Public Beach Protection in 4 Illinois Coastal Communities
Beneficial Use of Dredged Material Pilot Project Program
Civil Engineering Appendix – Plans and Specifications

July 2020
Attachment 1: Plans
Waukegan Harbor Dredging
Approach Channel
Maintenance Dredging FY20
Waukegan, Illinois

Solicitation No.: W912P6-20-B-0009
Contract No.: W912P6-20-C-000X
Issue Date: 07/2020
Certified Final Documents - RTA
GENERAL NOTES

1. THE SURVEY CONDITIONS SHOWN ON THESE DRAWINGS ARE FROM AN OCTOBER 2018 SURVEY PERFORMED BY SURVEY CORPORATION OF AMERICA. ALL SURVEY DATA IS REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, EXISTING CONDITIONS AT THE TIME OF BIDDING, AND INCLUDE COST ACCORDINGLY IN THE BID.

2. ALL COORDINATES SHOWN ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE.

3. ALL ELEVATIONS SHOWN ARE REFERENCED TO THE INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGHLD85) U.S. NORTH AMERICAN DATUM OF 1983 (NAD83) U.S. SURVEY FEET OR LOW WATER DATUM (LWD) AS INDICATED.

4. ALL HORIZONTAL AND VERTICAL CONTROL POINTS ARE REFERENCED TO THE SURVEY CONDITIONS SHOWN ON THESE DRAWINGS ARE FROM AN OCTOBER 2018 SURVEY PERFORMED BY SURVEY CORPORATION OF AMERICA. ALL SURVEY DATA IS REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, EXISTING CONDITIONS AT THE TIME OF BIDDING, AND INCLUDE COST ACCORDINGLY IN THE BID.

5. ALL ELEVATIONS SHOWN ARE REFERENCED TO THE INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGHLD85) U.S. NORTH AMERICAN DATUM OF 1983 (NAD83) U.S. SURVEY FEET OR LOW WATER DATUM (LWD) AS INDICATED.

6. ALL HORIZONTAL AND VERTICAL CONTROL POINTS ARE REFERENCED TO THE SURVEY CONDITIONS SHOWN ON THESE DRAWINGS ARE FROM AN OCTOBER 2018 SURVEY PERFORMED BY SURVEY CORPORATION OF AMERICA. ALL SURVEY DATA IS REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, EXISTING CONDITIONS AT THE TIME OF BIDDING, AND INCLUDE COST ACCORDINGLY IN THE BID.

7. ALL ELEVATIONS SHOWN ARE REFERENCED TO THE INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGHLD85) U.S. NORTH AMERICAN DATUM OF 1983 (NAD83) U.S. SURVEY FEET OR LOW WATER DATUM (LWD) AS INDICATED.

8. ALL HORIZONTAL AND VERTICAL CONTROL POINTS ARE REFERENCED TO THE SURVEY CONDITIONS SHOWN ON THESE DRAWINGS ARE FROM AN OCTOBER 2018 SURVEY PERFORMED BY SURVEY CORPORATION OF AMERICA. ALL SURVEY DATA IS REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, EXISTING CONDITIONS AT THE TIME OF BIDDING, AND INCLUDE COST ACCORDINGLY IN THE BID.


10. ALL HORIZONTAL AND VERTICAL CONTROL POINTS ARE REFERENCED TO THE SURVEY CONDITIONS SHOWN ON THESE DRAWINGS ARE FROM AN OCTOBER 2018 SURVEY PERFORMED BY SURVEY CORPORATION OF AMERICA. ALL SURVEY DATA IS REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, EXISTING CONDITIONS AT THE TIME OF BIDDING, AND INCLUDE COST ACCORDINGLY IN THE BID.

11. ALL ELEVATIONS SHOWN ARE REFERENCED TO THE INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGHLD85) U.S. NORTH AMERICAN DATUM OF 1983 (NAD83) U.S. SURVEY FEET OR LOW WATER DATUM (LWD) AS INDICATED.

12. ALL HORIZONTAL AND VERTICAL CONTROL POINTS ARE REFERENCED TO THE SURVEY CONDITIONS SHOWN ON THESE DRAWINGS ARE FROM AN OCTOBER 2018 SURVEY PERFORMED BY SURVEY CORPORATION OF AMERICA. ALL SURVEY DATA IS REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, EXISTING CONDITIONS AT THE TIME OF BIDDING, AND INCLUDE COST ACCORDINGLY IN THE BID.
7. THE CONTRACTOR SHALL STAY A MINIMUM OF 50 FEET AWAY FROM ANY BREAKWATER.

5. AREAS TO BE DREDGED WILL BE SOMEWHERE WITHIN THE OUTER HARBOR, APPROACH CHANNEL, AND ADVANCE MAINTENANCE AREA. THE SPECIFIC AREA(S) TO BE DREDGED WILL BE IDENTIFIED VIA SURVEY CONDUCTED DURING THE CALENDAR YEAR THAT DREDGING IS TO BE COMPLETED.

OVERDREDGE DEPTH OF 2 FEET.

DEPTH IN THE ADVANCE MAINTENANCE AREA IS -22.0 LWD WITH AN ALLOWABLE OVERDREDGE DEPTH OF 1 FOOT. DREDGE MONUMENTS DG8501.

HYDROGRAPHIC SURVEY WEBSITE: https://www.arcgis.com/apps/opsdashboard/index.html

WILL BE IDENTIFIED VIA SURVEY CONDUCTED DURING THE CALENDAR YEAR THAT DREDGING IS TO BE COMPLETED.

ONCE A CONTRACTOR IS SELECTED IN ACCORDANCE WITH THE Procurement process, it will be responsible for surveying the areas identified for dredging. Dredging will take place within the outer harbor, approach channel, and advance maintenance area. The specific area(s) to be dredged will be identified via survey conducted during the calendar year that dredging is to be completed.

OVERDREDGE DEPTH OF 2 FEET.

DEPTH IN THE ADVANCE MAINTENANCE AREA IS -22.0 LWD WITH AN ALLOWABLE OVERDREDGE DEPTH OF 1 FOOT. DREDGE MONUMENTS DG8501.

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NOTES:
1. ALL COORDINATES SHOWN ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83) U.S. SURVEY FEET.
2. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING A BODY OF WATER BETWEEN THE TWO BOUNDARIES SHOWN NOT LIMITED TO BANKS (SHORE AREA) AND ADJACENT MEADOWS.
3. THE CONTRACTOR SHALL NOT PLACE MATERIAL HIGHER THAN PLUS 8 FEET LWD AT ON-BEACH PLACEMENT AREA(S). THE FINAL BEACH GRADE SHALL HAVE NO VALLEYS OR MOUNDS GREATER THAN 18 INCHES.
4. THE CONTRACTOR SHALL PLACE DREDGED MATERIAL BETWEEN NORTH AND SOUTH BOUNDARIES OF THE PLACEMENT AREA(S) ON EXISTING BEACH. IF NO BEACH EXISTS, CONTRACTOR SHALL BUILD BEACH FROM EXISTING SHORELINE PLACING MATERIAL NO HIGHER THAN PLUS 8 FEET LWD AND IN WATER LESS THAN 5 FEET DEEP. THE FINAL BEACH GRADE SHALL HAVE NO VALLEYS OR MOUNDS GREATER THAN 18 INCHES. SAND PLACEMENT MUST BE A CONTINUOUS BODY FROM EXISTING SHORELINE; NO NON-UBIQUITOUS PLACEMENT SUCH AS LONG NARROW STRETCHES OF MATERIAL UNCONNECTED TO THE EXISTING SHORE OR ISLANDS ARE ALLOWED.
5. CONTRACTOR SHALL NOT PLACE MATERIAL OUTSIDE OF THE WORK LIMITS SHOWN.
6. IF NO SITE ACCESS IS SHOWN, THEN THERE IS ONLY WATER BASED ACCESS. ALL SITE ACCESS SHOWN IS FOR REFERENCE ONLY AND CONTRACTOR MUST COORDINATE WITH LOCAL ENTITIES TO OBTAIN RIGHTS OF ACCESS.
NOTES:
1. ALL COORDINATES SHOWN REFER TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83) U.S. SURVEY FEET.
2. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING A SURVEY AND DEED TO UP AREA LIMITS AS SHOWN AND NOT TO GO BEYOND AS SHOWN. NO OWNER IS RESPONSIBLE FOR ADDING MOW OR SET BACK TO SURVEY SHOWN.
3. CONTRACTOR SHALL NOT PLACE MATERIALS BEYOND NORTH AND SOUTH BOUNDARIES SHOWN OR IN WATER SHALL NOT EXCEED 5 FEET DEEP. CONTRACTOR SHALL NOTIFY OWNER BEFORE ANY CONSTRUCTION STARTS AND NOTIFY OWNER AT ANY TIME OF WORK CONDUCTED.
4. CONTRACTOR SHALL PLACE DREDGED MATERIAL BETWEEN NORTH AND SOUTH BOUNDARIES OF THE PLACEMENT AREA(S). IF NO BEACH EXISTS, CONTRACTOR SHALL BUILD BEACH FROM EXISTING SHORELINE PLACING MATERIAL NO HIGHER THAN PLUS 8 FEET LWD AND IN WATER LESS THAN 5 FEET DEEP. THE FINAL BEACH GRADE SHALL HAVE NO VALLEYS OR MOUNDS GREATER THAN 18 INCHES. SAND PLACEMENT MUST BE A CONTINUOUS BODY FROM EXISTING SHORELINE; NO NON-UBIQUITOUS PLACEMENT SUCH AS LONG NARROW STRETCHES OF MATERIAL UNCONNECTED TO THE EXISTING SHORE OR ISLANDS ARE ALLOWED.
5. CONTRACTOR SHALL NOT PLACE DREDGED MATERIAL OUTSIDE OF THE WORK LIMITS SHOWN.
6. IF NO SITE ACCESS IS SHOWN, THEN THERE IS ONLY WATER BASED ACCESS. ALL SITE ACCESS AREA IS RESPONSIBLE ONLY AS CONTRACTOR MUST COORDINATE WITH Local Entities to Obtain Rights of Access.

LEGEND
- Site Access (Right of Way)
- Work Limits
- Site Access
- Beach Placement Area
- Typical Section
- Placement Area

NOTES:
- Placement Area - Typical Section
- Scale: 1" = 200'
NOTES
1. ALL COORDINATES SHOWN ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83) U.S. SURVEY FEET.
2. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING A SAFE AND SECURE TIE UP AREA AS APPROVED BY THE COR During BUT NOT LIMITED TO DOWN TIMES, HOLIDAY, AND ADVERSE WEATHER DAYS.
3. THE CONTRACTOR SHALL NOT PLACE MATERIAL HIGHER THAN PLUS 8 FEET LWD AT ON-BEACH PLACEMENT AREA(S). THE FINAL BEACH GRADE SHALL HAVE NO VALLEYS OR MOUNDS GREATER THAN 18 INCHES.
4. THE CONTRACTOR SHALL PLACE DREDGED MATERIAL BETWEEN NORTH AND SOUTH BOUNDARIES OF THE PLACEMENT AREA(S) ON EXISTING BEACH. IF NO BEACH EXISTS, CONTRACTOR SHALL BUILD BEACH FROM EXISTING SHORELINE PLACING MATERIAL NO HIGHER THAN PLUS 8 FEET LWD AND IN WATER LESS THAN 5 FEET DEEP. THE FINAL BEACH GRADE SHALL HAVE NO VALLEYS OR MOUNDS GREATER THAN 18 INCHES. SAND PLACEMENT MUST BE A CONTