1.6.2.1.

## 1.7 ACCIDENT PREVENTION PLAN (APP)

### 1.7.1 APP - Construction

A qualified person must prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of EM 385-1-1, and as supplemented herein. Cover all paragraph and subparagraph elements in

EM 385-1-1. The APP must be job-specific and address any unusual or unique aspects of the project or activity for which it is written. The APP must interface with the Contractor's overall safety and health program referenced in the APP in the applicable APP element, and made site-specific. Describe the methods to evaluate past safety performance of potential subcontractors in the selection process. Also, describe innovative methods used to ensure and monitor safe work practices of subcontractors. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the Contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP must be signed by an officer of the firm (Prime Contractor senior person), the individual preparing the APP, the on-site superintendent, the designated SSHO, the Contractor Quality Control Manager, and any designated Certified Safety Professional (CSP) or Certified Health Physicist (CIH). The SSHO must provide and maintain the APP and a log of signatures by each subcontractor foreman, attesting that they have read and understand the APP, and make the APP and log available on-site to the Contracting Officer. If English is not the foreman's primary language, the Prime Contractor must provide an interpreter.

Submit the APP to the Contracting Officer within 15 calendar days of Contract award and not less than 10 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP. Once reviewed and accepted by the Contracting Officer, the APP and attachments will be enforced as part of the Contract. Disregarding the provisions of this Contract or the accepted APP is cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified. Continuously review and amend the APP, as necessary, throughout the life of the Contract. Changes to the accepted APP must be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and Quality Control Manager. Incorporate unusual or high-hazard activities not identified in the original APP as they are discovered. Should any severe hazard exposure (i.e. imminent danger) become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the Contracting Officer within 24 hours of discovery. Eliminate and remove the hazard. In the interim, take all necessary action to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by ASSP A10.34), and the environment.

### 1.7.2 Names and Qualifications

Provide plans in accordance with the requirements outlined in section 2-7 of EM 385-1-1, including the following:

a. Names and qualifications (resumes including education, training, experience and certifications) of site safety and health personnel designated to perform work on this project to include the designated Site Safety and Health Officer and other competent and qualified personnel to be used. Specify the duties of each position.

b. Qualifications of competent and of qualified persons. As a minimum, designate and submit qualifications of competent persons for each of

the following major areas: excavation; scaffolding; fall protection; hazardous energy; confined space; health hazard recognition, evaluation and control of chemical, physical and biological agents; and personal protective equipment and clothing to include selection, use and maintenance.

1.7.3 Plans

Provide plans in the APP in accordance with the requirements outlined in Appendix A of EM 385-1-1, including the following:

1.7.3.1 Confined Space Entry Plan

Develop a confined or enclosed space entry plan in accordance with EM 385-1-1, applicable OSHA standards 29 CFR 1910, 29 CFR 1915, and 29 CFR 1926, OSHA Directive CPL 2.100, and any other federal, state and local regulatory requirements identified in this Contract. Identify the qualified person's name and qualifications, training, and experience. Delineate the qualified person's authority to direct work stoppage in the event of hazardous conditions. Include procedure for rescue by Contractor personnel and the coordination with emergency responders. (If there is no confined space work, include a statement that no confined space work exists and none will be created.)

1.7.3.2 Standard Lift Plan (SLP)

Plan lifts to avoid situations where the operator cannot maintain safe control of the lift. Prepare a written SLP in accordance with EM 385-1-1, Chapter 16 paragraph 7, using ENG Form 6203 (16-10.a) for every lift or series of lifts (if duty cycle or routine lifts are being performed). The SLP must be developed, reviewed and accepted by all personnel involved in the lift in conjunction with the associated AHA. Signature on the AHA constitutes acceptance of the plan. Maintain the SLP on the LHE for the current lift(s) being made. Maintain historical SLPs for a minimum of three months.

1.7.3.3 Critical Lift Plan - Crane or Load Handling Equipment

Provide a Critical Lift Plan as required by EM 385-1-1, Chapter 16 paragraph 7, using ENG Form 6213 (16-10.c). In addition, Critical Lift Plans are required for the following:

a. Lifts over 50 percent of the capacity of barge mounted mobile crane's hoist.

b. When working around energized power lines where the work will get closer than the minimum clearance distance in EM 385-1-1 Table 16-1.

c. For lifts with anticipated binding conditions.

d. When erecting cranes.

1.7.3.3.1 Critical Lift Plan Planning and Schedule

Critical lifts require detailed planning and additional or unusual safety precautions. Develop and submit a critical lift plan to the Contracting Officer 30 calendar days prior to critical lift. Comply with load testing requirements in accordance with EM 385-1-1, paragraph 16-7.d.

1.7.3.3.2 Lifts of Personnel

In addition to the requirements of EM 385-1-1, paragraph 16-8.hh, for lifts of personnel, demonstrate compliance with the requirements of 29 CFR 1926.1400 and EM 385-1-1.

1.7.3.4 Barge Mounted Mobile Crane Lift Plan

Provide a Naval Architecture Analysis and include an LHE Manufacturer's Floating Service Load Chart in accordance with EM 385-1-1, paragraph 16-8.z(3).

1.7.3.5 Multi-Purpose Machines, Material Handling Equipment, and Construction Equipment Lift Plan

Multi-purpose machines, material handling equipment, and construction equipment used to lift loads that are suspended by rigging gear, require proof of authorization from the machine OEM that the machine is capable of making lifts of loads suspended by rigging equipment. Written approval from a qualified registered professional engineer, after a safety analysis is performed, is allowed in lieu of the OEM's approval. Demonstrate that the operator is properly trained and that the equipment is properly configured to make such lifts and is equipped with a load chart.

1.7.3.6 Fall Protection and Prevention (FP&P) Plan

The plan must be in accordance with the requirements of EM 385-1-1, Chapter 21 and ASSP Z359.2, be site specific, and address all fall hazards in the work place and during different phases of construction. Address how to protect and prevent workers from falling to lower levels when they are exposed to fall hazards above 6 feet. A competent person or qualified person for fall protection must prepare and sign the plan documentation. Include fall protection and prevention systems, equipment and methods employed for every phase of work, roles and responsibilities, assisted rescue, self-rescue and evacuation procedures, training requirements, and monitoring methods. Review and revise, as necessary, the Fall Protection and Prevention Plan documentation as conditions change, but at a minimum every six months, for lengthy projects, reflecting any changes during the course of construction due to changes in personnel, equipment, systems or work habits. Keep and maintain the accepted Fall Protection and Prevention Plan documentation at the job site for the duration of the project. Include the Fall Protection and Prevention Plan documentation in the Accident Prevention Plan (APP).

1.7.3.7 Rescue and Evacuation Plan

Provide a Rescue and Evacuation Plan in accordance with EM 385-1-1 Chapter 21 and ASSP Z359.2, and include in the FP&P Plan and as part of the APP. Include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility.

1.7.3.8 Hazardous Energy Control Program (HECP)

Develop a HECP in accordance with EM 385-1-1 Chapter 12, 29 CFR 1910.147, 29 CFR 1910.333, 29 CFR 1915.89, ASSP Z244.1, and ASSP A10.44. Submit this HECP as part of the Accident Prevention Plan (APP). Conduct a preparatory meeting and inspection with all effected personnel to

coordinate all HECP activities. Document this meeting and inspection in accordance with EM 385-1-1, Chapter 12. Ensure that each employee is familiar with and complies with these procedures.

1.7.3.9 Excavation Plan

Identify the safety and health aspects of excavation, and provide and prepare the plan in accordance with EM 385-1-1, paragraph 25-8.

1.7.3.10 Lead, Cadmium, and Chromium Compliance Plan

Identify the safety and health aspects of work involving lead, cadmium and chromium, and prepare in accordance with Section 02 83 00 LEAD REMEDIATION.

1.7.3.11 Asbestos Hazard Abatement Plan

Identify the safety and health aspects of asbestos work, and prepare in accordance with Section 02 82 00 ASBESTOS REMEDIATION.

1.7.3.12 Site Safety and Health Plan

Identify the safety and health aspects, and prepare in accordance with Section 01 35 29.13 HEALTH, SAFETY, AND EMERGENCY RESPONSE PROCEDURES FOR CONTAMINATED SITES.

1.7.3.13 Polychlorinated Biphenyls (PCB) Plan

Identify the safety and health aspects of Polychlorinated Biphenyls work, and prepare in accordance with Sections 02 84 33 REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENYLS (PCBs) and 02 61 23 REMOVAL AND DISPOSAL OF PCB CONTAMINATED SOILS.

1.7.3.14 Site Demolition Plan

Identify the safety and health aspects, and prepare in accordance with Section 02 41 00 DECONSTRUCTION and referenced sources.

## 1.8 ACTIVITY HAZARD ANALYSIS (AHA)

Before beginning each activity, task or Definable Feature of Work (DFOW) involving a type of work presenting hazards not experienced in previous project operations, or where a new work crew or subcontractor is to perform the work, the Contractor(s) performing that work activity must prepare an AHA. AHAs must be developed by the Prime Contractor, subcontractor, or supplier performing the work, and provided for Prime Contractor review and approval before submitting to the Contracting Officer. AHAs must be signed by the SSHO, Superintendent, QC Manager and the subcontractor Foreman performing the work. Format the AHA in accordance with EM 385-1-1, Chapter 2 or as directed by the Contracting Officer. Submit the AHA for review at least 15 working days prior to the start of each activity task, or DFOW. The Government reserves the right to require the Contractor to revise and resubmit the AHA if it fails to effectively identify the work sequences, specific anticipated hazards, site conditions, equipment, materials, personnel and the control measures to be implemented.

AHAs must identify competent persons required for phases involving high risk activities, including confined entry, crane and rigging, excavations, trenching, electrical work, fall protection, and scaffolding.

### 1.8.1 AHA Management

Review the AHA list periodically (at least monthly) at the Contractor supervisory safety meeting, and update as necessary when procedures, scheduling, or hazards change. Use the AHA during daily inspections by the SSHO to ensure the implementation and effectiveness of the required safety and health controls for that work activity.

### 1.8.2 AHA Signature Log

Each employee performing work as part of an activity, task or DFOW must review the AHA for that work and sign a signature log specifically maintained for that AHA prior to starting work on that activity. The SSHO must maintain a signature log on site for every AHA. Provide employees whose primary language is other than English, with an interpreter to ensure a clear understanding of the AHA and its contents.

## 1.9 DISPLAY OF SAFETY INFORMATION

### 1.9.1 Safety Bulletin Board

Prior to commencement of work, erect a safety bulletin board at the job site. Where size, duration, or logistics of project do not facilitate a bulletin board, an alternative method, acceptable to the Contracting Officer, that is accessible and includes all mandatory information for employee and visitor review, may be deemed as meeting the requirement for a bulletin board. Include and maintain information on safety bulletin board as required by EM 385-1-1, Chapter 1. Additional items required to be posted include:

a. Confined space entry permit.

b. Hot work permit.

### 1.9.2 Safety and Occupational Health (SOH) Deficiency Tracking System

Establish a SOH deficiency tracking system that lists and monitors the status of SOH deficiencies in chronological order. Use the tracking system to evaluate the effectiveness of the APP. A monthly evaluation of the data must be discussed in the QC or SOH meeting with everyone on the project. The list must be posted on the project bulletin board and updated daily, and provide the following information:

a. Date deficiency identified;

b. Description of deficiency;

c. Name of person responsible for correcting deficiency;

d. Projected resolution date;

e. Date actually resolved.

## 1.10 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in paragraph REFERENCES. Maintain applicable equipment manufacturer's manuals.

## 1.11 EMERGENCY MEDICAL TREATMENT

Contractors must arrange for their own emergency medical treatment in accordance with EM 385-1-1. Government has no responsibility to provide emergency medical treatment.

## 1.12 NOTIFICATIONS and REPORTS

### 1.12.1 Mishap Notification

Notify the Contracting Officer as soon as practical, but no more than twenty-four hours, after any mishaps, including recordable accidents, incidents, and near misses, as defined in EM 385-1-1 Chapter 2, any report of injury, illness, or any property damage. For LHE or rigging mishaps, notify the Contracting Officer as soon as practical but not more than four hours after mishap. The Contractor is responsible for obtaining appropriate medical and emergency assistance and for notifying fire, law enforcement, and regulatory agencies. Immediate reporting is required for electrical mishaps, to include Arc Flash; shock; uncontrolled release of hazardous energy (includes electrical and non-electrical); load handling equipment or rigging; fall from height (any level other than same surface); and underwater diving. These mishaps must be investigated in depth to identify all causes and to recommend hazard control measures.

Within notification include Contractor name; Contract title; type of Contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (for example, type of construction equipment used and PPE used). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted. Assist and cooperate fully with the Government's investigation(s) of any mishap.

### 1.12.2 Accident Reports

a. Conduct an accident investigation for recordable injuries and illnesses, property damage, and near misses as defined in EM 385-1-1, to establish the root cause(s) of the accident. Complete the applicable USACE Accident Report Form 3394, and provide the report to the Contracting Officer within 5 calendar days of the accident. The Contracting Officer will provide copies of any required or special forms.

b. Near Misses: Report all "Near Misses" within 24 hrs. The Contracting Officer will provide the Contractor the required forms. Near miss reports are considered positive and proactive Contractor safety management actions.

c. Conduct an accident investigation for any load handling equipment accident (including rigging accidents) to establish the root cause(s) of the accident. Complete the LHE Accident Report (Crane and Rigging Accident Report) form and provide the report to the Contracting Officer within 30 calendar days of the accident. Do not proceed with crane operations until cause is determined and corrective actions have been implemented to the satisfaction of the Contracting Officer. The Contracting Officer will provide a blank copy of the accident report form.

1.12.3 LHE Inspection Reports

Submit LHE inspection reports required in accordance with EM 385-1-1 and as specified herein with Daily Reports of Inspections.

1.12.4 Certificate of Compliance and Pre-lift Plan/Checklist for LHE and Rigging

Provide a ENG Form 6209 Certificate of Compliance for LHE entering an activity under this Contract and in accordance with EM 385-1-1. Post certifications on the crane.

Develop a Standard Lift Plan (SLP) in accordance with EM 385-1-1, Chapter 16 using ENG Form 6203 Crane Standard Lift Plan for each lift planned. Submit SLP to the Contracting Officer for approval within 15 calendar days in advance of planned lift.

1.13 HOT WORK

1.13.1 Permit and Personnel Requirements

Submit and obtain a written permit prior to performing "Hot Work" (i.e. welding or cutting) or operating other flame-producing/spark producing devices, from the Fire Division. A permit is required from the Explosives Safety Office for work in and around where explosives are processed, stored, or handled. CONTRACTORS ARE REQUIRED TO MEET ALL CRITERIA BEFORE A PERMIT IS ISSUED. Provide at least two 20 pound 4A:20 BC rated extinguishers for normal "Hot Work". The extinguishers must be current inspection tagged, and contain an approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity. The Fire Watch must be trained in accordance with NFPA 51B and remain on-site for a minimum of one hour after completion of the task or as specified on the hot work permit.

When starting work in the facility, require personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency Fire Division phone number. REPORT ANY FIRE, NO MATTER HOW SMALL, TO THE RESPONSIBLE FIRE DIVISION IMMEDIATELY.

1.13.2 Work Around Flammable Materials

Obtain permit approval from a NFPA Certified Marine Chemist, or Certified Industrial Hygienist for "HOT WORK" within or around flammable materials (such as fuel systems or welding/cutting on fuel pipes) or confined spaces (such as sewer wet wells, manholes, or vaults) that have the potential for flammable or explosive atmospheres.

Whenever these materials, except beryllium and chromium (VI), are encountered in indoor operations, local mechanical exhaust ventilation systems that are sufficient to reduce and maintain personal exposures to within acceptable limits must be used and maintained in accordance with manufacturer's instruction and supplemented by exceptions noted in EM 385-1-1, Chapter 6.

1.14 RADIATION SAFETY REQUIREMENTS

Submit License Certificates, employee training records, and Leak Test Reports for radiation materials and equipment to the Contracting Officer

and Radiation Safety Office (RSO) for all specialized and licensed material and equipment proposed for use on the construction project (excludes portable machine sources of ionizing radiation including moisture density and X-Ray Fluorescence (XRF)). Maintain on-site records whenever licensed radiological materials or ionizing equipment are on Government property.

Protect workers from radiation exposure in accordance with 10 CFR 20, ensuring any personnel exposures are maintained As Low As Reasonably Achievable.

### 1.14.1 Radiography Operation Planning Work Sheet

Submit a Gamma and X-Ray Radiography Operation Planning Work Sheet to Contracting Officer 14 days prior to commencement of operations involving radioactive materials or radiation generating devices. For portable machine sources of ionizing radiation, including moisture density and XRF, use and submit the Portable Gauge Operations Planning Worksheet instead. The Contracting Officer will review the submitted worksheet and provide questions and comments.

Contractors must use primary dosimeters process by a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory.

### 1.14.2 Site Access and Security

Coordinate site access and security requirements with the Contracting Officer for all radiological materials and equipment containing ionizing radiation that are proposed for use on a government facility. For gamma radiography materials and equipment, a Government escort is required for any travels on the Installation. The Government authorized representative will meet the Contractor at a designated location outside the Installation, ensure safety of the materials being transported, and will escort the Contractor for gamma sources onto the Installation, to the job site, and off the Installation. For portable machine sources of ionizing radiation, including moisture density and XRF, the Government authorized representative will meet the Contractor at the job site.

Provide a copy of all calibration records, and utilization records for radiological operations performed on the site.

### 1.14.3 Loss or Release and Unplanned Personnel Exposure

Loss or release of radioactive materials, and unplanned personnel exposures must be reported immediately to the Contracting Officer, RSO, and Base Security Department Emergency Number.

### 1.14.4 Site Demarcation and Barricade

Properly demark and barricade an area surrounding radiological operations to preclude personnel entrance, in accordance with EM 385-1-1, Nuclear Regulatory Commission, and Applicable State regulations and license requirements, and in accordance with requirements established in the accepted Radiography Operation Planning Work Sheet.

Do not close or obstruct streets, walks, and other facilities occupied and used by the Government without written permission from the Contracting Officer.

### 1.14.5 Security of Material and Equipment

Properly secure the radiological material and ionizing radiation equipment at all times, including keeping the devices in a properly marked and locked container, and secondarily locking the container to a secure point in the Contractor's vehicle or other approved storage location during transportation and while not in use. While in use, maintain a continuous visual observation on the radiological material and ionizing radiation equipment. In instances where radiography is scheduled near or adjacent to buildings or areas having limited access or one-way doors, make no assumptions as to building occupancy. Where necessary, the Contracting Officer will direct the Contractor to conduct an actual building entry, search, and alert. Where removal of personnel from such a building cannot be accomplished and it is otherwise safe to proceed with the radiography, position a fully instructed employee inside the building or area to prevent exiting while external radiographic operations are in process.

### 1.14.6 Transportation of Material

Comply with 49 CFR 173 for Transportation of Regulated Amounts of Radioactive Material. Notify Local Fire authorities and the site Radiation Safety Officer (RSO) of any Radioactive Material use.

### 1.14.7 Schedule for Exposure or Unshielding

Actual exposure of the radiographic film or unshielding the source must not be initiated until after 5 p.m. on weekdays.

### 1.14.8 Transmitter Requirements

Adhere to the base policy concerning the use of transmitters, such as radios and cell phones. Obey Emissions control (EMCON) restrictions.

## 1.15 CONFINED SPACE ENTRY REQUIREMENTS

Confined space entry must comply with Chapter 34 of EM 385-1-1, OSHA 29 CFR 1926, OSHA 29 CFR 1910, OSHA 29 CFR 1910.146, and OSHA Directive CPL 2.100. Any potential for a hazard in the confined space requires a permit system to be used.

### 1.15.1 Entry Procedures

Prohibit entry into a confined space by personnel for any purpose, including hot work, until the qualified person has conducted appropriate tests to ensure the confined or enclosed space is safe for the work intended and that all potential hazards are controlled or eliminated and documented. Comply with EM 385-1-1, Chapter 34 for entry procedures. Hazards pertaining to the space must be reviewed with each employee during review of the AHA.

### 1.15.2 Forced Air Ventilation

Forced air ventilation is required for all confined space entry operations and the minimum air exchange requirements must be maintained to ensure exposure to any hazardous atmosphere is kept below its action level.

### 1.15.3 Sewer Wet Wells

Sewer wet wells require continuous atmosphere monitoring with audible

alarm for toxic gas detection.

1.15.4 Rescue Procedures and Coordination with Local Emergency Responders

Develop and implement an on-site rescue and recovery plan and procedures. The rescue plan must not rely on local emergency responders for rescue from a confined space.

1.16 DIVE SAFETY REQUIREMENTS

Develop a Dive Operations Plan, AHA, emergency management plan, and personnel list that includes qualifications, for each separate diving operation. Submit these documents to the District Dive Coordinator (DDC) via the Contracting Officer or Government Designated Authority (GDA), for review and approval at least 15 working days prior to commencement of diving operations. These documents must be at the diving location at all times. Provide each of these documents as a part of the project file.

1.17 SEVERE STORM PLAN

In the event of a severe storm warning, the Contractor must comply with the applicable Storm Plan and:

a. Secure outside equipment and materials and place materials that could be damaged in protected areas.

b. Check surrounding area, including roof, for loose material, equipment, debris, and other objects that could be blown away or against existing facilities.

c. Ensure that temporary erosion controls are adequate.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 CONSTRUCTION AND OTHER WORK

Comply with EM 385-1-1, NFPA 70, NFPA 70E, NFPA 241, the APP, the AHA, Federal and State OSHA regulations, and other related submittals and activity fire and safety regulations. The most stringent standard prevails.

PPE is governed in all areas by the nature of the work the employee is performing. Use personal hearing protection at all times in designated noise hazardous areas or when performing noise hazardous tasks. Safety glasses must be worn or carried/available on each person. Mandatory PPE includes:

a. Hard Hat

b. Long Pants

c. Appropriate Safety Shoes

d. Appropriate Class Reflective Vests

### 3.1.1 Worksite Communication

Employees working alone in a remote location or away from other workers must be provided an effective means of emergency communications (i.e., cellular phone, two-way radios, land-line telephones or other acceptable means). The selected communication must be readily available (easily within the immediate reach) of the employee and must be tested prior to the start of work to verify that it effectively operates in the area/environment. Develop an employee check-in/check-out communication procedure to ensure employee safety.

### 3.1.2 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this Contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocyanates, lead-based paint, and hexavalent chromium, are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials. Low mercury lamps used within fluorescent lighting fixtures are allowed as an exception without further Contracting Officer approval. Notify the Radiation Safety Officer (RSO) prior to excepted items of radioactive material and devices being brought on base.

### 3.1.3 Unforeseen Hazardous Material

Contract documents identify materials such as PCB, lead paint, and friable and non-friable asbestos and other OSHA regulated chemicals (i.e. 29 CFR Part 1910.1000). If material(s) that may be hazardous to human health upon disturbance are encountered during construction operations, stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to FAR 52.243-4 Changes and FAR 52.236-2 Differing Site Conditions.

## 3.2 UTILITY OUTAGE REQUIREMENTS

Apply for utility outages at least 10 days in advance. At a minimum, the written request must include the location of the outage, utilities being affected, duration of outage, any necessary sketches, and a description of the means to fulfill energy isolation requirements in accordance with EM 385-1-1, Chapter 11. Some examples of energy isolation devices and procedures are highlighted in EM 385-1-1, Chapter 12. In accordance with EM 385-1-1, Chapter 12, where outages involve Government or Utility personnel, coordinate with the Government on all activities involving the control of hazardous energy.

These activities include, but are not limited to, a review of HECP and HEC procedures, as well as applicable Activity Hazard Analyses (AHAs). In accordance with EM 385-1-1, Chapter 11 and NFPA 70E, work on energized electrical circuits must not be performed without prior Government

authorization. Government permission is considered through the permit process and submission of a detailed AHA. Energized work permits are considered only when de-energizing introduces additional or increased hazard or when de-energizing is infeasible.

## 3.3 OUTAGE COORDINATION MEETING

After the utility outage request is approved and prior to beginning work on the utility system requiring shut-down, conduct a pre-outage coordination meeting in accordance with EM 385-1-1, paragraph 12-8. This meeting must include the Prime Contractor, the Prime and subcontractors performing the work, the Contracting Officer, and the Public Utilities representative. All parties must fully coordinate HEC activities with one another. During the coordination meeting, all parties must discuss and coordinate on the scope of work, HEC procedures (specifically, the lock-out/tag-out procedures for worker and utility protection), the AHA, assurance of trade personnel qualifications, identification of competent persons, and compliance with HECP training in accordance with EM 385-1-1, paragraph 12-3. Clarify when personal protective equipment is required during switching operations, inspection, and verification.

## 3.4 CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)

Provide and operate a Hazardous Energy Control Program (HECP) in accordance with EM 385-1-1 Chapter 12, 29 CFR 1910.333, 29 CFR 1915.89, ASSP A10.44, NFPA 70E, and paragraph HAZARDOUS ENERGY CONTROL PROGRAM (HECP).

### 3.4.1 Safety Preparatory Inspection Coordination Meeting with the Government or Utility

For electrical distribution equipment that is to be operated by Government or Utility personnel, the Prime Contractor and the subcontractor performing the work must attend the safety preparatory inspection coordination meeting, which will also be attended by the Contracting Officer's Representative, and required by EM 385-1-1, paragraph 12-5.a. The meeting will occur immediately preceding the start of work and following the completion of the outage coordination meeting. Both the safety preparatory inspection coordination meeting and the outage coordination meeting must occur prior to conducting the outage and commencing with lockout/tagout procedures.

### 3.4.2 Lockout/Tagout Isolation

Where the Government or Utility performs equipment isolation and lockout/tagout, the Contractor must place their own locks and tags on each energy-isolating device and proceed in accordance with the HECP. Before any work begins, both the Contractor and the Government or Utility must perform energy isolation verification testing while wearing required PPE detailed in the Contractor's AHA and required by EM 385-1-1, Chapters 2, 5, and 11. Install personal protective grounds, with tags, to eliminate the potential for induced voltage in accordance with EM 385-1-1, Chapter 12.

### 3.4.3 Lockout/Tagout Removal

Upon completion of work, conduct lockout/tagout removal procedure in accordance with the HECP. In accordance with EM 385-1-1, Chapter 12, each lock and tag must be removed from each energy isolating device by the

authorized individual or systems operator who applied the device. Provide formal notification to the Government (by completing the Government form if provided by Contracting Officer's Representative), confirming that steps of de-energization and lockout/tagout removal procedure have been conducted and certified through inspection and verification. Government or Utility locks and tags used to support the Contractor's work will not be removed until the authorized Government employee receives the formal notification.

## 3.5 FALL PROTECTION PROGRAM

Establish a fall protection program, for the protection of all employees exposed to fall hazards. Within the program include company policy, identify roles and responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and evacuation procedures in accordance with ASSP Z359.2 and EM 385-1-1, Chapter 21.

### 3.5.1 Training

Institute a fall protection training program. As part of the Fall Protection Program, provide training for each employee who might be exposed to fall hazards and using personal fall protection equipment. Provide training by a competent person for fall protection in accordance with EM 385-1-1, Chapter 21. Document training and practical application of the competent person in accordance with EM 385-1-1, Chapter 21 and ASSP Z359.2 in the AHA.

### 3.5.2 Fall Protection Equipment and Systems

Enforce use of personal fall protection equipment and systems designated (to include fall arrest, restraint, and positioning) for each specific work activity in the Site Specific Fall Protection and Prevention Plan and AHA at all times when an employee is exposed to a fall hazard. Protect employees from fall hazards as specified in EM 385-1-1, Chapter 21.

Provide personal fall protection equipment, systems, subsystems, and components that comply with EM 385-1-1 Chapter 21, 29 CFR 1926.500 Subpart M,ASSP Z359.0, ASSP Z359.1, ASSP Z359.2, ASSP Z359.3, ASSP Z359.4, ASSP Z359.6, ASSP Z359.7, ASSP Z359.11, ASSP Z359.12, ASSP Z359.13, ASSP Z359.14, ASSP Z359.15, ASSP Z359.16 and ASSP Z359.18.

#### 3.5.2.1 Additional Personal Fall Protection Measures

In addition to the required fall protection systems, other protective measures such as safety skiffs, personal floatation devices, and life rings, are required when working above or next to water in accordance with EM 385-1-1, Chapter 21. Personal fall protection systems and equipment are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall protection systems are required when operating other equipment such as scissor lifts. The need for tying-off in such equipment is to prevent ejection of the employee from the equipment during raising, lowering, travel, or while performing work.

#### 3.5.2.2 Personal Fall Protection Equipment

Only a full-body harness with a shock-absorbing lanyard or self-retracting

lanyard is an acceptable personal fall arrest body support device. The use of body belts is not acceptable. Harnesses must have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Snap hooks and carabineers must be self-closing and self-locking, capable of being opened only by at least two consecutive deliberate actions and have a minimum gate strength of 3,600 lbs in all directions. Use webbing, straps, and ropes made of synthetic fiber. The maximum free fall distance when using fall arrest equipment must not exceed 6 feet, unless the proper energy absorbing lanyard is used. Always take into consideration the total fall distance and any swinging of the worker (pendulum-like motion), that can occur during a fall, when attaching a person to a fall arrest system. Equip all full body harnesses with Suspension Trauma Preventers such as stirrups, relief steps, or similar in order to provide short-term relief from the effects of orthostatic intolerance in accordance with EM 385-1-1, Chapter 21.

### 3.5.3 Fall Protection for Roofing Work

Implement fall protection controls based on the type of roof being constructed and work being performed. Evaluate the roof area to be accessed for its structural integrity including weight-bearing capabilities for the projected loading.

a. Low Sloped Roofs:

(1) For work within 6 feet from unprotected edge of a roof having a slope less than or equal to 4:12 (vertical to horizontal), protect personnel from falling by the use of conventional fall protection systems (personal fall arrest/restraint systems, guardrails, or safety nets) in accordance with EM 385-1-1, Chapter 21 and 29 CFR 1926.500. A safety monitoring system is not adequate fall protection and is not authorized.

(2) For work greater than 6 feet from the unprotected roof edge, addition to the use of conventional fall protection systems the use of a warning line system is also permitted, in accordance with 29 CFR 1926.500 and EM 385-1-1, Chapter 21.

b. Steep-Sloped Roofs: Work on a roof having a slope greater than 4:12 (vertical to horizontal) requires a personal fall arrest system, guardrails with toe-boards, or safety nets. This requirement also applies to residential or housing type construction.

### 3.5.4 Horizontal Lifelines (HLL)

Provide HLL in accordance with EM 385-1-1, Chapter 21. Commercially manufactured horizontal lifelines (HLL) must be designed, installed, certified and used, under the supervision of a qualified person, for fall protection as part of a complete fall arrest system which maintains a safety factor of 2 (29 CFR 1926.500). The competent person for fall protection may (if deemed appropriate by the qualified person) supervise the assembly, disassembly, use and inspection of the HLL system under the direction of the qualified person. Locally manufactured HLLs are not acceptable unless they are custom designed for limited or site specific applications by a Registered Professional Engineer who is qualified in designing HLL systems.

### 3.5.5 Guardrails and Safety Nets

Design, install and use guardrails and safety nets in accordance with EM 385-1-1, Chapter 21 and 29 CFR 1926 Subpart M.

### 3.5.6 Rescue and Evacuation Plan and Procedures

When personal fall arrest systems are used, ensure that the mishap victim can self-rescue or can be rescued promptly should a fall occur. Prepare a Rescue and Evacuation Plan and include a detailed discussion of the following: methods of rescue; methods of self-rescue or assisted-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. Include the Rescue and Evacuation Plan within the Activity Hazard Analysis (AHA) for the phase of work, in the Fall Protection and Prevention (FP&P) Plan, and the Accident Prevention Plan (APP). The plan must be in accordance with the requirements of EM 385-1-1, ASSP Z359.2, and ASSP Z359.4.

## 3.6 WORK PLATFORMS

### 3.6.1 Scaffolding

Provide employees with a safe means of access to the work area on the scaffold. Climbing of any scaffold braces or supports not specifically designed for access is prohibited. Comply with the following requirements:

a. Scaffold platforms greater than 20 feet in height must be accessed by use of a scaffold stair system.

b. Ladders commonly provided by scaffold system manufacturers are prohibited for accessing scaffold platforms greater than 20 feet maximum in height.

c. An adequate gate is required.

d. Employees performing scaffold erection and dismantling must be qualified.

e. Scaffold must be capable of supporting at least four times the maximum intended load, and provide appropriate fall protection as delineated in the accepted fall protection and prevention plan.

f. Stationary scaffolds must be attached to structural building components to safeguard against tipping forward or backward.

g. Special care must be given to ensure scaffold systems are not overloaded.

h. Side brackets used to extend scaffold platforms on self-supported scaffold systems for the storage of material are prohibited. The first tie-in must be at the height equal to 4 times the width of the smallest dimension of the scaffold base.

i. Scaffolding other than suspended types must bear on base plates upon wood mudsills ( 2 in x 10 in x 8 in minimum) or other adequate firm foundation.

j. Scaffold or work platform erectors must have fall protection during

the erection and dismantling of scaffolding or work platforms that are more than 6 feet.

k. Delineate fall protection requirements when working above 6 feet or above dangerous operations in the Fall Protection and Prevention (FP&P) Plan and Activity Hazard Analysis (AHA) for the phase of work.

### 3.6.2 Elevated Aerial Work Platforms (AWPs)

Workers must be anchored to the basket or bucket in accordance with manufacturer's specifications and instructions (anchoring to the boom may only be used when allowed by the manufacturer and permitted by the CP). Lanyards used must be sufficiently short to prohibit worker from climbing out of basket. The climbing of rails is prohibited. Lanyards with built-in shock absorbers are acceptable. Self-retracting devices are not acceptable. Tying off to an adjacent pole or structure is not permitted unless a safe device for 100 percent tie-off is used for the transfer.

Use of AWPs must be operated, inspected, and maintained as specified in the operating manual for the equipment and delineated in the AHA. Operators of AWPs must be designated as qualified operators by the Prime Contractor. Maintain proof of qualifications on site for review and include in the AHA.

## 3.7 EQUIPMENT

### 3.7.1 Material Handling Equipment (MHE)

a. Material handling equipment such as forklifts must not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions. Material handling equipment fitted with personnel work platform attachments are prohibited from traveling or positioning while personnel are working on the platform.

b. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions. Material Handling Equipment Operators must be trained in accordance with OSHA 29 CFR 1910, Subpart N.

c. Operators of forklifts or power industrial trucks must be licensed in accordance with OSHA.

### 3.7.2 Load Handling Equipment (LHE)

The following requirements apply. In exception, these requirements do not apply to commercial truck mounted and articulating boom cranes used solely to deliver material and supplies (not prefabricated components, structural steel, or components of a systems-engineered metal building) where the lift consists of moving materials and supplies from a truck or trailer to the ground; to cranes installed on mechanics trucks that are used solely in the repair of shore-based equipment; to crane that enter the activity but are not used for lifting; nor to other machines not used to lift loads suspended by rigging equipment. However, LHE accidents occurring during such operations must be reported.

a. Equip cranes and derricks as specified in EM 385-1-1, Chapter 16.

b. Notify the Contracting Officer 15 working days in advance of any LHE

entering the activity, in accordance with EM 385-1-1, Chapter 21, so that necessary quality assurance spot checks can be coordinated. Contractor's operator must remain with the crane during the spot check. Rigging gear must be in accordance with OSHA, ASME B30.9 Standards safety standards.

c. Comply with the LHE manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Perform erection under the supervision of a designated person (as defined in ASME B30.5). Perform all testing in accordance with the manufacturer's recommended procedures.

d. Comply with ASME B30.5 for mobile and locomotive cranes, ASME B30.22 for articulating boom cranes, ASME B30.3 for construction tower cranes, ASME B30.8 for floating cranes and floating derricks, ASME B30.9 for slings, ASME B30.20 for below the hook lifting devices and ASME B30.26 for rigging hardware.

e. When operating in the vicinity of overhead transmission lines, operators and riggers must be alert to this special hazard and follow the requirements of EM 385-1-1 Chapter 11, and ASME B30.5 or ASME B30.22 as applicable.

f. Do not use crane suspended personnel work platforms (baskets) unless the Contractor proves that using any other access to the work location would provide a greater hazard to the workers or is impossible. Do not lift personnel with a line hoist or friction crane. Additionally, submit a specific AHA for this work to the Contracting Officer. Ensure the activity and AHA are thoroughly reviewed by all involved personnel.

g. Inspect, maintain, and recharge portable fire extinguishers as specified in NFPA 10, Standard for Portable Fire Extinguishers.

h. All employees must keep clear of loads about to be lifted and of suspended loads, except for employees required to handle the load.

i. Use cribbing when performing lifts on outriggers.

j. The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.

k. A physical barricade must be positioned to prevent personnel access where accessible areas of the LHE's rotating superstructure poses a risk of striking, pinching or crushing personnel.

l. Maintain inspection records in accordance by EM 385-1-1, Chapter 16, including shift, monthly, and annual inspections, the signature of the person performing the inspection, and the serial number or other identifier of the LHE that was inspected. Records must be available for review by the Contracting Officer.

m. Maintain written reports of operational and load testing in accordance with EM 385-1-1, Chapter 16, listing the load test procedures used along with any repairs or alterations performed on the LHE. Reports must be available for review by the Contracting Officer.

n. Certify that all LHE operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

o. Take steps to ensure that wind speed does not contribute to loss of control of the load during lifting operations. At wind speeds greater than 20 mph, the operator, rigger and lift supervisor must cease all crane operations, evaluate conditions and determine if the lift may proceed. Base the determination to proceed or not on wind calculations per the manufacturer and a reduction in LHE rated capacity if applicable. Include this maximum wind speed determination as part of the activity hazard analysis plan for that operation.

q. Follow FAA guidelines when required based on project location.

3.7.3 Machinery and Mechanized Equipment

a. Proof of qualifications for operator must be kept on the project site for review.

b. Manufacture specifications or owner's manual for the equipment must be on-site and reviewed for additional safety precautions or requirements that are sometimes not identified by OSHA or USACE EM 385-1-1. Incorporate such additional safety precautions or requirements into the AHAs.

3.7.4 Base Mounted Drum Hoists

a. Operation of base mounted drum hoists must be in accordance with EM 385-1-1 and ASSP A10.22.

b. Rigging gear must be in accordance with applicable ASME/OSHA standards.

c. When used on telecommunication towers, base mounted drum hoists must be in accordance with TIA-1019, TIA-222, ASME B30.7, 29 CFR 1926.552, and 29 CFR 1926.553.

d. When used to hoist personnel, the AHA must include a written standard operating procedure. Operators must have a physical examination in accordance with EM 385-1-1 paragraph 16-3.f and trained, at a minimum, in accordance with EM 385-1-1 paragraph 16-8.hh and 16-1.b. The base mounted drum hoist must also comply with OSHA Instruction CPL 02-01-056 and ASME B30.23.

e. Material and personnel must not be hoisted simultaneously.

f. Personnel cage must be marked with the capacity (in number of persons) and load limit in pounds.

g. Construction equipment must not be used for hoisting material or personnel or with trolley/tag lines. Construction equipment may be used for towing and assisting with anchoring guy lines.

3.7.5 Use of Explosives

Explosives must not be used or brought to the project site without prior written approval from the Contracting Officer. Such approval does not relieve the Contractor of responsibility for injury to persons or for damage to property due to blasting operations.

Storage of explosives, when permitted on Government property, must be only where directed and in approved storage facilities. These facilities must

be kept locked at all times except for inspection, delivery, and withdrawal of explosives.

## 3.8 EXCAVATIONS

Soil classification must be performed by a competent person in accordance with 29 CFR 1926 and EM 385-1-1.

### 3.8.1 Utility Locations

Provide a third party, independent, private utility locating company to positively identify underground utilities in the work area in addition to any station locating service and coordinated with the station utility department.

### 3.8.2 Utility Location Verification

Physically verify underground utility locations, including utility depth, by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within 3 feet of the underground system.

### 3.8.3 Utilities Within and Under Concrete, Bituminous Asphalt, and Other Impervious Surfaces

Utilities located within and under concrete slabs or pier structures, bridges, parking areas, and the like, are extremely difficult to identify. Whenever Contract work involves chipping, saw cutting, or core drilling through concrete, bituminous asphalt or other impervious surfaces, the existing utility location must be coordinated with station utility departments in addition to location and depth verification by a third party, independent, private locating company. The third party, independent, private locating company must locate utility depth by use of Ground Penetrating Radar (GPR), X-ray, bore scope, or ultrasound prior to the start of demolition and construction. Outages to isolate utility systems must be used in circumstances where utilities are unable to be positively identified. The use of historical drawings does not alleviate the Contractor from meeting this requirement.

## 3.9 ELECTRICAL

Perform electrical work in accordance with EM 385-1-1, Chapters 11 and 12.

### 3.9.1 Conduct of Electrical Work

As delineated in EM 385-1-1, electrical work is to be conducted in a de-energized state unless there is no alternative method for accomplishing the work. In those cases obtain an energized work permit from the Contracting Officer. The energized work permit application must be accompanied by the AHA and a summary of why the equipment/circuit needs to be worked energized. Underground electrical spaces must be certified safe for entry before entering to conduct work. Cables that will be cut must be positively identified and de-energized prior to performing each cut. Attach temporary grounds in accordance with ASTM F855 and IEEE 1048. Perform all high voltage cable cutting remotely using hydraulic cutting tool. When racking in or live switching of circuit breakers, no additional person other than the switch operator is allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear

of any energized electrical sources is the preferred method.

When working in energized substations, only qualified electrical workers are permitted to enter. When work requires work near energized circuits as defined by NFPA 70, high voltage personnel must use personal protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves and electrical arc flash protection for personnel as required by NFPA 70E. Insulating blankets, hearing protection, and switching suits may also be required, depending on the specific job and as delineated in the Contractor's AHA. Ensure that each employee is familiar with and complies with these procedures and 29 CFR 1910.147.

### 3.9.2 Qualifications

Electrical work must be performed by QP with verifiable credentials who are familiar with applicable code requirements. Verifiable credentials consist of State, National and Local Certifications or Licenses that a Master or Journeyman Electrician may hold, depending on work being performed, and must be identified in the appropriate AHA. Journeyman/Apprentice ratio must be in accordance with State, Local requirements applicable to where work is being performed.

### 3.9.3 Arc Flash

Conduct a hazard analysis/arc flash hazard analysis whenever work on or near energized parts greater than 50 volts is necessary, in accordance with NFPA 70E.

All personnel entering the identified arc flash protection boundary must be QPs and properly trained in NFPA 70E requirements and procedures. Unless permitted by NFPA 70E, no Unqualified Person is permitted to approach nearer than the Limited Approach Boundary of energized conductors and circuit parts. Training must be administered by an electrically qualified source and documented.

### 3.9.4 Grounding

Ground electrical circuits, equipment and enclosures in accordance with NFPA 70 and IEEE C2 to provide a permanent, continuous and effective path to ground unless otherwise noted by EM 385-1-1.

Check grounding circuits to ensure that the circuit between the ground and a grounded power conductor has a resistance low enough to permit sufficient current flow to allow the fuse or circuit breaker to interrupt the current.

### 3.9.5 Testing

Temporary electrical distribution systems and devices must be inspected, tested and found acceptable for Ground-Fault Circuit Interrupter (GFCI) protection, polarity, ground continuity, and ground resistance before initial use, before use after modification and at least monthly. Monthly inspections and tests must be maintained for each temporary electrical distribution system, and signed by the electrical CP or QP.

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# SOURCES FOR REFERENCE PUBLICATIONS
**05/24**

## 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 standards producing organization (e.g., ASTM B564 Standard Specification for Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

### 1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents 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.

AACE INTERNATIONAL (AACE)
726 East Park Avenue #180
Fairmont, WV 26554 USA
Ph: 304-296-8444
Fax: 304-291-5728
Internet: https://web.aacei.org/

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)
1801 Alexander Bell Drive
Reston, VA 20191
Ph: 800-548-2723; 703-295-6300
Email: customercare@asce.org
Internet: https://www.asce.org/

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)
Two Park Avenue
New York, NY 10016-5990
Ph: 800-843-2763
Fax: 973-882-1717
E-mail: customercare@asme.org
Internet: https://www.asme.org/

AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)
520 N. Northwest Highway
Park Ridge, IL 60068
Ph: 847-699-2929
E-mail: customerservice@assp.org
Internet: https://www.assp.org/

ASTM INTERNATIONAL (ASTM)
100 Barr Harbor Drive, P.O. Box C700
West Conshohocken, PA 19428-2959

Ph: 610-832-9500
Fax: 610-832-9555
E-mail: service@astm.org
Internet: https://www.astm.org/

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)
445 and 501 Hoes Lane
Piscataway, NJ 08854-4141
Ph: 732-981-0060 or 800-701-4333
Fax: 732-981-9667
E-mail: onlinesupport@ieee.org
Internet: https://www.ieee.org/

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
1 Batterymarch Park
Quincy, MA 02169-7471
Ph: 800-344-3555
Fax: 800-593-6372
Internet: https://www.nfpa.org

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA)
1320 North Courthouse Rosd, Suite 200
Arlington, VA 22201
Ph: 703-907-7700
Fax: 703-907-7727
E-mail: marketing@tiaonline.org
Internet: https://www.tiaonline.org/

U.S. ARMY CORPS OF ENGINEERS (USACE)
CRD-C DOCUMENTS available on Internet:
http://www.wbdg.org/ffc/army-coe/standards
Order Other Documents from:
Official Publications of the Headquarters, USACE
E-mail: hqpublications@usace.army.mil
Internet: http://www.publications.usace.army.mil/
or
https://www.hnc.usace.army.mil/Missions/Engineering-Directorate/TECHINFO/

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)
8601 Adelphi Road
College Park, MD 20740-6001
Ph: 866-272-6272
Internet: https://www.archives.gov/
Order documents from:
Superintendent of Documents
U.S. Government Publishing Office (GPO)
732 N. Capitol Street, NW
Washington, DC 20401
Ph: 202-512-1800 or 866-512-1800
Bookstore: 202-512-0132
Internet: https://www.gpo.gov/

## PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

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# SECTION 01 45 00

# QUALITY CONTROL
**08/23, CHG 1: 05/24**

## 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 the basic designation only.

ASTM INTERNATIONAL (ASTM)

| | |
|---|---|
| ASTM D3740 | (2019) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction |
| ASTM E329 | (2023) Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection |

U.S. ARMY CORPS OF ENGINEERS (USACE)

| | |
|---|---|
| EM 385-1-1 | (2024) Safety -- Safety and Occupational Health (SOH) Requirements |

### 1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program. Include all associated costs in the applicable Schedule item.

### 1.3 SUBMITTALS

Government approval is required for submittals with a "G" classification. Submittals not having a "G" classification are for information only. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES.

SD-01 Preconstruction Submittals

Contractor Quality Control (CQC) Plan; G

### 1.4 GENERAL REQUIREMENTS

Establish and maintain an effective quality control (QC) system that complies with FAR 52.246-12 Inspection of Construction. QC is comprised of plans, procedures, and organization necessary to produce an end product that complies with the Contract requirements. The QC system covers all construction operations, both onsite and offsite, and must be keyed to the proposed construction sequence. The Quality Control Manager, Superintendent, Site Safety and Health Officer (SSHO), and all on-site supervisors are responsible for the quality of work and are subject to removal by the Contracting Officer for non-compliance with the quality

requirements specified in the Contract. The Quality Control Manager must maintain a physical presence at the work site at all times and is the primary individual responsible for all quality control.

## 1.5 QUALITY CONTROL (QC) PROGRAM REQUIREMENTS

Establish and maintain a QC program as described in this section. The QC program consists of a QC Organization, QC Plan, QC Plan Meeting(s), a Coordination and Mutual Understanding Meeting, QC meetings, three phases of control, submittal review and approval, testing, completion inspections, QC certifications, and documentation necessary to provide materials, equipment, workmanship, fabrication, construction and operations that comply with the requirements of this Contract. The QC program must cover on-site and off-site work and be keyed to the work sequence. No construction work or testing may be performed unless the QC Manager is on the work site. The QC Manager must report to an officer of the firm and not be subordinate to the Project Superintendent or the Project Manager. The QC Manager, Project Superintendent and Project Manager must work together effectively. Although the QC Manager is the primary individual responsible for quality control, all individuals will be held responsible for the quality of work on the job.

### 1.5.1 Meetings

#### 1.5.1.1 Quality Control Plan Meeting

Prior to submission of the QC Plan, the Contractor may request a meeting with the Contracting Officer to discuss the QC Plan requirements of this Contract.

The purpose of this meeting is to develop a mutual understanding of the QC Plan requirements prior to plan development and submission and to agree on the Contractor's list of Definable Feature of Work (DFOW).

#### 1.5.1.2 Coordination and Mutual Understanding Meeting

After the before start of construction, and prior to acceptance by the Government of the CQC Plan, meet with the Contracting Officer and discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details must 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 will be prepared by the QC Manager and signed by the Contractor and the Government. Provide a copy of the signed minutes to all attendees[ and include in the QC Plan]. At a minimum the Coordination and Mutual Understanding Meeting must be repeated when a new QC Manager is appointed. There can be other occasions when subsequent conferences will be called by either party to reconfirm mutual understandings or address deficiencies in the CQC system or procedures which can require corrective action by the Contractor.

##### 1.5.1.2.1 Purpose

The purpose of this meeting is to develop a mutual understanding of the QC details, including documentation, administration for on-site and off-site work, design intent, environmental requirements and procedures, coordination of activities to be performed, and the coordination of the Contractor's management, production, and QC personnel. At the meeting,

the Contractor must explain in detail how three phases of control will be implemented for each DFOW, as well as how each DFOW will be affected by each management plan or requirement as listed below:

a. Waste Management Plan.

b. Procedures for noise and acoustics management.

c. Environmental Protection Plan.

d. Environmental regulatory requirements.

1.5.1.2.2 Coordination of Activities

Coordinate activities included in various sections to assure efficient and orderly installation of each component. Coordinate operations included under different sections that are dependent on each other for proper installation and operation.

1.5.1.2.3 Attendees

As a minimum, the Contractor's personnel required to attend include an officer of the firm, the Project Manager, Project Superintendent, QC Manager, Alternate QC Manager,[ Assistant QC Manager,][ QC Specialists,] Environmental Manager, and subcontractor representatives. Each subcontractor who will be assigned QC responsibilities must have a principal of the firm at the meeting.

1.5.1.3 Quality Control (QC) Meetings

After the start of construction, conduct weekly QC meetings led by the QC Manager at the work site with the Project Superintendent,[ the QC Specialists,] and the other personnel as necessary. The QC Manager is to prepare the minutes of the meeting and provide a copy to the Contracting Officer within 2 working days after the meeting. The Contracting Officer may attend these meetings. As a minimum, accomplish the following at each meeting:

a. Review the minutes of the previous meeting.

b. Review the schedule and the status of work and deficiencies/rework. Review the most current approved schedule (in accordance with schedule specification) and the status of work and deficiencies/rework.

c. Review the status of submittals and Request For Information (RFIs).

d. Review the work to be accomplished in the next 3 weeks as defined by the schedule section paragraph WEEKLY PROGRESS MEETINGS in Section 01 32 01.00 10 PROJECT SCHEDULE and all documentation required for that work.

e. Review Testing Plan and Log including status of tests performed since last QC Meeting.

f. Resolve QC and production problems. Discuss status of pending change orders.

g. Address items that may require revising the QC Plan.

h. Review Accident Prevention Plan (APP) and effectiveness of the safety program.

i. Review environmental requirements and procedures.

j. Review Environmental Management Plan.

k. Review Waste Management Plan.

l. Review the status of training completion.

### 1.5.2 Contractor Quality Control (CQC) Plan

Submit no later than 7 days prior to the Preconstruction Conference, the CQC Plan proposed to implement the requirements FAR 52.246-12 Inspection of Construction. Construction will be permitted to begin only after acceptance of the CQC Plan and other Contract requirements or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional work.

#### 1.5.2.1 Content of Contractor Quality Control (CQC) Plan

Provide a CQC Plan, prior to start of construction that includes a table of contents, with major sections identified, pages numbered sequentially, and that documents the proposed methods and responsibilities for accomplishing quality control during the construction of the project. The CQC Plan must at a minimum include the following sections:

a. A description of the quality control organization and acknowledgment that the CQC staff will implement the three phase control system for all aspects of the work specified.

b. An organizational chart showing the quality control organization with individual names and job titles and lines of authority up to an executive of the company at the home office.

c. NAMES AND QUALIFICATIONS: Names and qualifications, in resume format, (including position titles and durations for qualifying experiences) for each person in the QC organization. Include the Construction Quality Management (CQM) for Contractors course certifications for the QC personnel as required by the paragraph CONSTRUCTION QUALITY MANAGEMENT TRAINING.

d. DUTIES, RESPONSIBILITY AND AUTHORITY OF QC PERSONNEL: Duties, responsibilities, and authorities of each person in the QC organization.

e. OUTSIDE ORGANIZATIONS: A listing of outside organizations, such as architectural and consulting engineering firms, that will be employed by the Contractor and a description of the services these firms will provide.

f. APPOINTMENT LETTERS: Letters signed by an officer of the firm appointing the QC Manager and Alternate QC Manager, and stating that they are responsible for implementing and managing the QC program as described in this Contract. Include in this letter the responsibility of the QC Manager and Alternate QC Manager to implement and manage the

three phases of control, and their authority to stop work that is not in compliance with the Contract. Letters of direction are to be issued by the QC Manager to[ the Assistant QC Manager and] all other QC Specialists or quality control representatives outlining their duties, authorities, and responsibilities. Include copies of the letters in the QC Plan.

g. SUBMITTAL PROCEDURES AND INITIAL SUBMITTAL REGISTER: Procedures for reviewing, approving, scheduling, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. Provide the name(s) of the person(s) in the QC organization authorized to review and certify submittals prior to approval. Provide the initial submittal of the Submittal Register as specified in Section 01 33 00 SUBMITTAL PROCEDURES.

h. TESTING LABORATORY INFORMATION: Testing laboratory information required by the paragraph ACCREDITATION REQUIREMENTS, as applicable.

i. TESTING PLAN AND LOG: A Testing Plan and Log that includes the tests required, associated feature of work required, referenced by the specification paragraph number requiring the test, the frequency, and the person responsible for each test.

j. Procedures to complete construction deficiencies from identification through acceptable corrective action. Establish verification procedures that identified deficiencies have been corrected. This phase is performed prior to beginning work on each definable feature of work, after all required plans, documents, materials are approved, and after copies are at the work site.

k. Reporting procedures, including proposed reporting formats.

l. Procedures for submitting and reviewing design changes/variations prior to submission to the Contracting Officer.

m. LIST OF DEFINABLE FEATURES: A Definable Feature of Work (DFOW) is a task that is separate and distinct from other tasks and has control requirements and work crews unique to that task. A DFOW is identified by different trades or disciplines, or it is work by the same trade in a different environment. A DFOW is by definition any item or activity on the construction schedule, and the schedule specification provides direction regarding how the DFOWs are to be structured. Include in the list of DFOWs for all activities on the Construction Schedule. Although each section of the specifications can generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. Identify the specification section number and schedule activity ID for each DFOW listed. The DFOW list will be reviewed in coordination with the construction schedule and agreed upon during the Coordination of Mutual Understanding Meeting.

n. PROCEDURES FOR PERFORMING AND TRACKING THE THREE PHASES OF CONTROL: Identify procedures used to ensure the three phases of control to manage the quality on this project. For each Definable Feature of Work (DFOW), a Preparatory and Initial phase checklist will be filled out during the Preparatory and Initial phase meetings. Conduct the Preparatory and Initial Phases and meetings with a view towards obtaining quality construction by planning ahead and identifying potential problems for each DFOW.

o. PROCEDURES FOR COMPLETION INSPECTION: Procedures for identifying and documenting the completion inspection process. Include in these procedures the responsible party for punch out inspection, pre-final inspection, and final acceptance inspection.

p. TRAINING PROCEDURES AND TRAINING LOG: Procedures for coordinating and documenting the training of personnel required by the Contract.

q. ORGANIZATION AND PERSONNEL CERTIFICATIONS LOG: Procedures for coordinating, tracking and documenting all certifications required for entities such as subcontractors, testing laboratories, suppliers, and personnel. The QC Manager will ensure that certifications are current, appropriate for the work being performed, and will not lapse during any period of the Contract that the work is being performed.

### 1.5.3 Acceptance of the Quality Control (QC) Plan

The Contracting Officer's acceptance of the Contractor QC Planis required prior to the start ofconstruction.The Contracting Officer reserves the right to require changes in the QC Plan and operations as necessary, including removal or addition of personnel, to ensure the specified quality of work. The Contracting Officer reserves the right to interview any member of the QC organization at any time to verify the submitted qualifications. All QC organization personnel are subject to acceptance by the Contracting Officer. The Contracting Officer may require the removal of any individual for non-compliance with quality requirements specified in the Contract.

### 1.5.4 Notification of Changes

Notify the Contracting Officer, in writing, of any proposed changes in the QC Plan or changes to the QC organization personnel. Proposed changes are subject to acceptance by the Contracting Officer.

## 1.6 QUALITY CONTROL (QC) ORGANIZATION

### 1.6.1 Personnel Requirements

The requirements for the CQC organization are a Site Safety and Health Officer (SSHO), QC Manager, a Design Quality Manager, and enough qualified personnel to ensure safety and Contract compliance. The SSHO reports directly to a senior project (or corporate) official independent from the QC Manager. The SSHO will also serve as a member of the CQC Staff Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly. The CQC staff always maintains a presence at the site during progress of the work and have complete authority and responsibility to take any action necessary to ensure Contract compliance. The CQC staff will be subject to acceptance by the Contracting Officer. Provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Promptly complete and furnish all letters, material submittals, shop drawing submittals, schedules, and all other project documentation to the CQC organization. The CQC organization is responsible for always maintaining these documents and records at the site, except as otherwise acceptable to the Contracting Officer.

### 1.6.2 Quality Control (QC) Manager

#### 1.6.2.1 Duties

Provide a QC Manager at the work site to implement and manage the QC program. The QC Manager must be employed by the Prime Contractor. The only duties and responsibilities of the QC Manager are to manage and implement the QC program on this Contract. The QC Manager must attend the partnering meetings, QC Plan Meetings, Coordination and Mutual Understanding Meeting, conduct the QC meetings, perform the three phases of control, perform submittal review and approval, ensure testing is performed and provide QC certifications and documentation required in this Contract. The QC Manager is responsible for managing and coordinating the three phases of control and documentation performed by testing laboratory personnel and any other inspection and testing personnel required by this Contract. The QC Manager is the manager of all QC activities.

#### 1.6.2.2 Qualifications

The QC Manager must be an individual with a minimum of 5 years combined experience in the following positions: Project Superintendent, QC Manager, Project Manager, Project Engineer or Construction Manager on similar size and type construction contracts which included the major trades that are part of this Contract. The individual must have at least 2 years experience as a QC Manager. The individual must be familiar with the requirements of EM 385-1-1 and have experience in the areas of hazard identification, safety compliance, and sustainability.

The QC Manager and all members of the QC organization must be capable of reading, writing, and conversing fluently in the English language.

#### 1.6.2.3 Construction Quality Management Training

In addition to the above experience and education requirements, the QC Manager and all members of the QC team must have completed the CQM for Contractors course. If the QC Manager does not have a current certification, obtain the CQM for Contractors course certification within 90 days of award. This course is periodically offered by the Naval Facilities Engineering Systems Command and the Army Corps of Engineers. Contact the Contracting Officer for information on the next scheduled class.

The Construction Quality Management Training certificate expires after 5 years. If the QC Manager's certificate has expired, retake the course to remain current.

### 1.6.3 Organizational Changes

Maintain the QC staff with personnel as required by the specification section at all times. When it is necessary to make changes to the QC staff, revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

### 1.6.4 Alternate Quality Control (QC) Manager Duties and Qualifications

Designate an alternate for the QC Manager at the work site to serve in the event of the designated QC Manager's absence. The qualification requirements for the Alternate QC Manager must be the same as for the QC Manager.

## 1.7 SUBMITTAL AND DELIVERABLES REVIEW AND APPROVAL

Procedures for submission, review and approval of submittals are described in Section 01 33 00 SUBMITTAL PROCEDURES. Procedures must include field verification of relevant dimensions and component characteristics by the QC organization prior to submittal being sent to the Contracting Officer. The CQC organization is responsible for certifying that all submittals and deliverables are in compliance with the Contract.

## 1.8 THREE PHASES OF CONTROL

CQC enables the Contractor to ensure that the construction, including that of subcontractors and suppliers, complies with the requirements of the Contract. At least three phases of control must be conducted by the QC Manager to adequately cover both on-site and off-site work for each definable feature of the construction work as follows:

### 1.8.1 Preparatory Phase

Document the results of the preparatory phase actions by separate minutes prepared by the QC Manager and attach to the daily CQC report. Instruct applicable workers as to the acceptable level of workmanship required to meet Contract specifications.

Notify the Contracting Officer at least 2 business days in advance of each preparatory phase meeting. The meeting will be conducted by the QC Manager and attended by[ the QC Specialists,] the Project Superintendent, and the foreman responsible for the DFOW. When the DFOW will be accomplished by a subcontractor, that subcontractor's foreman must attend the preparatory phase meeting. This phase is 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. Perform the following prior to beginning work on each DFOW:

a. Review each paragraph of the applicable specification sections, reference codes, and standards. Make available during the prepatory inspection a copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field. Maintain and make available in the field for use by Government personnel until final acceptance of the work.

b. Review the Contract drawings.

c. Verify that field measurements are as indicated on construction or shop drawings or both before confirming product orders, to minimize waste due to excessive materials.

d. Verify that appropriate shop drawings and submittals for materials and equipment have been submitted and approved. Verify receipt of approved factory test results, when required.

e. Review the testing plan and ensure that provisions have been made to provide the required QC testing.

f. Examine the work area to ensure that the required preliminary work has been completed and complies with the Contract and ensure any deficiencies/rework items in the preliminary work have been corrected and confirmed by the Contracting Officer.

g. Review coordination of product/material delivery to designated prepared areas to execute the work.

h. Examine the required materials, equipment and sample work to ensure that they are on hand and conform to the approved shop drawings and submitted data and are properly stored.

i. Check to assure that all materials and equipment have been tested, submitted, and approved.

j. Discuss specific controls to be used, construction methods, construction tolerances, workmanship standards, and the approach that will be used to provide quality construction by planning ahead and identifying potential problems for each DFOW. Ensure any portion of the plan requiring separate Contracting Officer acceptance has been approved.

k. Review the APP and appropriate Activity Hazard Analysis (AHA) to ensure that applicable safety requirements are met, and that required Safety Data Sheets (SDS) are submitted.

1.8.2 Initial Phase

Notify the Contracting Officer at least 2 business days in advance of each initial phase. When construction crews are ready to start work on a DFOW, conduct the initial phase with[ the QC Specialists,] the Project Superintendent, and the foreman responsible for that DFOW. Observe the initial segment of the DFOW to ensure that the work complies with Contract requirements. Document the results of the initial phase in the[ daily CQC Report and in the] Initial Phase Checklist. Repeat the initial phase for each new crew to work on-site when acceptable levels of specified quality are not being met. Indicate the exact location of initial phase for definable feature of work for future reference and comparison with follow-up phases. Perform the following for each DFOW:

a. Check 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 comply with the Contract.

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

d. Resolve any workmanship issues.

e. Ensure that testing is performed by the approved laboratory.

f. Check work procedures for compliance with the APP and the appropriate AHA to ensure that applicable safety requirements are met.

g. Review project specific work plans (i.e., HAZMAT Abatement, Stormwater Management) to ensure all preparatory work items have been completed and documented.

### 1.8.3 Follow-Up Phase

Perform the following for on-going DFOW daily, or more frequently as necessary, until the completion of each DFOW. The Final Follow-Up for any DFOW will clearly note in the daily report the DFOW is completed, and all deficiencies/rework items have been completed in accordance with the paragraph DEFICIENCY/REWORK ITEMS LIST. Each DFOW that has completed the Initial Phase and has not completed the Final Follow-up must be included on each daily report. If no work was performed on that DFOW for the period of that daily report, it must be so noted. Document all Follow-Up activities for DFOWs in the daily CQC Report:

a. Ensure the work including control testing complies with Contract requirements until completion of that particular work feature. Record checks in the CQC documentation.

b. Maintain the quality of workmanship required.

c. Ensure that testing is performed by the approved laboratory.

d. Ensure that deficiencies/rework items are being corrected. Conduct final follow-up checks and correct all deficiencies prior to the start of additional features of work which may be affected by the deficient work.

e. Do not build upon nor conceal non-conforming work.

f. Assure manufacturers' representatives have performed necessary inspections if required and perform safety inspections.

### 1.8.4 Additional Preparatory and Initial Phases

Conduct additional preparatory and initial phases on the same DFOW if the quality of on-going work is unacceptable, if there are changes in the applicable QC organization, if there are changes in the on-site production supervision or work crew, if work on a DFOW has not started within 45 days of the initial preparatory meeting or has resumed after 45 days of inactivity, or if other problems develop.

### 1.8.5 Notification of Three Phases of Control for Off-Site Work

Notify the Contracting Officer at least 2 weeks prior to the start of the preparatory and initial phases.

### 1.8.6 Deficiency/Rework Items List

The QC Manager must maintain a list of work that does not comply with the Contract, identifying what items need to be corrected, the activity ID number associated with the item, the date the item was originally discovered, the date the item will be corrected by, and the date the item was corrected.

The QC Manager reviews the list at each weekly QC Meeting:

a. There is no requirement to report a deficiency/rework item that is corrected the same day it is discovered.

b. No successor task may be advanced beyond the preparatory phase meeting until all deficiencies/rework items have been cleared by the QC

Manager and concurred with by the Contracting Officer. This must be confirmed as part of the Preparatory Phase activities.

c. Attach a copy of the "Deficiency/Rework Items List" to the last daily CQC Report of each month.

d. The Contractor is responsible for including those items identified by the Contracting Officer.

e. All deficiencies/rework items must be confirmed as corrected by the QC Manager, and concurred by the Contracting Officer, prior to commencement of any completion inspections per paragraph COMPLETION INSPECTIONS unless specifically exempted by the Contracting Officer.

f. Non-Compliance with these requirements is grounds for removal in accordance with paragraph ACCEPTANCE OF THE QUALITY CONTROL (QC) PLAN.

g. All delays, concurrent or related to failure to manage, monitor, control, and correct deficiencies/rework items are entirely the responsibility of the Contractor and can not be made the subject, or any component of any request for additional time or compensation.

## 1.9 TESTING

Perform specified or required tests to verify that control measures are adequate to provide a product which conforms to Contract requirements. Upon request, furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and acceptance tests when specified. Procure the services of an U.S. Army Corps of Engineers approved testing laboratory or establish an approved testing laboratory at or near the project site. 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 test documentation requirements, have been prepared.

e. Record results of all tests taken, both passing and failing on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test. If approved by the Contracting Officer, actual test reports are submitted later with a reference to the test number and date taken. Provide an information copy of tests performed by an offsite or commercial test facility directly to the Contracting Officer. Failure to submit timely test reports as stated results in nonpayment for related work performed and disapproval of the test facility for this Contract.

### 1.9.1 Laboratory Accreditation Authorities

All testing laboratories must be validated by the USACE Material Testing Center (MTC) for the tests to be performed. Information on the USACE MTC

with web-links to both a list of validated testing laboratories and for the laboratory inspection request for can be found at: https://mtc.erdc.dren.mil

1.9.2 Capability Check

The Contracting Officer retains the right to check laboratory equipment in the proposed laboratory and the laboratory technician's testing procedures, techniques, and other items pertinent to testing, for compliance with the standards set forth in this Contract. Laboratories utilized for testing soils, concrete, asphalt, and steel must meet criteria detailed in ASTM D3740 and ASTM E329.

1.9.2.1 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.

1.9.3 Test Results

Cite applicable Contract requirements, tests or analytical procedures used. Provide actual results and include a statement that the item tested or analyzed conforms or fails to conform to specified requirements. If the item fails to conform, notify the Contracting Officer immediately. Conspicuously stamp the cover sheet for each report in large red letters "CONFORMS" or "DOES NOT CONFORM" to the specification requirements, whichever is applicable. Test results must be signed by a testing laboratory representative authorized to sign certified test reports. Furnish the signed reports, certifications, and other documentation to the Contracting Officer via the QC Manager.

1.10 COMPLETION INSPECTIONS

1.10.1 Punch-Out Inspection

Near the completion of all work or any increment thereof, established by a completion time stated in the Contract Clause entitled "Commencement, Prosecution, and Completion of Work," or stated elsewhere in the specifications, the QC Manager must conduct an inspection of the work and develop a "punch list" of items which do not conform to the approved drawings, specifications, and Contract. Include in the punch list any remaining items on the "Deficiency/Rework Items List", that were not corrected prior to the Punch-Out Inspection as approved by the Contracting Officer in accordance with the paragraph DEFICIENCY/REWORK ITEMS LIST. Include within the punch list the estimated date by which the deficiencies will be corrected. Provide a copy of the punch list to the Contracting Officer.

The QC Manager, or staff, must make follow-on inspections to ascertain that all deficiencies have been corrected. All punch list items must be confirmed as corrected by the QC Manager and concurred by the Contracting Officer. Once this is accomplished, notify the Government that the facility is ready for the Government "Pre-Final Inspection".

1.10.2 Pre-Final Inspection

The Government and QC Manager will perform this inspection to verify that

the facility is complete and ready to be occupied. A Government "Pre-Final Punch List" will be documented by the QC Manager as a result of this inspection. The QC Manager will ensure that all items on this list are corrected and concurred by the Contracting Officer prior to notifying the Government that a "Final" inspection with the Client can be scheduled. All items noted on the "Pre-Final" inspection must be corrected and concurred by the Contracting Officer in a timely manner and be accomplished before the Contract completion date for the work, or any increment thereof, if the project is divided into increments by separate completion dates unless exceptions are directed by the Contracting Officer.

### 1.10.3 Final Acceptance Inspection

Notify the Contracting Officer at least 14 calendar days prior to the date a final acceptance inspection can be held. State within the notice that all items previously identified on the pre-final punch list will be corrected and acceptable, along with any other unfinished Contract work, by the date of the final acceptance inspection. The Contractor must be represented by the QC Manager, the Project Superintendent, and others deemed necessary. Attendees for the Government will include the Contracting Officer, other Government QA personnel, and personnel representing the Client. 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 entitled "Inspection of Construction."

## 1.11 QUALITY CONTROL (QC) CERTIFICATIONS

### 1.11.1 Contractor Quality Control (CQC) Report Certification

Contain the following statement within the CQC Report: "On behalf of the Contractor, I certify that this report is complete and correct and equipment and material used, and work performed during this reporting period is in compliance with the Contract drawings and specifications to the best of my knowledge, except as noted in this report."

### 1.11.2 Completion Certification

Upon completion of work under this Contract, the QC Manager must furnish a certificate to the Contracting Officer attesting that "the work has been completed, inspected, tested and is in compliance with the Contract." Provide a copy of this final QC Certification for completion to the preparer of the Operation & Maintenance (O&M) documentation.

## 1.12 DOCUMENTATION AND INFORMATION FOR THE CONTRACTING OFFICER

Maintain current and complete records of on-site and off-site QC program operations and activities.

Contact the Contracting Officer for sample forms or print from RMS-QCS as needed. Prior to commencing work on construction, the Contractor must obtain a copy set of the current report forms. The report forms will consist of the Contractor Quality Control (CQC) Report, CQC Report (Continuation Sheet), Contractor Production Report, Contractor Production Report (Continuation Sheet), Preparatory Phase Checklist, Initial Phase Checklist, Testing Plan and Log, and Rework Items List. Unless otherwise provided by the Contracting Officer, Contractor may use the forms provided as related material located at https://www.wbdg.org/ffc/dod/unified-

facilities-guide-specifications-ufgs/ufgs-01-45-00.

1.12.1 Construction Documentation

Reports are required for each day that work is performed and must be attached to the Contractor Quality Control Report prepared for the same day. Maintain current and complete records of on-site and off-site QC program operations and activities. Reports are required for each day work is performed. Account for each calendar day throughout the life of the Contract.

The Project Superintendent and the QC Manager must prepare and sign the Contractor Production and CQC Reports, respectively. Every space on the forms must be filled in. Use N/A if nothing can be reported in one of the spaces. The reporting of work must be identified by terminology consistent with the construction schedule. In the "Remarks" sections of the reports, enter pertinent information including directions received, problems encountered during construction, work progress and delays, conflicts or errors in the drawings or specifications, field changes, safety hazards encountered, instructions given and corrective actions taken, delays encountered, a record of visitors to the work site, quality control problem areas, deviations from the QC Plan, construction deficiencies encountered, and meetings held. For each entry in the report(s), identify the Schedule Activity No. that is associated with the entered remark.

1.12.2 Quality Control Activities

CQC and Contractor Production reports will be prepared daily to maintain current records providing factual evidence that required quality control activities and tests have been performed. Include in these records the work of subcontractors and suppliers on an acceptable form that includes, as a minimum, the following information:

a. The name and area of responsibility of the Contractors and any subcontractors.

b. Operating plant/equipment with hours worked, idle, or down for repair.

c. Work performed each day, giving location, description, and by whom. When a Network Analysis Schedule (NAS) is used, identify each item of work performed each day by NAS activity number.

d. Control phase activities performed. Preparatory, and Initial phase Checklists associated with the DFOW referenced to the construction schedule. Follow-up phase activities identified to the DFOW. If testing or specific QC Specialist activities are associated with the Follow-up phase activities for a specific DFOW note this and include those reports.

e. Test and control activities performed with results and references to specifications and drawings requirements. Identify the control phase (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action in accordance with the paragraph DEFICIENCY/REWORK ITEMS LIST.

f. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications and drawings requirements.

g. Submittals and deliverables reviewed, with Contract reference, by whom, and action taken.

h. Offsite surveillance activities, including actions taken.

i. Job safety evaluations stating what was checked, results, and instructions or corrective actions.

j. Instructions given/received and conflicts in plans and specifications.

### 1.12.3 Verification Statement

Indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. Cover both conforming and deficient features and include a statement that equipment and materials incorporated in the work and workmanship comply with the Contract.

Furnish the original and one copy of these records in report form to the Government by 10:00 AM the next working day after the date covered by the report. As a minimum, prepare and submit one report for every 7 days of no work and on the last day of a no work period. All calendar days need to be accounted for throughout the life of the Contract. The first report following a day of no work will be for that day only. Reports need to be signed and dated by the QC Manager. Include copies of test reports and copies of reports prepared by all subordinate quality control personnel within the QC Manager Report.

### 1.12.4 Quality Control Validation

Establish and maintain the following in an electronic folder. Divide folder into a series of tabbed sections as shown below. Ensure folder is updated at each required progress meeting.

a. CQC Meeting minutes in accordance with paragraph QUALITY CONTROL (QC) MEETINGS.

b. All completed Preparatory and Initial Phase Checklists, arranged by specification section, further sorted by DFOW referenced to the construction schedule. Submit each individual Phase Checklist the day the phase event occurs as part of the CQC daily report.

c. All milestone inspections, arranged by Activity Number referenced to the construction schedule.

d. An up-to-date copy of the Testing Plan and Log with supporting field test reports, arranged by specification section referenced to the DFOW to which individual reports results are associated. Individual field test reports will be submitted within 2 working days after the test is performed in accordance with the paragraph QUALITY CONTROL ACTIVITIES.

e. Copies of all Contract modifications, arranged in numerical order. Also include documentation that modified work was accomplished.

f. An up-to-date copy of the paragraph DEFICIENCY/REWORK ITEMS LIST.

g. Upon commencement of Completion Inspections of the entire project or any defined portion, maintain up-to-date copies of all punch lists

issued by the QC staff to the Contractor and subcontractors and all punch lists issued by the Government in accordance with the paragraph COMPLETION INSPECTIONS.

### 1.12.5 Testing Plan and Log

As tests are performed, the QC Manager will record on the "Testing Plan and Log" the date the test was performed and the date the test results were forwarded to the Contracting Officer. Attach a copy of the updated "Testing Plan and Log" to the last daily CQC Report of each month. Provide a copy of the final "Testing Plan and Log" to the preparer of the Operation & Maintenance (O&M) documentation.

### 1.12.6 As-Built Drawings

The QC Manager must ensure the as-built drawings, required by Section 01 78 00 CLOSEOUT SUBMITTALS are kept current on a daily basis and marked to show deviations which have been made from the Contract drawings. The as-built drawings document shall commence with the QC Manager ensuring all amendments, or changes to the Contract prior to Contract award are accurately noted in the initial document set creating the accurate baseline of the Contract prior to any work starting. Ensure each deviation has been identified with the appropriate modifying documentation (e.g., PC No., Modification No., Request for Information No.). The QC Manager must initial each revision. Upon completion of work, the QC Manager will furnish a certificate attesting to the accuracy of the as-built drawings prior to submission to the Contracting Officer.

## 1.13 NOTIFICATION ON NON-COMPLIANCE

The Contracting Officer will notify the Contractor of any detected non-compliance with the Contract. Take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, is 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 will be made the subject of a claim for extension of time for excess costs or damages by the Contractor.

## 1.14 DELIVERY, STORAGE, AND HANDLING

Designate receiving/storage areas for incoming material to be delivered according to installation schedule and to be placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. Store and handle materials in a manner as to prevent loss from weather and other damage. Keep materials, products, and accessories covered and off the ground, and store in a dry, secure area. Prevent contact with material that may cause corrosion, discoloration, or staining. Protect all materials and installations from damage by the activities of other trades.

# PART 2 PRODUCTS

Not used.

# PART 3 EXECUTION

Not used.

-- End of Section --

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RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM)

**06/25**

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SECTION 01 45 00.15 10

RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM)
**06/25**

PART 1 GENERAL

1.1 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

| | |
|---|---|
| EM 385-1-1 | (2024) Safety -- Safety and Health Requirements Manual |

1.2 MEASUREMENT AND PAYMENT

The work of this section is not measured for payment. The Contractor is responsible for the work of this section, without any direct compensation other than the payment received for contract items.

1.3 CONTRACT ADMINISTRATION

The Government will use the Resident Management System (RMS) to assist in its monitoring and administration of this contract. The Government accesses the system using the Government Mode of RMS (RMS GM) and the Contractor accesses the system using the Contractor Mode (RMS CM). The term RMS will be used in the remainder of this section for both RMS GM and RMS CM. The joint Government-Contractor use of RMS facilitates electronic exchange of information and overall management of the contract. The Contractor accesses RMS to record, maintain, input, track, and electronically share information with the Government throughout the contract period in the following areas:

Administration
Finances
Quality Control
Submittal Monitoring
Scheduling
Closeout
Import/Export of Data

The Contractor must be prepared to transition from the Resident Management System (RMS) to the new Construction Management Platform (CMP) at any time during the period of performance of this contract, once the USACE enterprise implements this change. The Contractor's obligation to transition from RMS to the CMP system is a requirement of this contract. Therefore, additional time or cost increase to complete this transition will not be considered. In the event of the transition, RMS project information will be migrated to CMP by the government and available in the CMP system. After the transition, the Contractor must utilize the CMP system to perform all contract administration functions previously required in RMS, including all areas listed above. After the transition, “RMS” and “CMP” will be synonymous for all “Resident Management System”

and “RMS” references in this contract’s specification. To facilitate the transition from RMS to CMP, online training for the CMP system will be made available to the Contractor with enough time to train staff, prior to the transition occurring.

1.3.1 Correspondence and Electronic Communications

For ease and speed of communications, exchange correspondence and other documents in electronic format to the maximum extent feasible. Paper documents will govern in the event of discrepancy with the electronic version. Contracting Officer will determine which documents require submission of paper copies.

1.3.2 Other Factors

Other portions of this document have a direct relationship to the reporting accomplished through RMS. Particular attention is directed to FAR 52.236-15 Schedules for Construction Contracts; FAR 52.232-27 Prompt Payment for Construction Contracts; FAR 52.232-5 Payments Under Fixed-Priced Construction Contracts; Section 01 32 01.00 10 PROJECT SCHEDULE; Section 01 33 00 SUBMITTAL PROCEDURES; Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS; and Section 01 45 00 QUALITY CONTROL.

1.4 RMS SOFTWARE

RMS is a web based application. Download, install and be able to utilize the latest version of RMS no less than 7 calendar days prior to the Preconstruction Conference. RMS software, user manuals, access and installation instructions, program updates and training information are available from the RMS website (https://rms.usace.army.mil). The Government and the Contractor will have different access authorities to the same contract database through RMS. The common database will be updated automatically each time a user finalizes an entry or change.

1.5 CONTRACT DATABASE - GOVERNMENT

The Government will enter the basic contract award data in RMS prior to granting the Contractor access. The Government entries into RMS will generally be related to submittal reviews, correspondence status, and Quality Assurance(QA)comments, as well as other miscellaneous administrative information.

1.6 CONTRACT DATABASE - CONTRACTOR

Contractor entries into RMS establish, maintain, and update data throughout the duration of the contract. Contractor entries generally include prime and subcontractor information, daily reports, submittals, RFI's, schedule updates and payment requests. RMS includes the ability to import attachments and export reports in many of the modules, including submittals. The Contractor responsibilities for entries in RMS typically include the following items:

1.6.1 Administration

1.6.1.1 Contractor Information

Enter all current Contractor administrative data and information into RMS within 7 calendar days of receiving access to the contract in RMS. This includes, but is not limited to, Contractor's name, address, telephone

numbers, management staff, and other required items.

1.6.1.2 Subcontractor Information

Enter all missing subcontractor administrative data and information into RMS CM within seven calendar days of receiving access to the Contract in RMS or within seven calendar days of the signing of the subcontractor agreement for agreements signed at a later date. This includes name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor is listed separately for each trade to be performed.

1.6.1.3 Correspondence

Identify all Contractor correspondence to the Government with a serial number. Prefix correspondence initiated by the Contractor's site office with "S". Prefix letters initiated by the Contractor's home (main) office with "H". Letters are numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C" or "RFP".

1.6.1.4 Equipment

Enter and maintain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates in accordance with Section 01 45 00 QUALITY CONTROL.

1.6.1.5 Reports

Track the status of the project using the reports available in RMS. The value of these reports reflects the quality of the data input. These reports include but are not limited to the Progress Payment Request worksheet, Quality Control (QC) comments, Deficiency Tracking Log, Submittal Register Status, and Three-Phase Control worksheets in accordance with Sections 01 20 00 PRICE AND PAYMENT PROCEDURES, Section 01 32 01.00 10 PROJECT SCHEDULE, 01 33 00 SUBMITTAL PROCEDURES, and 01 45 00 QUALITY CONTROL.

1.6.1.6 Request For Information (RFI)

Create and track all Requests For Information (RFI) in the RMS Administration Module for Government review and response. Provide status at weekly progress meeting in accordance with Section 01 32 01.00 10 PROJECT SCHEDULE.

1.6.2 Finances

1.6.2.1 Pay Activity Data

Develop and enter a list of pay activities in conjunction with the project schedule in accordance with Section 01 32 01.00 10 PROJECT SCHEDULE. The sum of pay activities equals the total Contract amount, including modifications. Each pay activity must be assigned to a Contract Line Item Number (CLIN). The sum of the activities assigned to a CLIN equals the amount of each CLIN.

1.6.2.2 Payment Requests

Prepare all progress payment requests using RMS. Update the work

completed under the Contract at least monthly, measured as percent or as specific quantities. After the update, generate a payment request and prompt payment certification using RMS. Submit the signed prompt payment certification and payment request as well as supporting data, either electronically or by hard copy.

### 1.6.3 Quality Control (QC)

Enter and track implementation of the 3-phase QC Control System, QC testing, transferred and installed property and warranties in RMS. Prepare daily reports, identify and track deficiencies, document progress of work, and support other Contractor QC requirements in RMS. Maintain all data on a daily basis. Ensure that RMS reflects all quality control methods, tests and actions contained within the Contractor Quality Control (CQC) Plan and Government review comments. Provide within seven calendar days of Government acceptance of the CQC Plan.

#### 1.6.3.1 Quality Control (QC) Reports

The Contractor's Quality Control (QC) Daily Report in RMS is the official report. The Contractor can use other supplemental formats to record QC data, but information from any supplemental formats are to be consolidated and entered into the RMS QC Daily Report. Any supplemental information may be entered into RMS as an attachment to the report. QC Daily Reports must be finalized and signed in RMS within 24 hours after the date covered by the report.

#### 1.6.3.2 Deficiency Tracking.

Use the QC Daily Report Module to enter and track deficiencies. Deficiencies identified and entered into RMS by the Contractor or the Government will be sequentially numbered with a QC or QA prefix for tracking purposes. Enter each deficiency into RMS the same day that the deficiency is identified. Monitor, track and resolve all QC and QA entered deficiencies. A deficiency is not considered to be corrected until the Government indicates concurrence in RMS.

#### 1.6.3.3 Three-Phase Control Meetings

Maintain scheduled and actual dates and times of preparatory and initial control meetings in RMS, and upload meeting minutes of the meetings. Worksheets for the three-phase control meetings are generated within RMS.

#### 1.6.3.4 Labor and Equipment Hours

Enter labor and equipment exposure hours on a daily basis. Roll up the labor and equipment exposure data into a monthly exposure report.

#### 1.6.3.5 Accident/Safety Reporting

Both the Contractor and the Government enter safety related comments in RMS as a deficiency. The Contractor must monitor, track and show resolution for safety issues in the QC Daily Report area of the RMS QC Module. In addition, follow all reporting requirements for accidents and incidents as required in EM 385-1-1, Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS and as required by any other applicable Federal, State or local agencies.

#### 1.6.3.6 Definable Features of Work

Enter each feature of work, as defined in the approved CQC Plan, into the RMS QC Module. A feature of work may be associated with a single or multiple pay activities, however a pay activity is only to be linked to a single feature of work.

#### 1.6.3.7 Activity Hazard Analysis

Import activity hazard analysis electronic document files into the RMS QC Module utilizing the document package manager. Prepare activity hazard analysis in accordance with Section 01 35 26 GOVERNMENT SAFETY REQUIREMENTS.

### 1.6.4 Submittal Management

Enter all current submittal register data and information into RMS within seven calendar days of receiving access to the Contract in RMS.The Contractor is responsible for entering Activity Numbers for each submittal item corresponding to their Schedule. The Contractor will import the information shown in the submittal register following the specification Section 01 33 00 SUBMITTAL PROCEDURES unless otherwise directed by the Contracting Officer. Group electronic submittal documents into transmittal packages to send to the Government, except very large electronic files, samples, spare parts, mock ups, color boards, or where hard copies are specifically required. Track transmittals and update the submittal register in RMS on a daily basis throughout the duration of the Contract.

Contractor may request submittals to be added to RMS throughout the lifecycle of the project. Approval/disapproval of Contractor requests is at the discretion of the Contracting Officer. Submittals entry into RMS must be updated daily or as practical for performance of the Contract, as approved by the Contracting Officer.

### 1.6.5 Schedule

Enter and update the contract project schedule in RMS by either manually entering all schedule data or by importing the Standard Data Exchange Format (SDEF) file, based on the requirements in Section 01 32 01.00 13 PROJECT SCHEDULE.

### 1.6.6 Closeout

Closeout documents, processes and forms are managed and tracked in RMS by both the Contractor and the Government. Ensure that all closeout documents are entered, completed and documented within RMS.

## 1.7 IMPLEMENTATION

Use of RMS as described in the preceding paragraphs is mandatory. Ensure that sufficient resources are available to maintain contract data within the RMS system. RMS is an integral part of the Contractor's required management of quality control.

## 1.8 NOTIFICATION OF NONCOMPLIANCE

Take corrective action within seven calendar days after receipt of notice of RMS non-compliance by the Contracting Officer.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

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# SECTION 01 50 00

# TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS
**06/25**

## 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 within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

| | |
|---|---|
| EM 385-1-1 | (2024) Safety -- Safety and Health Requirements Manual |

### 1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Construction Site Plan; G

### 1.3 CONSTRUCTION SITE PLAN

Prior to the start of work, submit for Government approval a site plan showing the locations and dimensions of temporary facilities (including layouts and details, equipment and material storage area (onsite and offsite), and access and haul routes, avenues of ingress/egress to the fenced area and details of the fence installation. Identify any areas which may have to be graveled to prevent the tracking of mud. Indicate if the use of a supplemental or other staging area is desired. Show locations of safety and construction fences, site trailers, construction entrances, trash dumpsters, temporary sanitary facilities, and worker parking areas.

### 1.4 NAVIGATION AIDS

Notify the Federal Aids to Navigation Officer 30 days prior to the commencement of work.

The Contractor shall not relocate or move any aids to navigation that have been established by the U.S. Coast Guard. If it becomes necessary to have any aids to navigation moved in order to complete dredging operations under this contract, the Contractor shall notify the appropriate Coast Guard Office, with a copy to the Contracting Officer and/or his Representative, not less than 30 days prior to the need for movement. The Contractor shall notify the appropriate Coast Guard Office of the approximate time of completion of dredging.

The Coast Guard has indicated that the requirements of navigation may make it necessary to establish times other than those requested. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS PLANS WITH THE COAST GUARD SUFFICIENTLY IN ADVANCE OF THE PLANNED CLOSING TO PREVENT DELAY TO THE DREDGING OPERATIONS AND COMPLY WITH THE COAST GUARD REQUIREMENT.

## 1.5 LAYOUT OF WORK

a. The Government will establish the following base lines and bench marks at the site of the work: (Monuments and bench marks as shown on the drawings.)

b. From the base lines and bench marks established by the Government, complete the layout of the work and provide measurements for the execution of the work to the location and limit marks indicated, subject to such modifications as the Contracting Officer may require to meet changed conditions or as a result of necessary modifications to the contract work.

c. Provide stakes, templates, platforms, equipment, tools and material, and labor as required for laying out the work from the base lines and bench marks established by the Government. Maintain and preserve all stakes and other marks established by the Contracting Officer until authorized to remove them, and if such marks are destroyed by the Contractor or through his negligence prior to their authorized removal, they may be replaced by the Contracting Officer, at his discretion, and the expense of replacement will be deducted from any amounts due or to become due the Contractor. The Contracting Officer may require that work be suspended at any time when location and limit marks established by the Contractor are not reasonably adequate to permit checking of the work.

## 1.6 SUBMERGED PIPELINES

Should it become necessary in the performance of this contract to use a submerged pipelines across a navigable channel, the Contractor must notify the Contracting Officer, in writing to be received in the District Office at least ten working days prior to the desired closure date. This notification shall include the following:

(1) Location (Channel Centerline Stationing) and depth (over the top of the pipeline) at which the submerged line will be placed;

(2) The desired length of time the channel is to be closed for installation of the pipeline;

(3) The date and hour placement or removal will commence;

(4) The date and hour of anticipated completion; and

(5) The name and telephone number of the person to be contacted for information and response to any emergency condition.

The requirements of navigation may make it necessary to establish times other than those requested. It is the contractor's responsibility to coordinate his/her plans with the Coast Guard sufficiently in advance of the planned closing to prevent delay to the dredging operations and comply with the Coast Guard requirements.

## 1.7 FLOATING PIPELINE

Design rubber float lines to minimize the number of connections in the discharge line and reduce the need to disconnect the float line from the submerged line in moderate storm conditions. Provide an information-only design submittal prior to starting this Definable Feature of Work. Floating pipeline, used as access ways, shall be equipped with walkways and guard rails. The walkway must be securely anchored to the pipeline and a guard rail equivalent in strength to a wood rail 2 inch by 4 inch must be provided on at least one side of the walkway and must be secured to upright at intervals of not more than 8 feet and of not less than 36 nor more than 42 inches in height above the walkway. Float pipelines not equipped with walkways must be barricaded to prevent personnel access.

## 1.8 BRIDGE-TO-BRIDGE RADIO-TELEPHONE EQUIPMENT

In order that radio-telephone communication may be made with passing vessels, all dredges engaged in work under the contract shall be equipped with and operate bridge-to-bridge radio-telephone equipment on VHF Channel 13 (156.65 MHz with low power output having a communication range of approximately ten (10) miles). The Federal Communication Commission has approved the frequency.

## 1.9 HEAD PROTECTION AREA

THE ENTIRE WORK SITE UNDER THIS CONTRACT IS DESIGNATED AS A HARD HAT AREA. The Contractor shall post the area in accordance with the requirements of EM 385-1-1, and shall ensure that all prime and subcontractor personnel, vendors, and visitors utilize hard hats while within the project area. (EM 385-1-1 2024)

## 1.10 SIGNAL LIGHTS

The Contractor shall display signal lights and conduct his operations in accordance with the General Regulations of the Coast Guard governing lights and day signals to be displayed by towing vessels with tows on which no light signals can be displayed. Vessels working on wrecks, dredges, and vessels 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 a fairway or channel, and the passing by other vessels or floating plant working in navigable channels, as approved by the Commandant, U.S. Coast Guard with respect to vessels on the high seas (33 CAR 81 App. A-72 COLREGS, Part C), vessels in inland waters (33-CFR 93.18 - 93.31a), and vessels in western rivers (33 CFR 95.5.51 - 95.70)), as applicable. (DAEN-PRP Ind dtd. 12 Sep. 83)

## 1.11 REVERSE SIGNAL ALARM

a. All construction equipment, except light service trucks, panels, pickup trucks, station wagons, crawler-type cranes, power shovels and draglines, whether moving alone or in combination shall be equipped with reverse signal alarms. The alarm shall be mounted on the rear of the equipment and shall be protected or constructed as to withstand severe wear and tear, adverse weather and unfavorable environmental working conditions and shall be certified by the manufacturer to fully meet the following performance standards.

b. The alarm shall produce a relatively pure tone which shall peak within the American National Std's. Inst. standard octave pass band of 600 to 2400 cycles per second and shall produce a 0.2 to 0.5 second audible warning within the initial three (3) feet of backward movement of the vehicle on which it is mounted and at regular intervals, not to exceed three (3) seconds throughout the backward movement. The alarm shall automatically stop when backward movement ceases. The sound intensity of the alarm shall range from and not exceed 90-100 db (decibels) at a horizontal distance of five feet from the alarm.

c. Actuation of the alarm shall be automatic by direct connections to any part of the equipment that moves or acts in a manner distinctive only to the rearward movement of the vehicle with no manual controls of any kind between the source of actuation and the alarm. Where application of this requirement to specific types of the equipment has impractical application, other means of actuation may be used upon written approval of the Contracting Officer and/or his Representative.

d. The use of the alarm shall be in the addition to prescribed requirements for signalmen.

## 1.12 INSPECTION

The inspectors will assess whether the gauges, ranges, location marks and limit marks are maintained in proper order; but the presence of the inspector shall not relieve the Contractor of the responsibility for the proper execution of the work in accordance with the specifications. The Contractor will be required:

a. To furnish, on the request of the Contracting Officer and/or his Representative or any inspector, the use of such boats, boatmen, laborers, a part of the ordinary and usual equipment and crew of the dredging plant as may be reasonably necessary in inspecting and supervising the work. However, the Contractor will not be required to furnish such facilities for the surveys prescribed in the clause entitled: "Final Examination and Acceptance."

b. To furnish, on the request of the Contracting Officer or the Contracting Officer's Representative or any inspector, suitable transportation from all points on shore designated by the Contracting Officer and/or his Representative to and from the various pieces of plant and to and from the placement area. Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Contracting Officer or Contracting Officer Representative, and the cost thereof will be deducted from any amounts due or to become due to the Contractor.

c. To provide the Contracting Officer and/or his Representative or any inspector, a contact available to assist in coordinating/conducting virtual inspections in cases when in person inspections cannot be performed.

## 1.13 DOD CONDITION OF READINESS (COR)

DOD will set the Condition of Readiness (COR) based on the weather forecast for sustained winds 50 knots (58 mph) or greater. Contact the Contracting Officer for the current COR setting.

Monitor weather conditions a minimum of twice a day and take appropriate actions according to the approved Emergency Plan in the accepted Accident Prevention Plan, EM 385-1-1 Section 01 Emergency Planning and the instructions below.

Unless otherwise directed by the Contracting Officer, comply with:

a. Condition FOUR (Sustained winds of 58 mph or greater expected within 72 hours): Normal daily jobsite cleanup and good housekeeping practices. Collect and store in piles or containers scrap lumber, waste material, and rubbish for removal and disposal at the close of each work day. Maintain the construction site including storage areas, free of accumulation of debris. Stack form lumber in neat piles less than 3.3 feet high. Remove all debris, trash, or objects that could become missile hazards. Review requirements pertaining to "Condition THREE" and continue action as necessary to attain "Condition FOUR" readiness. Contact Contracting Officer for weather and COR updates and completion of required actions.

b. Condition THREE (Sustained winds of 58 mph or greater expected within 48 hours): Maintain "Condition FOUR" requirements and commence securing operations necessary for "Condition ONE" which cannot be completed within 18 hours. Cease all routine activities which might interfere with securing operations. Commence securing and stow all gear and portable equipment. Make preparations for securing buildings. Reinforce or remove formwork and scaffolding. Secure machinery, tools, equipment, materials, or remove from the jobsite. Expend every effort to clear all missile hazards and loose equipment from general base areas. Contact Contracting Officer for weather and COR updates and completion of required actions. Review requirements pertaining to "Condition TWO" and continue action as necessary to attain "Condition THREE" readiness.

c. Condition TWO (Sustained winds of 58 mph or greater expected within 24 hours): Secure the jobsite, and leave Government premises.

d. Condition ONE. (Sustained winds of 58 mph or greater expected within 12 hours): Contractor access to the jobsite and Government premises is prohibited.

# PART 2 PRODUCTS

## 2.1 TEMPORARY SIGNAGE

### 2.1.1 Bulletin Board

Prior to the commencement of work activities, provide a clear weatherproof covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the Contract, Wage Rate Information poster, Safety and Health Information as required by EM 385-1-1 and other information approved by the Contracting Officer. Coordinate requirements herein with 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS. Locate the bulletin board at the project site in a conspicuous place easily accessible to all employees, and in location as approved by the Contracting Officer.

### 2.1.2 Project Identification Sign

The requirements for the signs, their content, and location are as

specified in Section 01 58 00 PROJECT IDENTIFICATION. Erect signs within 15 days after receipt of the notice to proceed. Correct the data required by the safety sign daily, with light colored metallic or non-metallic numerals.

The Contractor shall furnish and erect a project sign at a location directed by the Contracting Officer or Contracting Officer's Representative. The project sign shall conform with all requirements as specified in Section 00 90 01, Attachment C, Project Identification and Safety Signs.

The Contractor shall maintain the sign in good condition throughout the construction period. No separate payment will be made for erecting and maintaining the project sign, and all costs in connection therewith will be considered the obligation of the Contractor. Upon completion of the project, the Contractor shall remove the sign from the work site.

### 2.1.3 Safety Sign

The Contractor shall construct a safety sign at a location directed by the Contracting Officer and/or his Representative. The sign shall be 6 feet by 4 feet and shall conform to the requirements as specified in Section 00 90 01, Attachment C, Project Identification and Safety Signs.

The sign shall be erected as soon as possible and within 5 calendar days after the date of the receipt of the Notice to Proceed. The data required by the sign shall be corrected daily. No separate payment will be made for erecting and maintaining the safety sign and all costs in connection therewith will be considered the obligation of the contractor. Upon completion of the project, the Contractor shall remove the sign from the work site.

### 2.1.4 Warning Signs

Post temporary signs, tags, and labels to give workers and the public adequate warning and caution of construction hazards according to the EM 385-1-1. Attach signs to the perimeter fencing every 150 feet warning the public of the presence of construction hazards. Signs must require unauthorized persons to keep out of the construction site. Correct the data required by safety signs daily. Post signs at all points of entry designating the construction site as a hard hat area.

## PART 3 EXECUTION

### 3.1 CONTRACTOR'S TEMPORARY FACILITIES

Contractor is responsible for security of their property. Provide adequate outside security lighting at the temporary facilities. Trailers must be anchored to resist high winds and meet applicable state or local standards for anchoring mobile trailers. Coordinate anchoring with EM 385-1-1. The Contract Clause entitled "FAR 52.236-10, Operations and Storage Areas" and the following apply:

### 3.2 ACCOMMODATIONS FOR GOVERNMENT INSPECTIONS

The Contractor shall furnish regularly to Government inspectors onboard the dredge or other craft upon which they are employed a suitable separate room for an office. The room shall be fully equipped and maintained to the satisfaction of the Contracting Officer and/or his Representative; it

shall be properly heated, ventilated, and lighted, and shall have a desk which can be locked, and a chair for each inspector, beverage (e.g. water, coffee and tea) and bathroom conveniences. In addition, the Contractor shall provide a suitable sleeping area for use by the Government inspector when weather or sea conditions preclude safe transfer to shore. The entire cost to the Contractor for furnishing, equipping and maintaining the foregoing accommodations shall be included in the contract price. If the Contractor fails to meet these requirements, the Contracting Officer and/or his Representative will secure the facilities referred to above, and the cost thereof will be deducted from payments to the Contractor.

## 3.3 CLEANUP

Remove construction debris, waste materials, packaging material and the like from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways must be cleaned away. Store all salvageable materials resulting from demolition activities within the fenced area described above or at the supplemental storage area. Neatly stack stored materials not in trailers, whether new or salvaged.

## 3.4 RESTORATION OF STORAGE AREA

Upon completion of the project remove the bulletin board, signs, barricades, haul roads, and all other temporary products from the site. After removal of trailers, materials, and equipment from within the fenced area, remove the fence. Restore areas used during the performance of the Contract to the original or better condition. Remove gravel used to traverse grassed areas and restore the area to its original condition, including top soil and seeding as necessary.

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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 within the text by the basic designation only.

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

| | |
|---|---|
| 29 CFR 1910.1200 | Hazard Communication |
| 40 CFR 50 | National Primary and Secondary Ambient Air Quality Standards |
| 40 CFR 60 | Standards of Performance for New Stationary Sources |
| 40 CFR 63 | National Emission Standards for Hazardous Air Pollutants for Source Categories |
| 40 CFR 64 | Compliance Assurance Monitoring |
| 40 CFR 68 | Chemical Accident Prevention Provisions |
| 40 CFR 112 | Oil Pollution Prevention |
| 40 CFR 241 | Guidelines for Disposal of Solid Waste |
| 40 CFR 243 | Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste |
| 40 CFR 258 | Subtitle D Landfill Requirements |
| 40 CFR 260 | Hazardous Waste Management System: General |
| 40 CFR 261 | Identification and Listing of Hazardous Waste |
| 40 CFR 261.7 | Residues of Hazardous Waste in Empty Containers |
| 40 CFR 262 | Standards Applicable to Generators of Hazardous Waste |
| 40 CFR 262.11 | Hazardous Waste Determination and Recordkeeping |
| 40 CFR 263 | Standards Applicable to Transporters of Hazardous Waste |

| | |
|---|---|
| 40 CFR 264 | Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities |
| 40 CFR 265 | Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities |
| 40 CFR 266 | Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities |
| 40 CFR 268 | Land Disposal Restrictions |
| 40 CFR 273 | Standards for Universal Waste Management |
| 40 CFR 273.2 | Standards for Universal Waste Management - Batteries |
| 40 CFR 273.3 | Standards for Universal Waste Management - Pesticides |
| 40 CFR 273.4 | Standards for Universal Waste Management - Mercury Containing Equipment |
| 40 CFR 273.5 | Standards for Universal Waste Management - Lamps |
| 40 CFR 273.6 | Applicability - Aerosol Cans |
| 40 CFR 279 | Standards for the Management of Used Oil |
| 40 CFR 300 | National Oil and Hazardous Substances Pollution Contingency Plan |
| 40 CFR 300.125 | National Oil and Hazardous Substances Pollution Contingency Plan - Notification and Communications |
| 40 CFR 302 | Designation, Reportable Quantities, and Notification |
| 40 CFR 355 | Emergency Planning and Notification |
| 40 CFR 403 | General Pretreatment Regulations for Existing and New Sources of Pollution |
| 40 CFR 68 | Chemical Accident Prevention Provisions |
| 49 CFR 171 | General Information, Regulations, and Definitions |
| 49 CFR 172 | Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements |
| 49 CFR 173 | Shippers - General Requirements for Shipments and Packagings |

49 CFR 178 Specifications for Packagings

## 1.2 DEFINITIONS

### 1.2.1 Class I and II Ozone Depleting Substance (ODS)

Class I ODS is defined in Section 602(a) of The Clean Air Act. A list of Class I ODS can be found on the EPA website at the following weblink. https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances.

Class II ODS is defined in Section 602(s) of The Clean Air Act. A list of Class II ODS can be found on the EPA website at the following weblink. https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances.

### 1.2.2 Contractor Generated Hazardous Waste

Contractor generated hazardous waste is materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e., methyl ethyl ketone, toluene), waste thinners, excess paints, excess solvents, waste solvents, excess pesticides, and contaminated pesticide equipment rinse water.

### 1.2.3 Electronics Waste

Electronics waste is discarded electronic devices intended for salvage, recycling, or disposal.

### 1.2.4 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally or historically.

### 1.2.5 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

### 1.2.6 Hazardous Debris

As defined in paragraph SOLID WASTE, debris that contains listed hazardous waste (either on the debris surface, or in its interstices, such as pore structure) in accordance with 40 CFR 261. Hazardous debris also includes debris that exhibits a characteristic of hazardous waste in accordance with 40 CFR 261.

### 1.2.7 Hazardous Materials

Hazardous material is any material that: Is defined in 49 CFR 171, listed in 49 CFR 172, regulated as a hazardous material in accordance with 49 CFR 173; or requires a Safety Data Sheet (SDS) in accordance with 29 CFR 1910.1200; or during end use, treatment, handling, packaging, storage, transportation, or disposal meets or has components that meet or have potential to meet the definition of a hazardous waste as defined by 40 CFR 261 Subparts A, B, C, or D. Designation of a material by this definition, when separately regulated or controlled by other sections or directives, does not eliminate the need for adherence to that hazard-specific guidance which takes precedence over this section for "control" purposes. Such material includes ammunition, weapons, explosive actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical supplies, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos, mercury, and polychlorinated biphenyls (PCBs).

### 1.2.8 Hazardous Waste

Hazardous Waste is any material that meets the definition of a solid waste and exhibits a hazardous characteristic (ignitability, corrosivity, reactivity, or toxicity) as specified in 40 CFR 261, Subpart C, or contains a listed hazardous waste as identified in 40 CFR 261, Subpart D, or meets a state, local, or host nation definition of a hazardous waste.

### 1.2.9 Land Application

Land Application means spreading or spraying discharge water at a rate that allows the water to percolate into the soil. No sheeting action, soil erosion, discharge into storm sewers, discharge into defined drainage areas, or discharge into the "waters of the United States" must occur. Comply with federal, state, and local laws and regulations.

### 1.2.10 Municipal Separate Storm Sewer System (MS4) Permit

MS4 permits are those held by municipalities or installations to obtain NPDES permit coverage for their stormwater discharges.

### 1.2.11 National Pollutant Discharge Elimination System (NPDES)

The NPDES permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

### 1.2.12 Oily Waste

Oily waste are those materials that are, or were, mixed with Petroleum, Oils, and Lubricants (POLs) and have become separated from that POLs. Oily wastes also means materials, including wastewaters, centrifuge solids, filter residues or sludges, bottom sediments, tank bottoms, and sorbents which have come into contact with and have been contaminated by, POLs and may be appropriately tested and discarded in a manner which is in compliance with other state and local requirements.

This definition includes materials such as oily rags, "kitty litter" sorbent clay and organic sorbent material. These materials may be land filled provided that: It is not prohibited in other state regulations or local ordinances; the amount generated is "de minimus" (a small amount); it is the result of minor leaks or spills resulting from normal process

operations; and free-flowing oil has been removed to the practicable extent possible. Large quantities of this material, generated as a result of a major spill or in lieu of proper maintenance of the processing equipment, are a solid waste. As a solid waste, perform a hazardous waste determination prior to disposal. As this can be an expensive process, it is recommended that this type of waste be minimized through good housekeeping practices and employee education.

### 1.2.13 Regulated Waste

Regulated waste are solid wastes that have specific additional federal, state, or local controls for handling, storage, or disposal.

### 1.2.14 Sediment

Sediment is soil and other debris that have eroded and have been transported by runoff water or wind.

### 1.2.15 Solid Waste

Solid waste is a solid, liquid, semi-solid or contained gaseous waste. A solid waste can be a hazardous waste, non-hazardous waste, or non-Resource Conservation and Recovery Act (RCRA) regulated waste. Types of solid waste typically generated at construction sites may include:

#### 1.2.15.1 Debris

Debris is non-hazardous solid material generated during the construction, demolition, or renovation of a structure that exceeds 2.5-inch particle size that is: a manufactured object; plant or animal matter; or natural geologic material (for example, cobbles and boulders), broken or removed concrete, masonry, and rock asphalt paving; ceramics; roofing paper and shingles. Inert materials may not be reinforced with or contain ferrous wire, rods, accessories and weldments. A mixture of debris and other material such as soil or sludge is also subject to regulation as debris if the mixture is comprised primarily of debris by volume, based on visual inspection.

#### 1.2.15.2 Green Waste

Green waste is the vegetative matter from landscaping, land clearing and grubbing, including, but not limited to, grass, bushes, scrubs, small trees and saplings, tree stumps and plant roots. Marketable trees, grasses and plants that are indicated to remain, be re-located, or be re-used are not included.

#### 1.2.15.3 Material Not Regulated As Solid Waste

Material not regulated as solid waste is nuclear source or byproduct materials regulated under the Federal Atomic Energy Act of 1954 as amended; suspended or dissolved materials in domestic sewage effluent or irrigation return flows, or other regulated point source discharges; regulated air emissions; and fluids or wastes associated with natural gas or crude oil exploration or production.

#### 1.2.15.4 Non-Hazardous Waste

Non-hazardous waste is waste that is excluded from, or does not meet, hazardous waste criteria in accordance with 40 CFR 261.

#### 1.2.15.5 Recyclables

Recyclables are materials, equipment and assemblies such as doors, windows, door and window frames, plumbing fixtures, glazing and mirrors that are recovered and sold as recyclable, and structural components. It also includes commercial-grade refrigeration equipment with Freon removed, household appliances where the basic material content is metal, clean polyethylene terephthalate bottles, cooking oil, used fuel oil, textiles, high-grade paper products and corrugated cardboard, stackable pallets in good condition, clean crating material, and clean rubber/vehicle tires. Metal meeting the definition of lead contaminated or lead based paint contaminated may not be included as recyclable if sold to a scrap metal company. Paint cans that meet the definition of empty containers in accordance with 40 CFR 261.7 may be included as recyclable if sold to a scrap metal company.

#### 1.2.15.6 Surplus Soil

Surplus soil is existing soil that is in excess of what is required for this work, including aggregates intended, but not used, for on-site mixing of concrete, mortars, and paving. Contaminated soil meeting the definition of hazardous material or hazardous waste is not included and must be managed in accordance with paragraph HAZARDOUS MATERIAL MANAGEMENT.

#### 1.2.15.7 Scrap Metal

This includes scrap and excess ferrous and non-ferrous metals such as reinforcing steel, structural shapes, pipe, and wire that are recovered or collected and disposed of as scrap. Scrap metal meeting the definition of hazardous material or hazardous waste is not included.

#### 1.2.15.8 Wood

Wood is dimension and non-dimension lumber, plywood, chipboard, hardboard. Treated or painted wood that meets the definition of lead contaminated or lead based contaminated paint is not included. Treated wood includes, but is not limited to, lumber, utility poles, crossties, and other wood products with chemical treatment.

### 1.2.16 Surface Discharge

Surface discharge means discharge of water into drainage ditches, storm sewers, or creeks meeting the definition of "waters of the United States". Surface discharges from construction sites are discrete, identifiable sources and require a permit from the governing agency. Comply with federal, state, and local laws and regulations.

### 1.2.17 Wastewater

Wastewater is the used water and solids that flow through a sanitary sewer to a treatment plant.

#### 1.2.17.1 Stormwater

Stormwater is any precipitation in an urban or suburban area that does not evaporate or soak into the ground, but instead collects and flows into storm drains, rivers, and streams.

### 1.2.18 Waters of the United States

Waters of the United States means Federally jurisdictional waters, including wetlands, that are subject to regulation under Section 404 of the Clean Water Act or navigable waters, as defined under the Rivers and Harbors Act.

### 1.2.19 Wetlands

Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

### 1.2.20 Universal Waste

The universal waste regulations streamline collection requirements for certain hazardous wastes in the following categories: batteries, pesticides, mercury-containing equipment (for example, thermostats), and lamps (for example, fluorescent bulbs). The rule is designed to reduce hazardous waste in the municipal solid waste (MSW) stream by making it easier for universal waste handlers to collect these items and send them for recycling or proper disposal. These regulations can be found at 40 CFR 273.

### 1.2.21 Location Specific Universal Waste

Any of the following dangerous waste that are subject to the universal waste requirements of WAC-173-303-573: Batteries as described in WAC-173-303-573(2)); Lamps as described in WAC-173-303-573(5); Mercury-containing equipment as described in WAC-173-303-573(3).

## 1.3 SUBMITTALS

Government approval is required for submittals with a "G" classification. Submittals not having a "G" classification are for information only. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals; G

Environmental Protection Plan; G

## 1.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

Provide and maintain, during the life of the contract, environmental protection as defined. Plan for and provide environmental protective measures to control pollution that develops during construction practice. Plan for and provide environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features associated with the project. Protect the environmental resources within the project boundaries and those affected outside the limits of permanent work during the entire duration of this Contract. Comply with federal, state, and local regulations pertaining to the environment, including water, air, solid waste, hazardous waste and substances, oily substances, and noise pollution.

Tests and procedures assessing whether construction operations comply with Applicable Environmental Laws may be required. Analytical work must be

performed by qualified laboratories; and where required by law, the laboratories must be certified.

## 1.5 SPECIAL ENVIRONMENTAL REQUIREMENTS

The Contractor shall comply with the special environmental requirements listed in the attached Federal Consistency Determination(s) / Water Quality Certificate(s) of Section 00 90 02..

## 1.6 QUALITY ASSURANCE

### 1.6.1 Preconstruction Survey and Protection of Features

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. At the discretion of the contracting officer, prior to start of any onsite construction activities, perform a Preconstruction Survey of the project site with the Contracting Officer, and take photographs showing existing environmental conditions in and adjacent to the site. Submit a report for the record. Include in the report a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. The Contractor and the Contracting Officer will sign this survey report upon mutual agreement regarding its accuracy and completeness. Protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference that their preservation may cause to the work under the Contract.

### 1.6.2 Environmental Brief

Prior to initiating any work on site, meet with the Contracting Officer to discuss the proposed Environmental Protection Plan (EPP) or equipment local requirement. Develop a mutual understanding relative to the details of environmental protection, including measures for protecting natural and cultural resources, required reports, required permits, permit requirements (such as mitigation measures), and other measures to be taken.

### 1.6.3 Environmental Manager

Appoint in writing an Environmental Manager for the project site. The Environmental Manager is directly responsible for coordinating contractor compliance with federal, state, local, and district requirements. The Environmental Manager must ensure compliance with Hazardous Waste Program requirements (including hazardous waste handling, storage, manifesting, and disposal); implement the EPP; ensure environmental permits are obtained, maintained, and closed out; ensure compliance with Stormwater Program requirements; ensure compliance with Hazardous Materials (storage, handling, and reporting) requirements; and coordinate any remediation of regulated substances (lead, asbestos, PCB transformers). This can be a collateral position; however, the person in this position must be trained to adequately accomplish the following duties: ensure waste segregation and storage compatibility requirements are met; ensure only authorized personnel add wastes to containers; ensure Contractor personnel are trained in 40 CFR requirements in accordance with their position requirements; coordinate removal of waste containers; and maintain the Environmental Records binder and required documentation, including

environmental permits compliance and close-out. Submit Environmental Manager Qualifications to the Contracting Officer.

### 1.6.4 Employee Training Records

Prepare and maintain Employee Training Records throughout the term of the contract meeting applicable 40 CFR requirements. Provide Employee Training Records in the Environmental Records Binder. Submit these Assembled Employee Training Records to the Contracting Officer at the conclusion of the project, unless otherwise directed.

Train personnel to meet federal, state, local requirements. Conduct environmental protection/pollution control meetings for personnel prior to commencing construction activities. Conduct additional meetings for new personnel and when site conditions change. Include in the training and meeting agenda: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, 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; recognition and protection of archaeological sites, artifacts, waters of the United States, and endangered species and their habitat that are known to be in the area.

### 1.6.5 Non-Compliance Notifications

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with federal, state or local environmental laws or regulations, permits, and other elements of the Contractor's EPP. After receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. FAR 52.242-14 Suspension of Work provides that a suspension, delay, or interruption of work due to the fault or negligence of the Contractor allows for no adjustments to the contract for time extensions or equitable adjustments. In addition to a suspension of work, the Contracting Officer may use additional authorities under the contract or law.

## 1.7 ENVIRONMENTAL PROTECTION PLAN

The purpose of the EPP is to present an overview of known or potential environmental issues that must be considered and addressed during construction. Include in the EPP measures for protecting natural and cultural resources, required reports, and other measures to be taken. Meet with the Contracting Officer or Contracting Officer Representative to discuss the EPP and develop a mutual understanding relative to the details for environmental protection including measures for protecting natural resources, required reports, and other measures to be taken. Submit the EPP not less than 10 days before the preconstruction meeting. Revise the EPP throughout the project to include any reporting requirements, changes in site conditions, or contract modifications that change the project scope of work in a way that could have an environmental impact. No requirement in this section will relieve the Contractor of any applicable federal, state, and local environmental protection laws and regulations. During Construction, identify, implement, and submit for approval any additional requirements to be included in the EPP. Maintain the current version onsite.

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

The EPP includes, but is not limited to, the following elements:

1.7.1 General Overview and Purpose

1.7.1.1 Descriptions

a. Erosion and sediment control plan which identifies the type and location of the erosion and sediment controls to be provided. The plan must include monitoring and reporting requirements to assure that the control measures are in compliance with the erosion and sediment control plan, Federal, State, and local laws and regulations. A Storm Water Pollution Prevention Plan (SWPPP) may be substituted for this plan.

b. Traffic control plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Plan shall include measures to minimize the amount of mud transported onto paved public roads by vehicles or runoff.

c. Spill control plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. The Spill Control Plan supplements the requirements of EM 385-1-1.

d. Non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris and schedules for disposal.

e. Recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources. The plan shall detail the Contractor's actions to comply with and to participate in Federal, State, Regional and local Government sponsored recycling programs to reduce the volume of solid waste at the source.

f. Air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become air borne and travel off the project site.

g. Contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials.

h. Waste water management plan that identifies the methods and procedures for management and/or discharge of waste waters which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, disinfecting of water, hydrostatic test water, and water used in flushing of lines.

i. Historical, archaeological, cultural resources biological resources and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands known to be on the project site: and/or identifies procedures to be followed if historical archaeological, cultural resources, biological resources and wetlands not previously known to be onsite or in the area are discovered during construction.

1.7.1.2 Duties

The duties and level of authority assigned to the person(s) on the job site who oversee environmental compliance, such as who is responsible for adherence to the EPP, who is responsible for spill cleanup and training personnel on spill response procedures, who is responsible for manifesting hazardous waste to be removed from the site (if applicable), and who is responsible for training the Contractor's environmental protection personnel.

1.7.1.3 Procedures

A copy of any standard or project-specific operating procedures that will be used to effectively manage and protect the environment on the project site.

1.7.1.4 Communications

Communication and training procedures that will be used to convey environmental management requirements to Contractor employees and subcontractors.

1.7.1.5 Contact Information

Emergency contact information contact information (office phone number, cell phone number, and e-mail address).

1.7.2 General Site Information

1.7.2.1 Drawings

Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, jurisdictional wetlands, material storage areas, structures, sanitary facilities, storm drains and conveyances, and stockpiles of excess soil.

1.7.2.2 Work Area

Work area plan showing the proposed activity in each portion of the area and identify the areas of limited use or nonuse. Include measures for marking the limits of use areas, including methods for protection of features to be preserved within authorized work areas and methods to control runoff and to contain materials on site, and a traffic control plan.

Show where any fuels, hazardous substances, solvents, or lubricants will be stored. Provide a spill plan to address any releases of those materials.

1.7.2.3 Documentation

A letter signed by an officer of the firm appointing the Environmental Manager and stating that person is responsible for managing and implementing the Environmental Program as described in this contract. Include in this letter the Environmental Manager's authority to direct the removal and replacement of non-conforming work.

1.7.3 Management of Natural Resources

a. Land resources

b. Tree protection

c. Replacement of damaged landscape features

d. Temporary construction

e. Stream crossings

f. Fish and wildlife resources

g. Wetland areas

1.7.4 Protection of Historical and Archaeological Resources

a. Objectives

b. Methods

1.7.5 Protection of the Environment from Waste Derived from Contractor Operations

Control and disposal of solid and sanitary waste.

Control and disposal of hazardous waste.

This item consist of the management procedures for hazardous waste to be generated. The elements of those procedures will coincide with the Installation Hazardous Waste Management Plan when within an installation. The Contracting Officer will provide a copy of the Installation Hazardous Waste Management Plan as applicable.

At a minimum, include the following:

a. List of the types of hazardous wastes expected to be generated

b. Procedures to ensure a written waste determination is made for appropriate wastes that are to be generated

c. Sampling/analysis plan, including laboratory method(s) that will be used for waste determinations and copies of relevant laboratory certifications

d. Methods and proposed locations for hazardous waste accumulation/storage (that is, in tanks or containers)

e. Management procedures for storage, labeling, transportation, and disposal of waste (treatment of waste is not allowed unless

specifically noted)

f. Management procedures and regulatory documentation ensuring disposal of hazardous waste complies with Land Disposal Restrictions (40 CFR 268 )

g. Management procedures for recyclable hazardous materials such as lead-acid batteries, used oil, and similar

h. Used oil management procedures in accordance with 40 CFR 279; Hazardous waste minimization procedures

i. Plans for the disposal of hazardous waste by permitted facilities; and Procedures to be employed to ensure required employee training records are maintained.

1.7.6 Prevention of Releases to the Environment

Procedures to prevent releases to the environment

Notifications in the event of a release to the environment

1.7.7 Regulatory Notification and Permits

List what notifications and permit applications must be made. Some permits require up to 180 days to obtain. Demonstrate that those permits have been obtained or applied for by including copies of applicable environmental permits. The EPP will not be approved until the permits have been obtained.

1.7.8 Clean Air Act Compliance

1.7.8.1 Pollution Generating Equipment

Identify air pollution generating equipment or processes that may require federal, state, or local permits under the Clean Air Act. Ensure required permits are obtained prior to installing and operating applicable equipment/processes.

1.7.8.2 Stationary Internal Combustion Engines

Identify portable and stationary internal combustion engines that will be supplied, used or serviced. Comply with 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, 40 CFR 63 Subpart ZZZZ, and local regulations as applicable. At minimum, include the make, model, serial number, manufacture date, size (engine brake horsepower), and EPA emission certification status of each engine. Maintain applicable records and log hours of operation and fuel use. Logs must include reasons for operation and delineate between maintenance/testing, emergency, and non-emergency operation.

1.7.8.3 Air Pollution-engineering Processes

Identify planned air pollution-generating processes and management control measures (including, but not limited to, spray painting, abrasive blasting, demolition, material handling, fugitive dust, and fugitive emissions). Log hours of operations and track quantities of materials used.

#### 1.7.8.4 Compliant Materials

Provide the Government a list of SDSs for all hazardous materials proposed for use on site. Materials must be compliant with all Clean Air Act regulations for emissions including solvent and volatile organic compound contents, and applicable National Emission Standards for Hazardous Air Pollutants requirements.

### 1.7.9 Appendix

Attach to the Environmental Protection Plan, as an appendix, copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents.

## 1.8 LICENSES AND PERMITS

Obtain licenses and permits required for the construction of the project and in accordance with FAR 52.236-7 Permits and Responsibilities. Notify the Government of all equipment that may require permits or special approvals that the Contractor plans to use on site. This paragraph supplements the Contractor's responsibility under FAR 52.236-7 Permits and Responsibilities.

a. Permits obtained by the Government are included in Section 00 90 02

## 1.9 ENVIRONMENTAL RECORDS BINDER

Maintain on-site a separate three-ring Environmental Records Binder and submit at the completion of the project. Make separate parts within the binder that correspond to each submittal listed under paragraph CLOSEOUT SUBMITTALS in this section.

## 1.10 SOLID WASTE MANAGEMENT PERMIT

Provide the Contracting Officer with written notification of the quantity of anticipated solid waste or debris that is anticipated or estimated to be generated by construction. Include in the report the locations where various types of waste will be disposed or recycled. Include letters of acceptance from the receiving location or as applicable; submit one copy of the receiving location state and local Solid Waste Management Permit or license showing such agency's approval of the disposal plan before transporting wastes off Government property.

### 1.10.1 Monthly Solid Waste Disposal Report

Monthly, submit a solid waste disposal report to the Contracting Officer. For each waste, the report will state the classification (using the definitions provided in this section), amount, location, and name of the business receiving the solid waste.

# PART 2 PRODUCTS

Not Used

# PART 3 EXECUTION

## 3.1 PROTECTION OF NATURAL RESOURCES

Minimize interference with, disturbance to, and damage to fish, wildlife, and plants, including their habitats. Prior to the commencement of activities, consult with the Contracting Officer as applicable, regarding rare species or sensitive habitats that need to be protected. The protection of rare, threatened, and endangered animal and plant species identified, including their habitats, is the Contractor's responsibility.

Preserve the natural resources within the project boundaries and outside the limits of permanent work. Restore to an equivalent or improved condition upon completion of work that is consistent with the requirements of federal, state, or local laws and as specified within these specifications. Confine construction activities to within the limits of the work indicated or specified.

### 3.1.1 Flow Ways

Do not alter water flows or otherwise significantly disturb the native habitat adjacent to the project and critical to the survival of fish and wildlife, except as specified and permitted.

### 3.1.2 Vegetation

Except in areas to be cleared, do not remove, cut, deface, injure, or destroy trees or shrubs without the Contracting Officer's permission. Do not fasten or attach ropes, cables, or guys to existing nearby trees for anchorages unless authorized by the Contracting Officer. Where such use of attached ropes, cables, or guys is authorized, the Contractor is responsible for any resultant damage.

Protect existing trees that are to remain to ensure they are not injured, bruised, defaced, or otherwise damaged by construction operations. Remove displaced rocks from uncleared areas. Coordinate with the Contracting Officer to determine appropriate action for trees and other landscape features scarred or damaged by equipment operations.

### 3.1.3 Streams

Stream crossings must allow movement of materials or equipment without violating water pollution control standards of the federal, state, and local governments. Construction of stream crossing structures must be in compliance with all required permits including, but not limited to, Clean Water Act Section 404, and Section 401 Water Quality.

The Contracting Officer's approval and appropriate permits are required before any equipment will be permitted to ford live streams. In areas where frequent crossings are required, install temporary culverts or bridges. Obtain Contracting Officer's approval prior to installation. Remove temporary culverts or bridges upon completion of work, and repair the area to its original condition unless otherwise required by the Contracting Officer.

## 3.2 EROSION AND SEDIMENT CONTROL

### 3.2.1 Erosion and Sediment Controls

The Contractor shall be responsible for providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The area of bare soil exposed at any one time by construction operations should be kept to a minimum. The Contractor shall Construct or install temporary and permanent erosion and sediment control Best Management Practices (BMPs). BMPs may include, but not be limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. Any temporary measures shall be removed after the area has been stabilized.

Erosion control inspection reports may be compiled as part of a stormwater pollution prevention plan inspection reports.

### 3.2.2 Work Area Limits

Mark the areas that need not be disturbed under this Contract prior to commencing construction activities. Mark or fence isolated areas within the general work area that are not to be disturbed. Protect monuments and markers before construction operations commence. Where construction operations are to be conducted during darkness, all markers must be visible in the dark. Personnel must be knowledgeable of the purpose for marking and protecting particular objects.

### 3.2.3 Contractor Facilities and Work Areas

Place field offices, staging areas, stockpile storage, and temporary buildings in areas designated on the drawings or as directed by the Contracting Officer. Move or relocate the Contractor facilities only when approved by the Government. Provide erosion and sediment controls for onsite borrow and spoil areas to prevent sediment from entering nearby waters. Control temporary excavation and embankments for plant or work areas to protect adjacent areas.

## 3.3 SURFACE AND GROUNDWATER

### 3.3.1 Cofferdams, Diversions, and Dewatering

Construction operations for dewatering, removal of cofferdams, tailrace excavation, and tunnel closure must be constantly controlled to maintain compliance with existing state water quality standards and designated uses of the surface water body. Comply with State water quality standards and anti-degradation provisions and the Clean Water Act Section 404. Do not discharge excavation ground water to the sanitary sewer, storm drains, or to surface waters without prior specific authorization in writing from the Contracting Officer. Discharge of hazardous substances will not be permitted under any circumstances. Use sediment control BMPs to prevent construction site runoff from directly entering any storm drain or surface waters.

If the construction dewatering is noted or suspected of being contaminated, it may only be released to the storm drain system if the

discharge is specifically permitted. Obtain authorization for any contaminated groundwater release in advance from the Contracting Officer and the federal or state authority, as applicable. Discharge of hazardous substances will not be permitted under any circumstances.

### 3.3.2 Waters of the United States

Do not enter, disturb, destroy, or allow discharge of contaminants into waters of the United States. The protection of waters of the United States shown on the drawings in accordance with paragraph LICENSES AND PERMITS is the Contractor's responsibility. Authorization to enter specific waters of the United States identified does not relieve the Contractor from any obligation to protect other waters of the United States within, adjacent to, or in the vicinity of the construction site and associated boundaries.

## 3.4 PROTECTION OF CULTURAL RESOURCES

### 3.4.1 Archaeological Resources

Existing archaeological resources within the work area are shown on the drawings. Protect these resources and be responsible for their preservation during the life of the Contract. If, during excavation or other construction activities, any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, activities that may damage or alter such resources will be suspended. Resources covered by this paragraph include, but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, immediately notify 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. Cease all activities that may result in impact to or the destruction of these resources. Secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources. The Government retains ownership and control over archaeological resources.

### 3.4.2 Historical Resources

Existing historical resources within the work area are shown on the drawings. Protect these resources and be responsible for their preservation during the life of the Contract.

## 3.5 AIR RESOURCES

Equipment operation, activities, or processes will be in accordance with 40 CFR 64 and state air emission and performance laws and standards.

### 3.5.1 Particulates

Dust particles, aerosols and gaseous by-products from construction activities, and processing and preparation of materials (such as from asphaltic batch plants) must be controlled at all times, including weekends, holidays, and hours when work is not in progress. Maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or

outside the project boundaries free from particulates that would exceed 40 CFR 50, state, and local air pollution standards or that would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators, or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp. Provide sufficient, competent equipment available to accomplish these tasks. Perform particulate control as the work proceeds and whenever a particulate nuisance or hazard occurs. Comply with state and local visibility regulations.

### 3.5.2 Burning

Burning will not be allowed on the project site unless specified in other sections of the specifications or authorized in writing by the Contracting Officer. The specific time, location, and manner of burning will be subject to approval.

### 3.5.3 Odors

Control odors from construction activities. The odors must be in compliance with state regulations and local ordinances and may not constitute a health hazard.

## 3.6 WASTE MINIMIZATION

Minimize the use of hazardous materials and the generation of waste. Include procedures for pollution prevention/ hazardous waste minimization in the Hazardous Waste Management Section of the EPP. Describe the anticipated types of the hazardous materials to be used in the construction when requesting information.

### 3.6.1 Salvage, Reuse and Recycle

Identify anticipated materials and waste for salvage, reuse, and recycling. Describe actions to promote material reuse, resale or recycling. To the extent practicable, all scrap metal must be sent for reuse or recycling and will not be disposed of in a landfill.

Include the name, physical address, and telephone number of the hauler, if transported by a franchised solid waste hauler. Include the destination and, unless exempted, provide a copy of the state or local permit (cover) or license for recycling.

## 3.7 WASTE MANAGEMENT AND DISPOSAL

### 3.7.1 Waste Determination Documentation

Complete a Waste Determination form (provided at the pre-construction conference) for Contractor-derived wastes to be generated. All potentially hazardous solid waste streams that are not subject to a specific exclusion or exemption from the hazardous waste regulations (e.g., scrap metal, domestic sewage) or subject to special rules, (lead-acid batteries and precious metals) must be characterized in accordance with the requirements of 40 CFR 262.11 or corresponding applicable state or local regulations. Base waste determination on user knowledge of the processes and materials used, and analytical data when necessary. Attach support documentation to the Waste Determination form. As a minimum, provide a Waste Determination form for the following waste

(this listing is not exhaustive): oil- and latex -based painting and caulking products, solvents, adhesives, aerosols, petroleum products, and containers of the original materials.

### 3.7.2 Solid Waste Management

#### 3.7.2.1 Project Solid Waste Disposal Documentation Report

Provide copies of the waste handling facilities' weight tickets, receipts, bills of sale, and other sales documentation. In lieu of sales documentation, a statement indicating the disposal location for the solid waste that is signed by an employee authorized to legally obligate or bind the firm may be submitted. The sales documentation must include the receiver's tax identification number and business, EPA or state registration number, along with the receiver's delivery and business addresses and telephone numbers. For each solid waste retained for the Contractor's own use, submit the information previously described in this paragraph on the solid waste disposal report. Prices paid or received do not have to be reported to the Contracting Officer unless required by other provisions or specifications of this Contract or public law.

#### 3.7.2.2 Control and Management of Solid Wastes

Pick up solid wastes, and place in covered containers that are regularly emptied. Do not prepare or cook food on the project site. Prevent contamination of the site or other areas when handling and disposing of wastes. At project completion, leave the areas clean. Employ segregation measures so that no hazardous or toxic waste will become co-mingled with non-hazardous solid waste. Segregate and separate treated wood components disposed at a lined landfill approved to accept this waste in accordance with local and state regulations] Solid waste disposal offsite must comply with most stringent local, state, and federal requirements, including 40 CFR 241, 40 CFR 243, and 40 CFR 258.

Manage hazardous material used in construction, including but not limited to, aerosol cans, waste paint, cleaning solvents, contaminated brushes, and used rags, in accordance with 49 CFR 173.

### 3.7.3 Control and Management of Hazardous Waste

Do not dispose of hazardous waste on Government property. Do not discharge any waste to a sanitary sewer, storm drain, or to surface waters or conduct waste treatment or disposal on Government property without written approval of the Contracting Officer.

#### 3.7.3.1 Hazardous Waste/Debris Management

Identify construction activities that will generate hazardous waste or debris. Provide a documented waste determination for resultant waste streams. Identify, label, handle, store, and dispose of hazardous waste or debris in accordance with federal, state, and local regulations, including 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, and 40 CFR 268.

Manage hazardous waste in accordance with the approved Hazardous Waste Management Section of the EPP. Store hazardous wastes in approved containers in accordance with 49 CFR 173 and 49 CFR 178. Provide the Contracting Officer with a copy of waste determination documentation for any solid waste streams that have any potential to be hazardous waste or

contain any chemical constituents listed in 40 CFR 372-SUBPART D.

3.7.3.2 Universal Waste Management

Manage the following categories of universal waste in accordance with federal, state, and local requirements and Contracting Officer instructions:

a. Batteries as described in 40 CFR 273.2

b. Lamps as described in 40 CFR 273.5

c. Mercury-containing equipment as described in 40 CFR 273.4

d. Aerosol cans as described in 40 CFR 273.6

e. Pesticides as described in 40 CFR 273.3

Mercury is prohibited in the construction of this facility, unless specified otherwise, and with the exception of mercury vapor lamps and fluorescent lamps. Dumping of mercury-containing materials and devices such as mercury vapor lamps, fluorescent lamps, and mercury switches, in rubbish containers is prohibited. Remove without breaking, pack to prevent breakage, and transport out of the activity in an unbroken condition for disposal as directed.

3.7.3.3 Electronics End-of-Life Management

Recycle or dispose of electronics waste, including, but not limited to, used electronic devices such computers, monitors, hard-copy devices, televisions, mobile devices, in accordance with 40 CFR 260-262, state, and local requirements, and Contracting Officer instructions.

3.7.3.4 Disposal Documentation for Hazardous and Regulated Waste

Submit a copy of the applicable EPA and or state permit(s), manifest(s), or license(s) for transportation, treatment, storage, and disposal of hazardous and regulated waste by permitted facilities. Hazardous or toxic waste manifests must be reviewed, signed, and approved by the Contracting Officer before the Contractor may ship waste.

3.7.4 Releases/Spills of Oil and Hazardous Substances

3.7.4.1 Response and Notifications

Exercise due diligence to prevent, contain, and respond to spills of hazardous material, hazardous substances, hazardous waste, sewage, regulated gas, petroleum, lubrication oil, and other substances regulated in accordance with 40 CFR 300. Maintain spill cleanup equipment and materials at the work site. In the event of a spill, take prompt, effective action to stop, contain, curtail, or otherwise limit the amount, duration, and severity of the spill/release. In the event of any releases of oil and hazardous substances, chemicals, or gases; immediately (within 15 minutes) notify the state and local authorities as well as the Contracting Officer.

Submit verbal and written notifications as required by the federal ( 40 CFR 300.125 and 40 CFR 355), state, local regulations and instructions. Provide copies of the written notification and

documentation that a verbal notification was made within 20 days. Spill response must be in accordance with 40 CFR 300 and applicable state and local regulations. Contain and clean up these spills without cost to the Government.

3.7.4.2 Clean Up

Clean up hazardous and non-hazardous waste spills. Reimburse the Government for costs incurred including sample analysis materials, clothing, equipment, and labor if the Government will initiate its own spill cleanup procedures, for Contractor- responsible spills, when: Spill cleanup procedures have not begun within one hour of spill discovery/occurrence; or, in the Government's judgment, spill cleanup is inadequate and the spill remains a threat to human health or the environment.

3.7.5 Mercury Materials

Immediately report to the Environmental Office and the Contracting Officer instances of breakage or mercury spillage. Clean mercury spill area to the satisfaction of the Contracting Officer.

Do not recycle a mercury spill cleanup; manage it as a hazardous waste for disposal.

3.7.6 Wastewater

3.7.6.1 Disposal of Wastewater

Disposal of wastewater must be as specified below.

3.7.6.1.1 Treatment

Do not allow wastewater from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, and forms to enter water ways or to be discharged prior to being treated to remove pollutants. Dispose of the construction- related waste water in accordance with 40 CFR 403, state, regional, and local laws and regulations.

3.7.6.1.2 Surface Discharge

For discharge of ground water, obtain a state or federal permit specific for pumping and discharging ground water prior to surface discharging.

3.7.6.1.3 Land Application

Water generated from the flushing of lines after disinfection or disinfection in conjunction with hydrostatic testing must be applied in accordance with federal, state, and local laws and regulations for land application.

3.8 HAZARDOUS MATERIAL MANAGEMENT

Include hazardous material control procedures in the Safety Plan, in accordance with Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS. Address procedures and proper handling of hazardous materials, including the appropriate transportation requirements. Use hazardous materials in a manner that minimizes the amount of hazardous waste generated. Containers

of hazardous materials must have National Fire Protection Association labels or their equivalent. Certify that hazardous materials removed from the site are hazardous materials and do not meet the definition of hazardous waste, in accordance with 40 CFR 261 and state requirements.

## 3.9 PREVIOUSLY USED EQUIPMENT

Clean previously used construction equipment prior to bringing it onto the project site. Equipment must be free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. Consult with the U.S. Department of Agriculture jurisdictional office for additional cleaning requirements.

## 3.10 MILITARY MUNITIONS

In the event military munitions, as defined in 40 CFR 260, are discovered or uncovered, immediately stop work in that area and immediately inform the Contracting Officer.

## 3.11 PETROLEUM, OIL, LUBRICANT (POL) STORAGE AND FUELING

POL products include flammable or combustible liquids, such as gasoline, diesel, lubricating oil, used engine oil, hydraulic oil, mineral oil, and cooking oil. Store POL products and fuel equipment and motor vehicles in a manner that affords the maximum protection against spills into the environment. Manage and store POL products in accordance with EPA 40 CFR 112, and other federal, state, regional, and local laws and regulations. Use secondary containments, dikes, curbs, and other barriers, to prevent POL products from spilling and entering the ground, storm or sewer drains, stormwater ditches or canals, or navigable waters of the United States. Describe in the EPP (see paragraph ENVIRONMENTAL PROTECTION PLAN) how POL tanks and containers must be stored, managed, and inspected and what protections must be provided. Storage of fuel on the project site must be in accordance with EPA, state, and local laws and regulations and paragraph OIL STORAGE INCLUDING FUEL TANKS.

### 3.11.1 Used Oil Management

Manage used oil generated on site in accordance with 40 CFR 279. Determine if any used oil generated while onsite exhibits a characteristic of hazardous waste. Used oil containing 1,000 parts per million of solvents is considered a hazardous waste and disposed of at the Contractor's expense. Used oil mixed with a hazardous waste is also considered a hazardous waste. Dispose in accordance with paragraph HAZARDOUS WASTE DISPOSAL.

### 3.11.2 Oil Storage Including Fuel Tanks

Provide secondary containment and overfill protection for oil storage tanks. A berm used to provide secondary containment must be of sufficient size and strength to contain the contents of the tanks plus 5 inches freeboard for precipitation. Construct the berm to be impervious to oil for 72 hours that no discharge will permeate, drain, infiltrate, or otherwise escape before cleanup occurs. Use drip pans during oil transfer operations; adequate absorbent material must be onsite to clean up any spills and prevent releases to the environment. Cover tanks and drip pans during inclement weather. Provide procedures and equipment to prevent overfilling of tanks. If tanks and containers with an aggregate aboveground capacity greater than 1320 gallons will be used onsite (only

containers with a capacity of 55 gallons or greater are counted), provide and implement a Spill Prevention Control and Countermeasure (SPCC) plan meeting the requirements of 40 CFR 112. Submit the SPCC plan to the Contracting Officer for approval.

Monitor and remove any rainwater that accumulates in open containment dikes or berms. Inspect the accumulated rainwater prior to draining from a containment dike to the environment, to determine there is no oil sheen present.

## 3.12 INADVERTENT DISCOVERY OF PETROLEUM-CONTAMINATED SOIL OR HAZARDOUS WASTES

If petroleum-contaminated soil, or suspected hazardous waste is found during construction that was not identified in the Contract documents, immediately notify the Contracting Officer. Do not disturb this material until authorized by the Contracting Officer.

## 3.13 SOUND INTRUSION

Keep construction activities under surveillance and control to minimize environment damage by noise.

### 3.13.1 Noise Level Criteria

Maximum sound pressure levels measured at the booster pumps, engine generators and vehicles including muffler and exhaust components, shall not exceed decibel values prescribed by Federal, State and local codes and regulations. The foregoing applies with the pumps under normal operating conditions at not less than 50% full rated load. Tests will be performed at no additional cost to the Government by the Contractor, or the pump engine and generator manufacturer or by an approved testing agency having proven capability in noise measurements and using approved measurement equipment and acceptable measurement procedures. Test data will be submitted to the Contracting Officer for approval 5 days after the commencement of dredging operations. Should the sound pressure (noise) level test data indicate a need for sound reduction, the Contractor will provide necessary enclosures, baffles or any other appropriate means around booster pumps and engine generators including muffler and exhaust components, so as to attain noise levels which do not exceed those prescribed by aforementioned regulations. Details of the proposed enclosure or baffling arrangement shall be submitted to the Contracting Officer for approval. Such details will be accomplished by calculations, which indicate anticipated compliance of sound pressure (noise) levels with codes and regulations noted herein before. All this is especially enforceable where these booster and engine generators locations are in bathing areas.

## 3.14 POST CONSTRUCTION CLEANUP

Clean up areas used for construction in accordance with Contract Clause: "Cleaning Up". Unless otherwise instructed in writing by the Contracting Officer, remove traces of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. Grade parking area and similar temporarily used areas to conform with surrounding contours.

-- End of Section --

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SECTION 01 58 00

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**08/19, CHG 5: 08/22**

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# SECTION 01 58 00

# PROJECT IDENTIFICATION
**08/19, CHG 5: 08/22**

## 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 within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

| | |
|---|---|
| EP 310-1-6a | (2006; 2019 Change 2) Project Operation -- Sign Standards Manual, VOL 1 |
| EP 310-1-6b | (2006) Sign Standards Manual, VOL 2, Appendices |

### 1.2 SUBMITTALS

Government approval is required for submittals with a "G" classification. Submittals not having a "G" classification are for information only. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Sign Legend Orders; G

### 1.3 PROJECT IDENTIFICATION SIGN

#### 1.3.1 Construction Project Signs

Furnish the construction project sign package, maintain the signs during construction, and remove the signs from the job site upon completion of the project. The construction project sign package consists of two signs: one for project identification and the other to show the on-the-job safety performance of the contractor. Ensure that the package conforms to the requirements of EP 310-1-6a and EP 310-1-6b, specifically Section 16. Submit the sign legend orders as described in Section 16 of EP 310-1-6a before erecting the signs.

Utilize the Example Graphic of Signage with Dimensions for Civil Works Project and follow USACE policy provided in Engineering Pamphlet (EP) 310-1-6a, Sign Standards Manual, VOL 1 for guidelines on fabricating, locating, and mounting construction project signs (https://www.publications.usace.army.mil/Portals/76/Users/182/86/2486/EP_310-1-6a%20change%202.pdf).

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

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**05/19, CHG 1: 08/21**

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-- End of Section Table of Contents --

# SECTION 01 78 00

# CLOSEOUT SUBMITTALS
**05/19, CHG 1: 08/21**

## 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 within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

| | |
|---|---|
| ERDC/ITL TR-19-6 | (2019) A/E/C Graphics Standard, Release 2.1 |
| ERDC/ITL TR-19-7 | (2019) A/E/C CAD Standard - Release 6.1 |

### 1.2 DEFINITIONS

#### 1.2.1 As-Built Drawings

As-built drawings are the marked-up drawings, maintained by the Contractor on-site, that depict actual conditions and deviations from the Contract Documents. These deviations and additions may result from coordination required by, but not limited to: contract modifications; official responses to submitted Requests for Information (RFI's); direction from the Contracting Officer; design that is the responsibility of the Contractor, and differing site conditions. Maintain the as-builts throughout construction as red-lined PDF files. These files serve as the basis for the creation of the record drawings.

#### 1.2.2 Record Drawings

The record drawings are the final compilation of actual conditions reflected in the as-built drawings.

### 1.3 SOURCE DRAWING FILES

Request the full set of electronic drawings, in the source format, for Record Drawing preparation, after award and at least 30 days prior to required use.

#### 1.3.1 Terms and Conditions

Data contained on these electronic files must not be used for any purpose other than as a convenience in the preparation of construction [drawings and ]data for the referenced project. Any other use or reuse is at the sole risk of the Contractor and without liability or legal exposure to the Government. The Contractor must make no claim and waives to the fullest extent permitted by law, any claim or cause of action of any nature against the Government, its agents or sub consultants that may arise out of or in connection with the use of these electronic files. The Contractor must, to the fullest extent permitted by law, indemnify and hold the Government harmless against all damages, liabilities or costs, including reasonable attorney's fees and defense costs, arising out of or

resulting from the use of these electronic files.

These electronic CAD drawing files are not construction documents. Differences may exist between the CAD files and the corresponding construction documents. The Government makes no representation regarding the accuracy or completeness of the electronic CAD files, nor does it make representation to the compatibility of these files with the Contractor hardware or software. In the event that a conflict arises between the signed and sealed construction documents prepared by the Government and the furnished Source drawing files, the signed and sealed construction documents govern. The Contractor is responsible for determining if any conflict exists. Use of these Source Drawing files does not relieve the Contractor of duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate the work of all contractors for the project. If the Contractor uses, duplicates or modifies these electronic source drawing files for use in producing construction [drawings and ]data related to this contract, remove all previous indicia of ownership (seals, logos, signatures, initials and dates).

## 1.4 RECORD DRAWINGS

The Government will provide pdf and or program files at the preconstruction conference that contains one set of "as-designed" electronic CAD files in the specified software and format revised to reflect all amendments and the final contract PDF drawings. The CAD files are provided to enable preparation of as-built or as-constructed drawings. If discrepancies exist between the CAD files and the contract PDF drawings, correct the CAD files to show the contract PDF drawings.

### 1.4.1 Variation with Contract Drawings

The electronic files provided are not part of the contract documents. If there is any discrepancy between the electronic files and the contract drawings, the contract drawings govern. The Government has no responsibility to modify any GFM due to changes in the design that occur after award.

Evaluate the content and quality of the GFM upon receipt. If major discrepancies or omissions occur in the GFM, notify the Contracting Officer and indicate the nature of such variations.

### 1.4.2 Data Loss, Corruption, and Error

Transfer of GFM files may result in corrupted files resulting in data loss and errors. Use of GFM files at own risk. Verify data integrity upon receipt and request a replacement if necessary. Make any adjustment in file structure, format, or software version as needed to make GFM compatible with computer systems and/or software to meet the requirements of the contract.

### 1.4.3 Modeling Completeness and Quality

The Government makes no guarantee that the GFM provide the level of completeness or quality as required by the contract. Further, the Government makes no guarantee that identified variations will be corrected upon notification.

## 1.5 SUBMITTALS

Government approval is required for submittals with a "G" classification. Submittals not having a "G" classification are for information only. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-11 Closeout Submittals

As-Built Drawings; G

Record Drawings; G

## 1.6 QUALITY CONTROL

Additions and corrections to the contract drawings must be equal in quality and detail to that of the originals. Line colors, line weights, lettering, layering conventions, and symbols must conform to ERDC/ITL TR-19-7.

# PART 2 PRODUCTS

## 2.1 RECORD DRAWINGS

Prepare the CAD drawing files in MicroStation DGN format compatible with a Windows operating system.

### 2.1.1 Additional Drawings

If additional drawings are required, prepare them using the specified electronic file format applying the same graphic standards specified for original drawings. The title block and drawing border to be used for any new final record drawings must be identical to that used on the contract drawings.

#### 2.1.1.1 Sheet Numbers and File Names

If a sheet needs to be added between two sequential sheets, append a Supplemental Drawing Designator in accordance with ERDC/ITL TR-19-7 Adding a drawing sheet, and ERDC/ITL TR-19-6 Adding or deleting drawing sheets and index sheet procedures.

# PART 3 EXECUTION

## 3.1 AS-BUILT DRAWINGS

Provide and maintain two black line print copies of the PDF contract drawings for As-Built Drawings. Maintain the as-builts throughout construction as red-lined hard copies on site or red-lined PDF files.

### 3.1.1 Markup Guidelines

Make comments and markup the drawings complete without reference to letters, memos, or materials that are not part of the As-Built drawing. Show what was changed, how it was changed, where item(s) were relocated and change related details. These working as-built markup prints must be neat, legible and accurate as follows:

a. Use base colors of red, green, and blue. Color code for changes as

follows:

(1) Special (Blue) - Items requiring special information, coordination, or special detailing or detailing notes.

(2) Deletions (Red) - Over-strike deleted graphic items (lines), lettering in notes and leaders.

(3) Additions (Green) - Added items, lettering in notes and leaders.

b. Provide a legend if colors other than the "base" colors of red, green, and blue are used.

c. Add and denote any additional equipment or material facilities, service lines, incorporated under As-Built Revisions if not already shown in legend.

d. Use frequent written explanations on markup drawings to describe changes. Do not totally rely on graphic means to convey the revision.

e. Use legible lettering and precise and clear digital values when marking prints. Clarify ambiguities concerning the nature and application of change involved.

f. Wherever a revision is made, also make changes to related section views, details, legend, profiles, plans and elevation views, schedules, notes and call out designations, and mark accordingly to avoid conflicting data on all other sheets.

g. For deletions, cross out all features, data and captions that relate to that revision.

h. For changes on small-scale drawings and in restricted areas, provide large-scale inserts, with leaders to the applicable location.

i. Indicate one of the following when attaching a print or sketch to a markup print:

(1) Add an entire drawing to contract drawings

(2) Change the contract drawing to show changes on the drawing.

(3) Provided for reference only to further detail the initial design.

j. Incorporate all shop and fabrication drawings into the markup drawings.

### 3.1.2 As-Built Drawings Content

Revise As-Built Drawings or red-lined PDF files in accordance with ERDC/ITL TR-19-6 and ERDC/ITL TR-19-7. Keep these working as-built markup drawings current on a weekly basis and at least one set available on the jobsite at all times. Changes from the contract drawings which are made during construction or additional information which might be uncovered in the course of construction must be accurately and neatly recorded as they occur by means of details and notes. Submit the working as-built markup drawings for approval prior to submission of each monthly pay estimate. For failure to maintain the working and final record drawings as specified herein, the Contracting Officer may withhold a monthly progress payment until approval of updated drawings. Show on the as-built drawings, but

not limited to, the following information:

a. The location and description of any bridges, utility lines, or any other structures or or obstructions within the construction area. The location includes dimensions to permanent features.

b. The location and dimensions of any changes with the channel.

c. The grade or alignment of channel, structures or utilities if any changes were made from the contract plans.

d. Correct elevations if changes were made in channel depths.

e. All changes, which result from contract modifications.

f. Where contract drawings or specifications allow options, only the option selected for construction shall be shown on the as-built prints.

g. All amendments to the contract drawings issued during the solicitation period shall be posted on the as-built drawings

## 3.2 RECORD DRAWING FILES

If additional drawings are required, prepare them using the specified electronic file format applying the same graphic standards specified for original drawings. The title block and drawing border to be used for any new final record drawings must be identical to that used on the contract drawings. Accomplish additions and corrections to the contract drawings using CAD files. Provide all program files and hardware necessary to prepare final PDF record drawings. The Contracting Officer will review final PDF record drawings for accuracy and return them to the Contractor fo r required corrections, changes, additions, and deletions.

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SECTION 35 20 23

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**06/26**

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# SECTION 35 20 23

# DREDGING
**06/26**

## PART 1 GENERAL

### 1.1 GENERAL INFORMATION

This Section covers furnishing suitable dredging plant and performing all work required to remove the specified materials from within the prescribed work area limits as indicated, and placement of the dredge material within the prescribed material placement areas. The Contractor is responsible for making their own investigation of submerged, surface, and overhead structures in the work areas and other locations they find necessary to traverse. The exact location, depths, and heights of various structures including, but not limited to submarine cables, pipes, highlines, docks, piers, bulkheads, and bridges (as applicable), are not known and it will be necessary for the Contractor to ascertain interference problems and notify the respective owners in advance of dredging operations. The Contractor is responsible for making necessary arrangements with the respective owners of the structure(s) to assure satisfactory completion of dredging in the vicinity with a minimum interruption of service, and must perform their operations in such a manner as will avoid damage to these facilities.

### 1.2 DEFINITIONS

#### 1.2.1 Maintenance Material

Maintenance material is defined as that comprising shoaling which has occurred since the channel areas were last dredged.

#### 1.2.2 New Work Material

New work material is defined as previously undredged material.

#### 1.2.3 Hard Material

Hard material is defined as material requiring blasting or the use of special equipment for economical removal, and includes boulders or fragments too large to be removed in one piece by the dredge.

#### 1.2.4 Container and Transport Vessels

The term "container vessel" refers to any vessel used to contain, or hold, dredged material (scow, barge, hopper dredge, etc.). The term "transport vessel" refers to any vessel (tugboat, hopper dredge, work boat, etc.) used to move a container vessel. In the case of a hopper dredge, the hopper dredge may act as both a "container vessel" and a "transport vessel". If hopper dredge engines are not used for propulsion, and another vessel (tugboat, for example) is used to move it, then the hopper dredge would be the "container vessel" and the tugboat would be the "transport vessel".

Vessel Identification and Certification: All vessels (container and transport) that will be used, and/or may be used, during this contract must be identified prior to the first day of dredging. Vessels identified for

use on the contract must be certified to be fully operational, mechanically sound, completely seaworthy, and free of leaks or other defects.

## 1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Submerged Pipeline

Soundings or Sweepings; G
Indicate pipeline location and installation details. Submit drawings of surveys during progress of work by soundings or sweepings.

## 1.4 METHOD OF COMMUNICATION

Provide a system of communication between the dredge crew and the crew at the placement / processing area. A portable two-way radio is acceptable.

## 1.5 OTHER DREDGING OPERATIONS

The Contractor should anticipate the possibility of concurrent dredging operations, adjacent to or nearby the dredge and placement areas in this contract. Delays should be anticipated in transiting to, and through, the placement sites during concurrent dredging and placement operations. As a standard safety precaution, observe all placement site specific restrictions pertaining to the limit of dredges operating within at any given time. Coordination with other dredge plant in the vicinity of the dredge and placement areas is required.

## 1.6 ENVIRONMENTAL COMPLIANCE AND PROTECTION

Comply with conditions and requirements of State or Federal permits. The Government will secure the permit for dredging and placement of material as indicated. See Section 00 90 02.

During the life of the contract, provide and maintain environmental protective measures. Also, environmental protective measures required to correct conditions, such as oil spills or debris, that occur during the dredging operations, must be provided. Comply with Federal, State, and local regulations pertaining to water, air, and noise pollution.

## 1.7 BASIS FOR BIDS

Payment will be at the contract unit price per cubic yard, multiplied by total cubic yards of acceptable dredging. Include a bid unit price per cubic yard of dredging based on the quantity as specified. If the Contracting Officer requires an increase or a decrease in total volume of dredging, the contract price will be adjusted in accordance with the FAR 52.211-18 Variation in Estimated Quantity. Dredging conditions specified and indicated describe conditions which are known. However, the Contractor is responsible for other conditions encountered which are not

unusual when compared to conditions recognized in the dredging business as usual in dredging activities such as those required under this contract.

## PART 2 PRODUCTS

### 2.1 CHARACTER OF MATERIAL

Based on sampling and testing of the proposed dredged material in 2017, the material to be removed consists of primarily, silt, sand, and clay:

a. 0.7% silt, 73.8% sand, and 25.5% gravel.

b. The Contractor is ultimately responsible for determination of the characteristics of materials to be dredged.

## PART 3 EXECUTION

### 3.1 INSPECTION

Inspect the work, keep records of work performed, and ensure that gages, targets, ranges, and other markers are in place and usable for the intended purpose. Provide, at the request of the Contracting Officer, boats, boatmen, laborers, and materials necessary for inspecting, supervising, and surveying the work. When required, provide transportation for the Contracting Officer and inspectors to and from the placement area and between the dredging plant and adjacent points on shore.

The dredge will be inspected by the Contracting Officer, or their representative, prior to beginning work to ensure total dredging plant is in safe working condition. Before any machinery or mechanized equipment is placed in service, it must be inspected and tested by the Contractor and certified to be in safe operating condition.

### 3.2 DREDGING

#### 3.2.1 Order of Work

The order of work shall be determined by the Contractor and discussed during the Preconstruction Conference. The Government reserves the right to change the order of work at any time.

#### 3.2.2 Interference with Navigation

Minimize interference with the use of channels and passages. The Contractor is responsible for shifting or moving of dredges or the interruption of dredging operations to accommodate the movement of vessels and floating equipment, if necessary. Adhere to Coast Guard Regulations for passing vessels.

##### 3.2.2.1 Compensation for Interruption of Operations

If dredging operations are interrupted due to the movement of vessels or floating equipment, no adjustment in the contract time for completion will be made as provided by the contract. The Contractor is required to document the loss of dredging time due to vessel movements on the daily report of the dredging QC and Production form.

### 3.2.3 Lights

Each night, between sunset and sunrise and during periods of restricted visibility, provide lights for floating plants, pipelines, ranges, and markers. Also, provide lights for buoys that could endanger or obstruct navigation. When night work is in progress, maintain lights from sunset to sunrise for the observation of dredging operations. Lighting must conform to United States Coast Guard requirements for visibility and color.

### 3.2.4 Navigation Warnings

Furnish and maintain navigation warning signs along any pipelines. Provide notice to increase public awareness of potential hazards presented by dredge plant equipment by stating the location, date of construction, equipment mooring, marshaling areas, using local newspapers, radios, television, waterway users associations, or other appropriate area specific communication networks. Ensure that an announcement is made through the same networks at the beginning of the dredging operation. Make periodic updates/status announcements at intervals of not more than a month throughout the contract life.

Display a sturdy and prominent warning sign at all public boat marinas within 10 miles of dredging operations or moored equipment. The Contractor is responsible for keeping this sign current with respect to the dredging operations or equipments.

### 3.2.5 Ranges, Gages, and Lines

Provide, set, and maintain ranges, buoys, and markers needed to define the work and to facilitate inspection. Establish and maintain gages in locations observable from each part of the work so that the depth may be determined. Suspend dredging when the gages or ranges cannot be seen or followed. The Contracting Officer will furnish, upon request by the Contractor, survey lines, points, and elevations necessary for the setting of ranges, gages, and buoys.

### 3.2.6 Dredge Plant and Equipment

Maintain all dredge plant and associated equipment such as, but not limited to, scows, coamings, barges, and pipelines, to meet the requirements of the work. Promptly repair leaks or breaks along pipelines. Remove any misplaced dredged material.

### 3.2.7 Layout of Work

The Contractor will be provided layout charts for all dredging areas based on the schedule of work, the Contractor's hydrosurvey requests, and/or the results of Government hydrographic survey monitoring. The most current Government hydrosurvey information will be displayed on the dredging layout charts and provided to the Contractor. Other pertinent information to be included with each layout package will be: payment method, required and maximum dredging depths, coordinates for the material placement site, distance one-way from dredging location to placement site, specific placement site instructions, supplemental tide gauge information, horizontal control locations, and computed hydrosurvey quantities.

The total estimated quantity of material to be removed is computed as that material that is within the specified limits, including side slopes and overdepth. The quantities listed are estimates only. All estimated

quantities are subject to FAR 52.211-18 Variation in Estimated Quantity.

3.2.7.1 Quantity of Material

The total estimated amount of material to be removed from within the specified limits are shown on Section 00 01 00 "Solicitation, Offer and Award Form" and on Section 00 30 00 "ADMINISTRATIVE REQUIREMENTS" Paragraph 1.9 Estimated Quantities". The quantities listed are estimates only.

The estimated quantities for bidding purposes and for application of the "FAR 52.212-11, Variation in Estimated Quantity" shall be 15% higher or lower for the contract work, including overdepth. The quantities are calculated based on the contour dredging method where payment is allowed for all material up to Overdepth Grade except in areas below project grade or on side slopes. The Contractor shall within the limits of available funds, complete the work specified whether the quantities involved are greater or less than those estimated.

3.2.7.2 Overdepth Dredging

To cover unavoidable inaccuracies of dredging processes, material actually removed to a depth of two (2) feet below the required depth specified and within the dredging limits will be measured and paid for at full contract price. The quantity of overdepth dredging is based on the contour dredging method where payment is allowed for all metial up to Overdepth Grade except below project grade on side slopes.

3.2.7.3 Side Slopes

Side slopes in the dredge areas within this contract will be measured and paid based on a 3 feet horizontal to 1 foot vertical ratio. Dredging on side slopes must follow, as closely as practicable, the dredge area limits indicated on associated layout drawings.

A 2 foot allowance will be made for dredging beyond the indicated or specified side slopes, except as provided herein. The allowance will be determined by projecting a line upwards, paralleling the project design side slopes, from the intersection of the overdepth dredging limit (at a point located vertically below the limit of dredging at the top of slope). The amount of material excavated from side slopes will be determined by either cross-sections or computer, or both.

3.2.8 Obstructions and Debris

Except as indicated, the Government has no knowledge of cables, pipes, or other artificial obstructions or of any wrecks, wreckage, or other material that would necessitate the use of explosives or the employment of additional equipment for economical removal. Contractors should however exercise due diligence in determining the existence of any obstructions within proposed work areas during bid preparation.

Trash, debris and other miscellaneous man-made and natural organic objects may be encountered during the course of the dredging. This material may be present at any location above the required depth as indicated on drawings. Man-made materials may include (but are not limited to) wood, sheet metal, glass, lumber, plastics, tires, hoses, chains, cables, and hawsers and abandoned steel pipes. Natural organic objects include wooden objects such as tree branches but does not include inorganic objects such as large

boulders.

3.2.9 Dredging Requirements

a. Dredging Areas:

(1) BASIC WORK: requires dredging to the plane of -35 feet MLLW plus 2 foot allowable overdepth.

b. Placement Areas:

(1) SEA BRIGHT OFFSHORE BORROW AREA (SBOBA): all dredged material is to be placed at the Sea Bright Offshore Borrow Area (SBOBA).

3.2.10 Quality Control

Establish and maintain quality control for operations to assure compliance with contractual requirements and maintain records of this quality control for dredging operations.

While performing all dredging work control the horizontal positioning of the dredge with electronic positioning.

3.2.11 Surveys during Progress of Work

Quality of dredging depth will be determined by soundings or sweepings taken behind the dredge as work progresses. The Contractor will take progress soundings or sweepings. The Contractor will submit all data files and survey information, including mapping of these surveys to the COR for their review.

3.2.12 Salvaged Material

Anchors, chains, firearms, and other articles of value, which are brought to the surface during dredging operations, must remain or become the property of the Government and will be placed on shore at a convenient location near the site of the work, as directed.

3.2.13 Safety of Structures

The prosecution of work must ensure the stability of piers, bulkheads, and other structures lying on or adjacent to the site of the work, insofar as structures may be jeopardized by dredging operations. Repair damage resulting from dredging operations is the responsibility of the Contractor, insofar as such damage may be caused by variation in locations or depth of dredging, or both, from that indicated or permitted under the contract. The Contractor is responsible for coordinating with the owner of the structure for any necessary repairs.

3.3 PLACEMENT OPERATONS

3.3.1 Placement of Excavated Materials

Provide for safe transportation and placement of dredged materials. The placement of dredged materials in unauthorized places is forbidden. Comply with rules and regulations of all, federal, state and local authorities.

### 3.3.2 Misplaced Dredged Material

Any dredged materials deposited at locations other than in areas designated or approved by the Contracting Officer will be considered misplaced material and will not be paid for until the Contractor, at his own expense, removes and deposits such misplaced material where directed. This required removal and redeposit of the misplaced material and any necessary placement site restoration work is not the basis for a time extension or additional compensation under this contract.

The Contractor will immediately notify the Contracting Officer or his Representative if any material is misplaced or when infill or shoaling beyond the Contractor's control occurs.

## 3.4 MEASUREMENT

The Government will take soundings before and after dredging. The government will perform a before-dredge (BD) survey of the entire work area prior to the commencement of work. Once complete and the contractor has submitted a complete survey of the entire dredge area along with all associated files, the government will perform an after-dredge (AD) survey of the same area. The material removed between these two surveys within the allowable footprint and up to the maximum dredge template will be computed. This computation will be made using the TIN method.

Final quantities will be subject to deductions or correction of deductions previously made because of excessive overdepth, dredging outside or authorized areas, or placement of material in an unauthorized manner.

### 3.4.1 Method of Measurement

Quantity of material removed that will be paid for will be measured by cubic yard in place by means of volume difference from soundings taken before and after dredging. The drawings represent existing conditions based on current available information, but will be verified and corrected, if necessary, by soundings taken before dredging in each locality.

### 3.4.2 Monthly Estimates

Monthly estimates of work completed will be based on the result of soundings taken during the progress of the work. Deductions will be made for dredging and placement not in accordance with the specifications.

## 3.5 FINAL EXAMINATION AND ACCEPTANCE

As soon as practicable after the completion of areas, which in the opinion of the Contracting Officer, will not be affected by further dredging operations, each area will be examined by the Government by sounding or sweeping, or both. Remove shoals and lumps as required by methods approved by the Government. However, if the bottom is soft and the shoal areas form no material obstruction to navigation, removal may be waived at the discretion of the Government. The Contractor will be notified when soundings or sweepings are to be made. When areas are found to be in a satisfactory condition, the work therein will be accepted as complete.

Re-dredging at the Contract price, within the limit of available funds, may be completed with the consent of both the Government and the Contractor when infill or shoaling beyond the Contractor's control occurs

in any area previously accepted.

This contract has no partial acceptance areas. Any survey related disagreement(s) as it pertains to this contract must be submitted in writing to the Contracting Officer or his representative within 5 business days of occurrence of such survey related event. Failure to notify the Contracting Officer or his representative within 5 business days of such survey related event disqualifies the Contractor from any such related claims.

## 3.6 PLANT REMOVAL

Upon completion of the work, the contractor shall remove all dredging plant, including ranges, buoys, piles, and other markers or obstructions.

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SECTION 35 20 23.10 18

SBOBA DREDGED MATERIAL TRANSPORT, PLACEMENT AND MONITORING
**05/21**

# PART 1 GENERAL

## 1.1 DREDGED MATERIAL TRANSPORT AND PLACEMENT MONITORING

This contract section describes the requirements associated with the U.S. Army Corps of Engineers (USACE) New York District (NYD) Dredged Material Transport and Placement Monitoring program. The dredging contractor (contractor) must implement these placement requirements to ensure compliance with all applicable laws, regulations, including those requirements within the Marine Protection, Research and Sanctuaries Act (MPRSA Section 103) for the monitoring and surveillance of the transportation and ocean-placement of dredged material. The District monitoring program helps both the contractors (dredging contractors) and the District to ensure compliance with Section 404 of the Clean Water Act, Section 103 of the Marine Protection, Research, and Sanctuaries Act (MPRSA), 40 CFR Part 228 - Criteria for the Management of Disposal Sites for Ocean Dumping, in addition to all applicable state environmental laws. The basic components of the monitoring program are described below. The implementation of the program, using these components, is discussed thereafter.

All costs associated with the equipment, software, personnel, and other aspects of the monitoring program must be provided by the contractor (dredging contractor).

Where within this section, it states the contractor's responsibilities, this is inclusive of any and all agents (e.g. sub-contractors, inspectors) that may act on the contractor's behalf to ensure the placement requirements associated with this section are met. Failure of an agent to act on the contractor's behalf does not relieve the contractor of its responsibility to comply with the placement requirements.

The term "container vessel" refers to any vessel used to contain, or hold, dredged material (scow, barge, hopper dredge, etc.). The term "transport vessel" refers to any vessel (tugboat, hopper dredge, workboat, etc.) used to move a container vessel. In the case of a hopper dredge, the hopper dredge may act as both a "container vessel" and a "transport vessel". If hopper dredge engines are not used for propulsion, and another vessel (tugboat, for example) is used to move it, then the hopper dredge would be the "container vessel" and the tugboat would be the "transport vessel".

## 1.2 DREDGED MATERIAL TRANSPORT AND PLACEMENT MEETING

At least five (5) days prior to the initiation of all dredging, representatives of the contractor (including all of the contractor's applicable representatives, sub-contractors, and Inspectors on the project), shall meet with representatives of the USACE NY District (NYD) to discuss these placement requirements. The day and time of the meeting will be at the discretion of the NYD Operations Division and must be

coordinated by the contractor at least one week before the day of the meeting. Placement of dredged material must NOT occur until this pre-construction meeting (otherwise known as the Dredged Material Transport and Placement Meeting (DMTPM)) has occurred. The placement requirements may be subject to change at any time during the dredging project. Any changes or additional requirements, specified by NYD, must be implemented by the contractor as soon as practicable.

At the pre-construction meeting, the contractor must provide a list of all container vessels planned for use on this dredging project, which must include at least one (1) vessel designated as a backup barge. Container vessels identified for use on the project must be certified by the contractor to be fully operational, mechanically sound, completely seaworthy, and free of leaks or other defects.

At the pre-construction meeting, the contractor must also submit a list to NYD with the names of all DMIs who will be working on the project. This list must also specify and verify DMI company affiliations, DMI certification, and the expected duration of employment. DMIs who will be on duty at the beginning of the dredging project must be present at the pre-construction meeting to review the placement requirements associated with this project. Any DMIs who begin duty after the first day of dredging must also be briefed by NYD personnel on the placement requirements prior to working as a DMI on the project. Notice of replacement DMIs must be submitted to NYD at least five (5) business days prior to beginning work, unless unforeseen events prevents such notification.

The contractor must also provide NYD with documentation of National Marine Fisheries Service (NMFS) endangered species/marine mammal observer certification for each such observer who will be working on the project at the pre-construction meeting (see Part 1.4 of this section).

## 1.3 NEW YORK DISTRICT CERTIFIED DREDGED MATERIAL INSPECTORS (DMIs)

The contractor, at its own expense, shall have NYD certified dredged material inspectors (DMIs) monitor the transport of all dredged materials to the SBOBA, and/or any other open-water placement location, as described further within this section. A list of DMI Providers, which manage NYD-certified DMIs, can be requested from the NY District, Dredged Material Management Section at NYDredging@usace.army.mil. Only NYD certified DMIs may be used during this project.

The contractor is responsible for ensuring that DMIs, employed either directly or through sub-contracting, are fulfilling the DMI duties described in this contract section and in the associated placement requirements.

At any time during the project, the Contract Officer or Contract Officer Representative (COR) can require the contractor to remove and replace any DMIs who are not satisfactorily fulfilling their duties/requirements. Any DMI determined to be performing unsatisfactorily may also be subject to de-certification of their DMI status by NYD.

DMIs are not required to be present on transport vessels used when transporting container vessels loaded with dredged material for upland treatment/placement, however, NYD may require the contractor to provide an

independent observer to accompany each upland placement trip and to verify data associated with each upland placement trip.

### 1.3.1 RESPONSIBILITIES OF DREDGED MATERIAL INSPECTORS (DMIS)

Dredged material inspector (DMI) responsibilities are described as follows:

- DMIs will ensure that the placement requirements are being followed;

- DMIs are required to be on duty and in the transport vessel wheelhouse, to observe container vessel monitoring equipment function, watch for endangered species, if the DMIs are also NMFS certified endangered species / marine mammal observers (see Part 1.4 of this section for further explanation of these NMFS observer requirements), from the time the transport vessel departs from the dredging site, until the container vessel has completely emptied and all DMI reporting requirements have been completed for each placement trip (please note: The terms 'dredged material monitoring' and 'container vessel monitoring' are used interchangeably throughout this document);

- DMIs must estimate the volume of dredged material within each container vessel prior to the start of each trip to the designated dredged material placement location. The dredged material density and container vessel draft must be used by the DMI to estimate this volume, via use of dredging contractor-provided container vessel loading tables, unless the container vessel monitoring software provides the calculation automatically based on container vessel sensor data. This estimated volume must be recorded on the USACE (NYD) Transportation and Placement Log (TPL) form (see Part 1.8 of this section for an example of this form);

- DMIs must clearly photograph each container vessel (both in close-up and overview) with a working digital camera after loading, but prior to transport away from the dredging site. The close-up photograph must show the loaded container vessel such that the level and characteristics of material (e.g. color, texture, material composition, and approximate grain size) within the container vessel can be determined from the photograph. The overview photograph must show the relationship between the material in the container vessel and the container vessel itself (e.g. height of material in container vessel, distribution of material in container vessel, standing water next to dredged material in container vessel, etc.). The DMI must also take a photograph of the container vessel that documents the position of the plimsoll line relative to the water level;

- The minimum resolution required for each photograph is 1200 x 1600 pixels. Digital cameras used for the photography must be capable of both wide and narrow angle photographs;

- The contractor, either directly or indirectly via one or more of its agents (e.g. dredging contractor) , will be responsible for ensuring that sufficient lighting is provided to meet the container vessel photograph requirements, regardless of weather conditions or time of day. Flash photography must be used if darkness or other conditions require supplemental illumination. If the flash included with the digital camera does not provide adequate lighting, supplemental flash units and/or flood lights, may be necessary;

- Each digital photograph must be submitted, by the DMI, with the other

container vessel monitoring data (TPL, checklist, etc.) for posting on the dredged material / container vessel monitoring website. Photographs must be digitally imprinted with the dredging project name, contract number, date and time of each photograph, the trip number, and the container vessel identification;

- DMIs must measure the distance from the transport vessel to the container vessel, at the time of placement, using the hand-held laser range finder (if necessary) and record the value on the TPL;

- DMIs must complete a TPL and checklist for each ocean placement trip made by a container vessel loaded with dredged material, while on duty within the transport vessel, utilizing the dredged material monitoring software on a laptop dedicated for this purpose. DMI submittals (i.e. TPL and checklist), on the basis of one (1) set of submittals for each container vessel of dredged material, must be electronically submitted to NYD (points of contact (POCs), as specified at the pre-construction meeting), within two (2) hours after each placement event at the SBOBA, and/or any other open-water placement location, has occurred. Emails shall include signed and dated PDF copies of TPLs with the following naming convention: Trip_###_SHC_25_TPL.pdf.

- The DMI must either select "YES" or "NO" for each checklist item as appropriate, at each major stage of a trip (i.e. at the dredging site, while underway to the open water placement site, and during placement of dredged material). The checklist is included in Part 1.9 of this contract section;

- Any items receiving a "NO" answer are considered discrepancies and must be reported immediately by email to NYDredging@usace.army.mil, by phone to the Primary and Secondary POCs identified at the Pre-Construction Meeting, the contractor, and a dredging contractor representative, and the Dredged Material Monitoring Equipment and Software Contractor (DMMESC). These contacts are referred to as the "Notification List". Any discrepancies must also be recorded in the 'Comments' section of the TPL;

- When DMIs place the 'Notification List' telephone calls, DMIs must state their name, the dredging project they are serving as a DMI on, the name of the transport vessel, container vessel, the date, the time, and a brief description of the checklist item and the reason for the "NO" answer(s) for any checklist items;

- In the event of container vessel monitoring equipment/software (i.e. both PDMMES and BDMMES systems) malfunction, the DMI must manually complete a map of the placement area showing the position of the container vessel at the time container vessel doors were first opened, including the distance from the transport vessel to the container vessel (as determined using the hand-held laser range finder), the transport vessel differential global positioning system (DGPS) position at the time of initial container vessel door opening, the vessel direction of travel, and the bearing to the container vessel from the transport vessel. Maps must also be submitted to NYD with the TPL and other required documents. Please refer to Section 1.7.2 for a detailed description of this procedure;

- DMIs are NOT responsible for the operation of transport vessels nor are DMIs authorized to operate any equipment used to open and/or close container vessels;

- The contractor may be required to have DMIs take on additional duties

at any time during the dredging project, as specified by NYD.

### 1.3.2 EQUIPMENT REQUIREMENTS FOR DREDGED MATERIAL INSPECTORS (DMIS)

The contractor is responsible for ensuring that each DMI working on the dredging project is provided with the following equipment (e.g. items, provisions, accommodations, and supplies):

- A legible copy of the permit or contract specifications;

- A legible copy of the placement requirements (including the placement grid map) received at the pre-construction meeting, and any additional requirements provided by NYD during the dredging project;

- An 8" - 12" wide protractor with degrees printed or embossed on the curved surface, and dividers for scaling distances off of maps and charts;

- Container vessel loading tables for each container vessel used to transport dredged material;

- A fully operational, handheld laser range finder with a range of at least 1,000 feet, not more than ten (10) years old. Spare batteries for the laser range finder must be available at all times;

- A working digital camera for the purposes of taking container vessel load and plimsoll photographs, which meets the specifications and requirements described above in Part 1.3.1 of this contract section;

- A fully operable cellphone in each DMI's possession at all times, with active phone numbers unique to each phone, available for placing and receiving calls at all times. DMI cell phone numbers must be provided to NYD at the pre-construction meeting;

- Access to the transport vessel DGPS, fathometer, and radar;

- DMIs must be provided with a designated bunk space or other suitable sleeping location, and a suitable location for completing paperwork associated with DMIs duties, while working aboard a transport vessel as a DMI.

- DMIs are not allowed to be on duty for more than twelve (12) hours per twenty-four (24) hour day (a day is defined as the 24-hr period from 12:00 AM to 12:00 AM the following day);

- DMIs must be provided a minimum of eight (8) hours of continuous off-duty time each day to allow appropriate rest to ensure safety and competence.

## 1.4 NATIONAL MARINE FISHERIES SERVICE (NMFS) ENDANGERED SPECIES/MARINE MAMMAL OBSERVER

The contractor shall ensure that a National Marine Fisheries Service (NMFS) approved Observer is aboard the vessel transporting any container loaded with dredged material to the placement site. The observer will have the responsibility for determining the presence of endangered species (sea turtles and whales) during transit to, and upon arrival at the

location for all placement activities. The observer will ensure that the transport and container vessels do not intentionally approach any whale or sea turtle closer than 100 feet while in transit to and from the SBOBA, and/or any other open-water placement location. Upon arrival at the placement site, placement of dredged material may occur only if no endangered species are observed to be present within a 0.25 nautical mile of the placement site.
If endangered species are observed to be present within 0.25 nautical mile of the designated placement location, then the placement of dredged material must not occur. Placement of the dredged material may occur only when the observed animals have moved outside the 0.25 nautical mile zone around the designated placement location, or have completely departed the site.

In all such cases where whales or sea turtles have been encountered, the observer must submit a written report incorporating the following information: animal type (Whale or sea turtle); the specific species (if known); the date, time and location of the sighting (latitude, longitude); approximate distance away from the transport vessel and/or container vessel; number of individuals observed; behavior (feeding, nursing, migrating, etc.).

DMIs who are also certified as NMFS Observers may fulfill the duties of both positions currently on the same project. If a DMI is to also serve as a NMFS Observer, he/she must possess or acquire, prior to the initiation of the project, valid certification from NMFS of training on techniques for identifying species, and preparing applicable reports for instances where endangered species are encountered. *Please note, if a DMI is not a NMFS certified endangered species/marine mammal observer, the contractor must still ensure that such an observer is aboard the vessel transporting any container loaded with dredged material to the placement site within the SBOBA, and/or any other open-water placement location.*

## 1.5 DREDGED MATERIAL MONITORING EQUIPMENT

The contractor is required, at its own expense, to have all container vessels used to transport dredged material to any and all placement or treatment locations (SBOBA, non-SBOBA, or any other locations in the New York Bight or Lower Bay or any other area) equipped with container vessel monitoring equipment and software, through a separate contractor (i.e. Dredged Material Monitoring Equipment and Software Contractor (DMMESC)) not owned or affiliated with the dredging company. Only the DMMESC may service (e.g. install, modify, program, repair/replace and/or remove) the container vessel monitoring software/equipment.

Container vessel monitoring equipment must be installed and operating correctly on any container vessel used to transport dredged material prior to ANY dredged material being placed in the container vessel. All container vessel monitoring data collection must begin prior to ANY dredged material being placed in the container vessel and continue for the duration that any dredged material is contained in a container vessel. Container vessels loaded with any quantity of dredged material transported from the dredging site, must have all monitoring equipment functioning and recording data.

The contractor shall ensure that the container vessel monitoring equipment is continuously operational twenty-four (24) hours each day, at all times

any dredged material is being loaded at dredging sites, when any dredged material is contained within any container vessel, when any dredged material is transported from dredging sites, while any container vessels are returning to dredging sites after ocean placement, and when any container vessel is returning from upland facilities.

The contractor is also responsible for maintenance of all container vessel monitoring equipment and software, through the services of a DMMESC. Any problems with operation/function of the container vessel monitoring software and/or equipment must be directed to the DMMESC immediately to address, and to the NYD by phone at (917) 790-8429 or (917) 790-8082 and by email at NYDredging @usace.army.mil. Any monitoring equipment that is damaged or destroyed must be replaced/repaired prior to using the container vessel again.

At any time during the dredging project, the contractor must provide the DMMESC full access to all dredges, transport vessels, and/or container vessels used on this project, as the DMMESC determines necessary, to complete any services that may be required to fulfill the container vessel monitoring requirements associated with the project.

As it pertains to such services stated above, the contractor must provide the DMMESC with transportation from the shore to any vessel equipped with container vessel monitoring equipment, and any other assistance determined reasonable and/or necessary. Transportation must be provided in a timely manner such that the requirements associated with container vessel monitoring continue without interruption.

The contractor must provide the DMMESC with all plans and specs, drawings, etc., associated with the project at least ten (10) business days prior to the start of dredging;

The contractor is required to provide the DMMESC with a container vessel loading table, or ullage table, for each container vessel used to transport dredged material to upland facilities and ocean placement locations, that includes the range of possible container vessel drafts associated with the range of possible dredged material volumes contained in each container vessel;

Container vessel monitoring equipment and software must be approved by NYD prior to use. If NYD has not previously observed the operation of a specific sub-contractor's container vessel monitoring equipment and software proposed for use, the contractor is responsible for satisfactorily demonstrating the operability of this proposed equipment and software in order to receive approval by NYD. Such approval must be obtained by the contractor at least ten (10) business days prior to the start of dredging.

The following specifications are associated with, and required for, the container vessel monitoring equipment, software, and the container vessel monitoring website:

- A self-contained "black box" unit must be installed on all container vessels, and must be capable of recording on a twenty-four (24) hour basis, latitude and longitude positions of the container vessel, through DGPS (or wide area augmentation system (WAAS) enabled) technology, and container vessel draft, using a water pressure sensor, and the level of dredged material within container vessels, using a bin level sensor, both at variable sampling rates ranging from one (1) reading (i.e. of position,

draft, and bin level every six (6) to nine (9) seconds to one (1) reading every one (1) minute:

- Container vessels used to transport sand, glacial till, Pleistocene clay, or rock, to an offshore placement location (SBOBA and/or any other open-water placement location, and/or reef) must include fore and aft draft sensors and one (1) bin level sensor.

- Container vessels used for transport of fine-grained, muddy dredged material to the SBOBA, and/or any other open-water placement location, must include fore and aft draft sensors and fore and aft bin level sensors.

- Container vessels used to transport fine-grained, muddy dredged material to upland placement/treatment sites must include one (1) bin level sensor and one (1) draft sensor.

- Any transport vessels used to transport dredged material to any location, and all dredges used on the project, must be equipped with satellite (or cellular) real-time tracking and messaging systems maintained by the DMMESC;

- All transport vessels used to transport dredged material to open-water placement sites (non-upland placement/treatment locations) must be equipped to automatically record bathymetric data using a fathometer on each transport vessel. Transport vessel fathometers must have digital data output that is compatible with container vessel monitoring laptop computers and software;

Laptop computer container vessel monitoring software must include the following required capabilities:

- Trip numbering assignment, to be entered by the DMI at the beginning of each placement trip;

- Electronic versions of the TPL and checklist, to be completed by the DMI during each placement trip;

- Map displays with selectable scales that allow DMIs to view the dredging site, the New York Harbor area and New York Bight, the SBOBA, and/or any other open-water placement location, and designated placement grids and coordinates. The container vessel monitoring software must graphically display placement grids developed for the project and allow viewing of the position of the transport vessel and/or container vessel throughout the placement trip;

- Links to websites that allow National Oceanic and Atmospheric Administration (NOAA) offshore buoy data to be viewed in real-time, along with the latest marine weather forecasts;

- Real-time plotting of container vessel draft, bin level and speed, to be used to monitor potential container vessel leakage;

- Downloading of digital camera photos for inclusion with placement trip data;

- Collection of transport vessel fathometer data for inclusion with other placement trip data. Fathometer data must be collected within the specified boundaries that define each placement site;

- Transmission, at the end of each placement trip, of electronic TPLs, checklists, container vessel position, speed, draft & bin level data, fathometer data, and digital photos, to a website described below.

A website must be maintained by the DMMESC and include the following capabilities and reporting products:

- All data collected by the container vessel monitoring equipment, including, but not limited to, trip plots, draft & bin level plots, TPLs, checklists, digital photos, must be posted to a website accessible to NYD personnel as follows:

  - within two (2) hours of DMI submission of the data from the laptop computer.

  - within twenty-four (24) hours of container vessel unloading at the upland/treatment facility, for each container vessel used for upland placement/treatment.

- Plotting of summary maps, illustrating recorded trip courses (i.e. trip plots) to placement site(s), as a function of trip quantity (i.e. individual, multiple or all trips), trip date range, dredge, container vessel, transport vessel, DMI, placement location, and sub-project i.d., This feature must also allow the user to sub-query and map the selected trip data sets, as a function of the parameters described above, based on trip positioning data classification, as follows: loading points, standby points, all placement points, first placement point, full trip plot (i.e. all data points).

This feature must allow the user to view trip data at various scales, by map type (i.e. areal overview (with and without labels), and road), and by pre-configured default zoom extents (i.e. initial overview (full trip plot), dredging site, and placement site). Interactive coordinate information (i.e. latitude & longitude specified in decimal degrees to six (6) decimal places) must be illustrated, as function of cursor position on the map.

This feature must also contain a measuring tool that allows the user to measure distances (in feet, yards, miles, nautical miles, meters, and kilometers), areas of any shape (in square (sq.) feet, sq. yards, sq. miles, sq. meters, sq. kilometers, acres, and hectares, and plot points (in decimals degrees, and in degrees, minutes, seconds).

- Plotting of all recorded container vessel draft, bin level, and transport vessel speed, data points, as function of time, per selected trip data set. Each data plot type must be clearly distinguished from the others, must allow for cursor selected illustration of date, time and value (i.e. draft & bin level in feet, and speed in knots, both to one (1) decimal place) for each recorded data point.

As the cursor moves across any of the data plots, the respective position as which all data was recorded, must be illustrated in the map display of the trip plot.
This measure must also allow the user to zoom in and plot sub-sets of trip data.

- Automatic generation of emails to the Notification List for the following trip incidents:

- TPL checklist items marked "No".

- Misplaced dredged material (e.g. emergency short dumps, or mis-dumps due to human and/or mechanical error, at the dredging site, in transit, or in the vicinity of the placement site).

- Container vessel losses or gains in draft and/or bin level of 1.5 feet or greater, occurring during the transit and/or standby phases of a trip (based on the DMMESC's quality assurance (QA) review of the trip data set); the standby phase includes that stage in the trip, prior to transit to the SBOBA, and/or any other open-water placement location, either after the loading phase at the dredging site is complete, or in between loading phases, regardless of the nature of the loss or gain.

- Malfunctioning / non-working sensors (e.g. DGPS, bin, draft/water pressure) on any container vessels.

- Observed depth within the placement grid shallower than fifty (50) feet, based on recorded fathometer values.

All of the automatic emails types described above will also be recorded on the website in a consolidated database. This database must include the following data fields: trip number, container vessel, transport vessel, DMI, alarm type, date sent, and hyperlink to the email sent. For the 'TPL checklist' emails, this database must keep a record of the cumulative "No" results for the duration of the project, including a description of and tally of those checklist items receiving a "No";

- A placement grid cell management tool that reports the following per grid cell: total container vessel placements, total estimated volume of dredged material in the cell resulting from container vessel placements, the trip numbers associated with the container vessel placement events that occurred within the cell. The placement grid cell management tool must also have the capability for NYD, or the DMMESC as directed by NYD, to enable, disable, and set the number of maximum container vessel placement events within placement grid cells;

- Positioning information, viewable in real-time, or as soon as data transmission permits, of all dredge plants, container vessels and transport vessels used in the project, based on location data acquired by the satellite (or cellular) tracking system.

The satellite (cellular) tracking system must allow NYD to communicate with DMIs stationed aboard transport vessels via a messaging tool within the website, as a backup measure, when other modes of communication are not possible (e.g. in the event transport vessels are out of cell phone range);

- A dredging production database that reports the following per trip: trip number, date of trip, dredge used, transport vessel used, container vessel used, trip destination, estimated container vessel volume, and the time taken for the following - container vessel loading, container vessel de-watering, container vessel transit, container vessel unloading, dredged material disposal from the container vessel, return trip from the placement site and container vessel idleness, as applicable. The dredging production database will also include a map of the dredging site that is updated after the completion of each trip with the location of where dredging associated with each container vessel-loading event occurred;

- Transport vessel fathometer data must be acquired during all trips, and generated into the following reporting formats, for viewing on the container vessel monitoring website:

  - Trip-specific bathymetric plots (depth vs. time).

  - Bathymetric map(s) of the placement site, based on the cumulative fathometer data collected throughout the duration of the dredging project; where overlapping of data occurs, the shallowest depth must be reported. For rock projects, the above-described map must be generated and updated on a weekly basis. For non-rock projects, the above-described map must be generated at project completion.

- Provide a maintenance log on the container vessel monitoring website of the DMMESC's remote-access and on-site service visits associated with any container and/or transport vessel hardware/software installation and/or repairs.

- The DMMESC will submit all acquired monitoring data on a project basis, for those weeks that data acquisition occurs, no later than (NLT) the close of business (COB) of the Friday following after dredge survey acceptance. This data will be submitted remotely, via a USACE-approved web-based file sharing system, which the DMMSEC will be provided access to by NYD at the start of the project. Should the DMMSEC not be able to transmit the data remotely via this system, it must do so by regular mail, in CD/DVD format to NYD (address specified below), and within the same timeframe described above.

  DEPARTMENT OF THE ARMY
  U.S. Army Corps of Engineers, New York District, Operations Division
  Dredged Material Management Section (CENAN-OP-SD)
  Jacob K. Javits Federal Building
  26 Federal Plaza (Room 16-404)
  New York, NY 10278-0090
  Attn: Ryan Corbett
  Office: (917) 790-8082

The positioning data associated with each trip, must be submitted in format compatible with ArcGIS Pro software, such that the user is able to view the data output as a function of loading points, all placement points, first placement point, full trip plot (i.e. all data points).

This data submission must also include all required digital photos taken by DMIs of loaded container vessels.

All information entered into TPLs must be submitted in a relational database format.

All data collected by DMMSEC as a result of this contract, shall become property of the U.S. Government.

### 1.5.1 PRIMARY MONITORING EQUIPMENT AND SOFTWARE SYSTEMS

Primary Dredged Material Monitoring Equipment and Software (PDMMES) systems, consisting of laptop computers with container vessel monitoring software, onboard all transport vessels used to transport dredged material to all sites, must allow the data (e.g. vessel location, draft, and bin level), being collected by the "black box" unit DGPS (or WAAS enabled)

receiver and sensors on the container vessels being transported, to be viewed in real-time by the DMIs and by transport vessel crew members when used for open-water placement trips. PDMMES system data must be automatically transmitted from all container vessels to the transport vessel for storage and transmission to the DMMESC's computer system for posting on the container vessel monitoring website.

### 1.5.2 BACKUP DREDGED MATERIAL MONITORING EQUIPMENT AND SOFTWARE SYSTEMS

Backup Dredged Material Monitoring Equipment and Software (BDMMES) systems, used for placement trips, consisting of laptop computers with container vessel monitoring software, onboard all transport vessels used to transport dredged material, must allow the DGPS (or WAAS enabled) position of the transport vessel to be viewed on the computer screen, along with an estimated position of the container vessel based on the towing distance and angular offset of the container vessel from the course line of the transport vessel.

## 1.6 Sea Bright Offshore Borrow Area (SBOBA)

The SBOBA is located approximately 1.1 nautical miles east of Sea Bright, New Jersey, bounded by the following coordinates:

| Point | LatitudeDMS | LongitudeDMS | LatitudeDDM | LongitudeDDM |
|---|---|---|---|---|
| A | 40° 23' 54.17" N | 73° 57' 49.59" W | 40° 23.903' N | 73° 57.927' W |
| B | 40° 24' 06.00" N | 73° 57' 49.50" W | 40° 24.100' N | 73° 57.825' W |
| C | 40° 24' 05.74" N | 73° 56' 48.59" W | 40° 24.096' N | 73° 56.810' W |
| D | 40° 23' 53.88" N | 73° 56' 48.69" W | 40° 23.898' N | 73° 56.811' W |

DMS = Degrees, Minutes, Seconds
DDM = Degrees, Decimal Minutes

## 1.7 PLACEMENT OF DREDGED MATERIAL AT OCEAN WATER SITES

### 1.7.1 PLACEMENT OF DREDGED MATERIAL AT OCEAN WATER SITES, GENERAL

All placement of dredged material within the SBOBA must occur in accordance with the placement requirements, and with any additional requirements provided by NYD at any time during the project. Additional placement locations may be provided after dredging begins.

The contractor must receive grid coordinates for the SBOBA placement location(s) before dredging starts. Individual grid cells may be as small as 100 feet wide and 100 feet long. Details of the placement location within the SBOBA, for SBOBA-suitable dredged material, will be provided at the DMTPM.

Twenty-four (24) hours prior to departure of the first project vessel from port for the open water placement of any dredged material, the contractor must notify NYD by email. Emails regarding departures must be made to the Dredged Material Management Section at NYDredging@usace.army.mil, ryan.p.corbett@usace.army.mil, tiffani.m.lee@usace.army.mil, fiona.b.dunn@usace.army.mil, arsheen.ehtesham@usace.army.mil, and kelly.l.vega@usace.army.mil. The contractor must furnish the contractor name, project name, DMI name and estimated time of departure.

All non-rock material approved for ocean disposal shall be transported to the SBOBA, unless otherwise directed. Dredged material placement must not occur anywhere outside of the SBOBA, in SBOBA buffer zones, in shipwreck buffer zones, in the SBOBA "No Discharge Zone", or in any other area of the SBOBA determined by NYD to be off-limits for dredged material placement.

All placement events must be recorded and signed by the master of the tow. Every vessel engaged in the transportation of dredged material must have its name or number, and owner's name, painted in letters and numbers at least fourteen (14) inches high, on both port and starboard sides of the vessel. These names and numbers must be kept distinctly legible at all times, and vessels not so marked, cannot be used to transport or place dredged material.

The NY District reserves the right to have NYD and/or EPA employees and other invited representatives accompany all trips to the placement site(s) to observe placement activities and/or verify the contractor's compliance with these placement requirements.

### 1.7.2 PLACEMENT OF DREDGED MATERIAL AT OCEAN WATER SITES, PROTOCOLS

To help ensure proper placement of dredged material at the SBOBA, or other open-water placement locations, the following placement protocols must be followed:

a. DGPS navigation and fathometer equipment must be present and fully operational on board the transport vessel and must be calibrated periodically in accordance with the manufacturer's guidelines. The instrumentation must also conform to current industry standards. Re-calibration of the instrumentation will be required in instances where major modifications to the transport vessel have been made. Specific documentation certifying the accuracy of instruments may be requested by NYD when needed at any time. Fixed aids to navigation, with known latitude-longitude coordinates, must be used periodically to double-check the accuracy of navigation equipment. In addition, locations with a known depth and stable bottom must be used to periodically double-check accuracy of fathometers.

Container vessels may not be transported from the dredging site for offshore placement of dredged material unless the transport vessel DGPS navigation system, container vessel monitoring equipment and software, transport vessel fathometer, hand-held laser rangefinder, container vessel radio-control system (if used), digital camera, and backup radio on container vessel (if a scowman is used) are all in full working order and provide correct information.

b. The container vessel radio-control system (if used on the project) and the PDMMES and BDMMES systems must be inspected for correct operation. If any problems with the container vessel, radio-control system, PDMMES and BDMMES systems, video camera, or laser range finder, are encountered, corrections must be made before offshore transport of the container vessel may proceed, except when DMMESC personnel are onboard or attempting to fix a container vessel monitoring problem, in which case placement would proceed using the BDMMES. However, the BDMMES must not be used on more than two (2) consecutive placement trips.

c. Container vessels must be inspected for the presence of any conditions that may cause potential leakage. Prior to loading an empty container vessel at the dredging site, the empty container vessel must be inspected for presence of large dents or visible holes. Any holes must be repaired prior to placing any dredged material in the container vessel. Dents must be closely examined to ensure that a hole is not present, or that the hull strength is not compromised. The juncture of the two (2) split hulls, when the container vessel is closed, must form a straight line and the rubber gasket must form a tight seal. Damage to the rubber seal or juncture must be repaired prior to loading the container vessel.

Prior to leaving the dredging site, container vessels must be inspected to ensure correct operation of mechanical features. Container vessels must also be inspected for the presence of any conditions that may cause navigation problems. At least one (1) backup container vessel must be available for immediate use, if one (1) of the regularly used container vessels developments a condition that prevents it from being fully operational, mechanically sound, completely seaworthy, and free of leaks or other defects.

d. Container vessels loaded with a total of more than 6,000 CY of dredged material and water must not be transported to the SBOBA. Only SBOBA-suitable dredged material can be transported to the SBOBA. Container vessels used for transporting SBOBA-suitable material must not be used for the transport of material that is unsuitable for the SBOBA; container vessels used for transporting material, unsuitable for the SBOBA, to upland placement/treatment sites, must not be used for the transport of SBOBA-suitable material to the SBOBA and/or other open-water placement sites.

Floatable material, and/or trash, and/or debris excavated during the dredging project, including, but not limited to, wood, tires, scrap metal, car bodies, shopping carts, etc., must never be transported to the SBOBA or other open-water placement locations, regardless of the source of the items/material. Only dredged material approved for open-water placement shall be transported and/or placed at designated open-water placement locations. The contractor will be responsible for retrieving non-approved materials/items from open-water placement sites if such placement occurs.

e. The contractor is responsible for determining, prior to the departure of the transport vessel from the dredging site, that the forecasted weather and sea conditions at the expected time of placement of dredged material within the SBOBA will:

1) Allow for the safeguard of personnel and property during the transporting operation and full release of material from the container vessel at the designated location and

2) Not result in a loss of dredged material from the container vessel due to waves breaking into the container vessel.

If weather/sea conditions will not permit placement of dredged material at the designated grid cell, the container vessel must not be towed from the dredging site until conditions improve and allow safe and accurate dredged material placement.

f. Container vessels must be observed for potential leaking of dredged material, as indicated by visible turbidity plumes (muddier water) behind the container vessel, or significant change (of greater to or equal than

1.5 feet) in the container vessel draft and/or bin level. Container vessels exhibiting gradual changes (of at least one (1) foot) in draft and/or bin level changes may be leaking, and this must be noted on the TPL, and also must be reported to the Notification List immediately.

If gradual draft and/or bin level changes appear to occur regularly, or if a significant change in container vessel draft and/or bin level occurs during any trip, the contractor must examine the container vessel as soon as possible to determine if a leak is present. If a situation arises that requires emergency dumping of dredged material, all reasonable efforts to dump outside of navigation channels must be made by the contractor.

The container vessel draft and bin level values, as recorded by the container vessel sensors, must be documented in the TPL by the DMIs reported five (5) minutes of departing from the dredge site, while in transit, and at the designated placement location, just prior to container vessel door opening.

g. Container vessels must be brought to the designated grid cell, or coordinates, of the SBOBA, or other designated placement location, using the DGPS navigation systems of the transport vessel and the container vessel monitoring software onboard the transport vessel. Placement in the appropriate location must be documented by the DMI using the container vessel monitoring software while the container vessel position data is automatically being recorded by the container vessel monitoring system.

Container vessels must be towed at an appropriate speed and tow length that ensures successful placement of dredged material at the placement site, and that also maintains reliable navigation under safe weather/sea conditions. For each trip, the DMI must measure the distance from the transport vessel to the container vessel at the time of placement using the hand-held laser range finder, obtain a reading, and record the value on the TPL.

During each trip to the SBOBA, the dredged material contained in a container vessel must be able to be placed (initiation of placement) within individual grid cells as small as 100 feet wide and 100 feet long. Dredged material placed outside of designated grid areas of the SBOBA must be minimized to the maximum extent practicable.

h. If the PDMMES does not show reliable DGPS (or WAAS enabled) coordinates in the vicinity of the designated placement grid or other designated placement location, or is not functional, the BDMMES must be used to locate the placement site and estimate the container vessel position during placement. Length of towlines must be measured using the hand-held laser range finder. The bearing to the container vessel from the transport vessel must also be noted at the time of placement. Vessel navigation must be maintained in the direction of the maximum grid dimension for all placements, to the greatest extent possible.

The angular displacement of the container vessel from the transport vessel course (i.e. trackline) must be estimated by sighting the container vessel behind the transport vessel while holding a protractor with the 90 degree mark pointing directly behind the transport vessel in line with the vessel track line (wake). A pencil must then be used to point at the container vessel, to the left or right of the 90° mark, to determine the angular displacement off of the transport vessel track line, recorded as degrees to the left or right when sighting the container vessel, rounded to the nearest 5°. Container vessels directly behind the transport vessel would

be reported at 0° angular displacement (a container vessel displaced 10° to the left of the 90° mark on the protractor would be reported as 10° left, etc.). This angle must be recorded on the TPL, along with the following information if this option is used:

1) Coordinates of the transport vessel at the start and end of placement.

2) Length of tow line (distance from transport vessel stern to container vessel bow).

3) Angular displacement of container vessel from trackline of transport vessel.

4) Estimate of lateral displacement of container vessel from the transport vessel trackline.

5) Estimated longitude and latitude of container vessel at time of door opening and closing.

The lateral displacement may be estimated by the following formula (for angular displacements up to 20 degrees):

Lateral Displacement = Tow Length x Sine of Angular Displacement

The following values of sine (i.e. Sin ?) may be used:

Sin ( 5 degrees of angular displacement) = 0.087
Sin (10 degrees of angular displacement) = 0.174
Sin (15 degrees of angular displacement) = 0.259
Sin (20 degrees of angular displacement) = 0.342

For example, when using a 200 foot tow length, a container vessel is observed to track 15 degrees to the right of the transport vessel trackline. The estimated lateral displacement of the container vessel is:

200 feet x 0.259 = 52 feet

This means that when plotting the container vessel position on a map of the placement area, the container vessel would be plotted ~50 feet to the right and ~200 feet behind the position of the transport vessel (i.e. tow length distance). The errors in estimating increase with longer tow lengths. Because of this, it is critical to maintain as short a tow length as possible if the BDMMES or transport vessel's DGPS navigation system is used for placement. Perimeter grid cells are not permitted for use if PDMMES is not functioning. The closest adjacent grid cell toward the center of the grid must be used.

If the PDMMES system fails after leaving the dredging site, the backup system may be used for up to two (2) consecutive placement trips while awaiting DMMESC personnel to service the equipment. No more than two (2) consecutive trips to ocean placement sites may be made by such container vessels without the PDMMES fully functioning.

i. If neither the PDMMES nor BDMMES show reliable DGPS (or WAAS enabled) coordinates in the vicinity of the designated placement grid or other designated placement location, or are not functional, or weather/sea conditions prevent reliable maneuvering of the container vessel, the transport vessel DGPS must be used to position the container vessel at the center of the grid, or other backup location in the grid as specified by

NYD.

Length of towlines must be measured using the hand-held laser range finder. The bearing to the container vessel from the transport vessel must also be noted at the time of placement. The angular displacement of the container vessel from the transport vessel course (track line) must be estimated by sighting the container vessel behind the transport vessel while holding a protractor. This angle must be recorded on the TPL, along with the following information if this option is used:

1) Coordinates of the transport vessel at the start and end of placement.

2) Length of tow line (distance from transport vessel stern to container vessel bow).

3) Angular displacement of container vessel from trackline of transport vessel.

4) Estimate of lateral displacement of container vessel from the transport vessel trackline.

5) Estimated longitude and latitude of container vessel at time of door opening and closing.

j. The grid center, or other backup placement location, will only be used if steps (h) and (i) are attempted without success, or when inclement weather/sea conditions prevent reliable maneuvering of the container vessel. The grid center must not be used if inclement weather conditions persist. Placement at the grid center is an emergency procedure.

k. If weather and/or sea conditions prevent reliable measurement of transport distance using the hand-held laser range finder, the transport vessel's radar must be used to determine the distance and bearing to the container vessel.

l. If neither the PDMMES nor BDMMES systems, nor the transport vessel DGPS systems, provide navigation coordinates, the container vessel must be brought to a suitable location for correction of navigation problems. Placement of dredged material is not allowed if a reliable DGPS system is not providing coordinates at the time of container vessel door opening.

m. If radio communication with the container vessel is lost, preventing operation of radio-controlled container vessels, placement must not occur until the system is repaired. Voice contact, through radio or direct communication, must be maintained with a scowman, or other personnel, who is riding aboard a container vessel, for the duration of the placement trip. Container vessel opening must only occur when a direct, voice command has been given to personnel aboard the container vessel, or when radio communication with radio-controlled container vessels is maintained.

If the container vessel's engine cannot be operated by the radio-control system, and the container vessel is boarded to attempt to fix the engine, the container vessel must be located at the designated placement position if the container vessel's engine is started. Any problems with a radio control system must be fixed prior to subsequent use of the container vessel. The DMI must note on the TPL any time the radio-controlled container vessel system malfunctions and manual discharge is required, and immediately notify the Notification List.

n. A primary and backup radio must be onboard all manned container vessels, along with backup power supplies. Hand signals must never be used to direct the scowman regarding container vessel opening/closing. All personnel aboard container vessels, or who may board container vessels while transporting dredged material, must be informed that discharge of dredged material will only be allowed while voice communication is maintained.

o. To help ensure that dredged material is transported and placed at the SBOBA in accordance with the requirements described above, for each trip, the DMI must complete the required checklist (see Section 1.9). Items in the checklist must be reviewed by the DMI at the dredging site, while underway, and at the SBOBA. Any item on the checklist that receives a "NO" answer must be reported immediately to the Notification List. If the "NO" answer is related to the container vessel monitoring equipment and/or software, the DMMESC must also be notified immediately. These discrepancies must be noted on the TPL associated with the trip using the letter-number code associated with each item. Each placement trip to the SBOBA must use a checklist, to be completed by the DMI working aboard the transport vessel, using the container vessel monitoring software or by hand.

All of the checklist items included with the "At the Dredging Site" portion of the trip MUST receive a "YES" answer before a container vessel may be towed from the dredging site for placement at the SBOBA. If ANY of these checklist items receives a "NO" answer on the checklist, the issue must be corrected such that the checklist item can be answered with a "YES" prior to the container vessel being used to transport dredged material away from the dredging site.

p. Two (2) exceptions to this exist: 1) If a backup container vessel is used, it must be noted on the TPL, but normal placement can continue. 2) When the PDMMES systems are malfunctioning, dredged material may be transported from the dredging site if DMMESC personnel are onboard to fix/service the equipment, or if the BDMMES system is functioning. If any of the items in Part A are answered "NO" by the DMI, the Notification List must be contacted immediately. Telephone numbers of personnel on the Notification List must be supplied to all DMIs working on the dredging project. Reports of discrepancies or unusual events must also be submitted by the DMI as soon as possible to the NYD. Discrepancies must be noted on the TPL using the code letter/number associated with each item in the lists.

q. Parts B and C of the checklist pertain to activities/requirements of DMI while underway to the designated placement location and at the placement location, respectively. All of these items must be verified by the DMI aboard the transportation vessel. If any of these items are answered "NO" by the DMI, the Notification List must be contacted immediately.

## 1.8 USACE TRANSPORTATION AND PLACEMENT LOG

USACE Transportation and Placement Log

Log Number: Date:

Project Information

Trip Number: Tow Owner:

Contract: Inspector's Name:

Project Name: Tug's Navigational Unit:

Tug and Scow Information

Tug Name: Scow Name/Number:

Tug Captain: Scowman's Name:

Loading/Pre-Transit Information:

Dredge Departed From:

Material (Cubic yds.): Time Loading Complete (hh:mm:ss):

Est. Density: ETA to Placement Site (hh:mm:ss):

Material Description: Aft Draft: Forward Draft:

Winds at reporting station closest to placement location are presently blowing:

Image of Material: Material Closeup: Image of Plimsoll Mark:

Placement Site Weather Conditions

Wind Direction (from): Wind Speed (mph):

Observed Water Depth (ft): Wave Swell Height (ft):

Visibility (N miles): Weather Conditions:

Marine Mammals/Sea Turtles Sighting (Yes/No):

Transit/Placement Information

Time Scow Departed Dredge Site: Tug position determined by (GPS/DGPS):

Time scow arrives at project placement area:

Approximate distance from scow to target at time of discharge (ft):

Length of towline at time of discharge:

Distance from tug navigational antenna to tug's towing bit (ft):

Direction of scow relative to tug towing bit (degrees):

Estimated Scow Speed (kts): Scow Heading (Degrees):

Start Time (doors open):

Speed (kts): GPS/DGPS Latitude:

Heading (degrees): GPS/DGPS Longitude:

End Time (placement complete):

Speed (kts): GPS/DGPS Latitude:

Heading (degrees): GPS/DGPS Longitude:

Post Placement Time (doors closed):

Speed (kts): GPS/DGPS Latitude:

Heading (degrees): 9 GPS/DGPS Longitude:

Comments

## 1.9 DREDGED MATERIAL INSPECTOR CHECKLIST

Dredged Material Inspector (DMI) Checklist:

DREDGING PROJECT: _____

TRIP NUMBER: _____

DREDGED MATERIAL INSPECTOR NAME: _____

INSPECTOR SIGNATURE: _____

DATE: _____

Answer YES or NO to the following questions. Circle other choices and/or fill in blanks as appropriate. Any item on the checklist that receives a "NO" answer must be reported immediately to NY District at: (917) 790-8082 and NYDredging@usace.army.mil, or x8539, the contractor, and a dredging contractor representative not onboard the transport vessel. If the "NO" answer is related to the container vessel monitoring systems, the container vessel monitoring contractor must also be notified immediately. Items receiving "NO" answers must be indicated on the TPL using the letter-number code next to each item description and described on the TPL comments section.

All of the checklist items included with the "At the Dredging Site" portion of the trip must receive a "YES" answer before a vessel containing dredged material may be transported away from the dredging site for placement at the SBOBA. If ANY of these checklist items receives a "NO" answer on the checklist, the issue must be corrected, such that the checklist item can be answered with a "YES" prior to the container vessel that is being used for transport of dredged material departs from the dredging site.

PART A - At the Dredging Site:

A1 For all dredging projects, a copy of the placement requirements, received at the pre-construction and/or Dredged Material Transport and Placement Meeting (DMTPM) is in the DMI's possession. For federal projects, a copy of the contract specifications is in the DMI's possession. For permitted projects, a copy of the permit special conditions is in the DMI's possession.

A2 The container vessel being used to transport the dredged material is mechanically sound, does not leak, and has no visible damage that may cause leaking.

A3 A regularly used container vessel was used (i.e. as opposed to a backup container vessel).

A4 A container vessel loading table for the container vessel being towed is aboard the transport vessel and available for the DMI to use.

A5 An estimated dredged material density has been provided by the dredging contractor and recorded on the TPL form.

A6 The material being dredged has been observed by the DMI for general characteristics (grain size, color, consistency) and recorded on the TPL form.

A7 For container vessels loaded with any rock (rock is defined as any stones greater than 2.5 inches in diameter), the estimated rock percent, as provided by the dredge operator, has been recorded on the TPL form.

A8 An estimate of the volume of material in the container vessel has been calculated by the DMI using the container vessel loading table and recorded on the TPL form; if not automatically calculated by the container vessel monitoring software.

A9 Container vessel contains less volume of dredged material than the maximum volume allowed for placement during a single trip. *Container vessels loaded with a total of more than 6,000 CY of dredged material and water must not be transported to the SBOBA.*

A10 The monitoring systems (Primary and Backup) are fully operational and are functioning. Any container vessel monitoring system malfunctions must be reported immediately to the DMMESC. Transport vessels are not allowed to leave the dredging site while transporting any container vessels with dredged material if the container vessel monitoring systems are not fully operational. If the PDMMES system is not functional, the Backup monitoring system may only be used on two (2) consecutive offshore placement trips using an affected container vessel. No more than two (2) consecutive trips without the PDMMES system can ever be made.

A11 A fathometer is fully operational, functioning, and installed on the transport vessel.

A12 A radio onboard the transporting vessel is operable and can receive NOAA marine weather forecasts and ocean conditions.

A13 Current and forecasted marine weather and ocean conditions at the designated placement location have been monitored on the radio and will allow safe and accurate placement of dredged material. Conditions have been recorded on the TPL form.

A14 DGPS navigation system is fully operational, functioning, and installed aboard the transporting vessel.

A15 A radar system is fully operational, functioning, and installed aboard the transporting vessel.

A16 The satellite (or cellular), vessel tracking system on the transport vessel is present and operable.

A17 Radio-control system for container vessel operation (if scowman is not used) is fully operational and functioning.

A18 Radio and backup radio system, for communication between container vessels and transport vessels, are aboard container vessel (if scowman is used), are fully operational and functioning.

A19 Hand-held laser range finder, not more than ten (10) years old, with at least a 1000 foot range, is aboard transport vessel, fully operational and functioning, and available for DMI use, along with a set of backup batteries.

A20 A fully operable cell phone that can send and receive calls is in the possession of the DMI onboard the transport vessel.

A21 A protractor, pair of dividers (for map/chart distance scaling), and an up-to-date nautical chart that includes the placement area, are available for use by the DMI aboard the transport vessel.

A22 DMI is provided full access to fathometer, radar, vessel DGPS, and any other equipment/information necessary to conduct DMI duties.

A23 A digital photograph has been taken of the container vessel that documents the position of the plimsoll line relative to the water level.

A24 A digital photograph (close-up) has been taken of the loaded container vessel such that the level and characteristics of material (color, texture, material composition, and approximate grain size) within the container vessel can be determined from the photograph. A digital photograph (overview) has been taken of the loaded container vessel such that the relationships between material and container vessel walls can be determined from the photograph.

A25 The container vessel contains only dredged material (no trash, debris, timbers, tires, etc.) and only dredged material approved for open-water placement.

A26 Digital photograph(s) of the container vessel have been downloaded into the container vessel monitoring software.

A27 DMI activated the container vessel monitoring software at the dredging site.

A28 Time of departure from dredging site has been recorded on the TPL form.

A29 The bin-level, as indicated by the container vessel fore and aft bin sensors, has been entered into the TPL form comments section.

A30 DMI was at the dredging site while Part A, Items 1-30, of the TPL checklist was reviewed and completed.

A31 The container vessel draft (pressure) and bin level sensor values, as displayed by the container vessel monitoring software has been recorded on the TPL form. (This value must be noted approximately five (5) minutes after leaving the dredging site, while being towed, to account for any shifting / settling of the material in the container vessel).

PART B - While Underway to Open-Water Placement Site:

B1 Container vessel draft is being monitored with container vessel monitoring software to detect sudden or gradual changes in draft.

B2 In the vicinity of the Verrazzano-Narrows Bridge, radio and backup radios aboard the container vessel (if a scowman is used) have been checked and both are fully functional.

B3 If the DMI is also a NMFS certified marine mammal/endangered species observer, observation and appropriate reporting is conducted.

B4 Container vessel draft and/or bin level varies by less than one (1) foot, or by less than 12 points of pressure (draft only), from the value at the dredging site.

B5 Container vessel does not appear to be listing.

B6 Water behind container vessel has been observed, if possible, to ensure that no turbid water plumes are present.

B7 A fixed reference position, such as a channel marker, has been used to ensure that the transport vessel DGPS and Container vessel DGPS positions agree.

B8 Marine weather and sea conditions present and forecast to be present at the placement location are periodically monitored. The transport vessel captain, after consultation with the DMI, may decide to return to the dredging site based on an updated marine forecast.

PART C - In the Vicinity of the Designated Placement Location:

C1 Water depths were continuously monitored (a reading observed at least every 5 seconds) with the transport vessel fathometer while navigating anywhere within the placement area boundary (transport vessel crew must also monitor water depths).

C2 All water depths observed anywhere within the placement grid were at a depth of at least fifty (50) feet.

C3 If depths less than fifty (50) feet were observed in the placement grid, the latitude, longitude and depth have been recorded in the TPL form comments section.

C4 Container vessel radio control equipment operates without any problems.

C5 Placement was initiated in the targeted grid cell and was coordinated with transport vessel crew.

C6 Container vessel draft and/or bin level varies by less than 1.5 feet, or by less than twenty (20) points of pressure (draft only), from the value at the dredging site.

C7 Container vessel draft information immediately prior to container vessel door opening has been recorded on the TPL form.

C8 TPL form was completed using the container vessel monitoring software, or by hand if container vessel monitoring system malfunctions, within 30 minutes of container vessel door opening.

C9 Container vessel monitoring equipment, transportation vessel navigation equipment, and all other equipment related to placement of dredged material worked without any problems.

C10 All activities associated with placement of dredged materials appeared to be conducted in a safe manner.

C11 Nothing occurred that might have resulted in incorrect placement of dredged material.

C12 If a marine mammal or sea turtle was observed, the appropriate NMFS form was completed.

C13 Any item in the checklist that received a "NO" answer was noted in the comments section of the TPL (letter and number).

C14 TPL form submitted within two (2) hours of container vessel door, or hopper bin, opening, for SBOBA placement.

C15 A copy of the TPL form, with checklist "NO" answer documentation in the comments section, has been signed by the DMI and placed in a file/folder to become part of a permanent record of the trip.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --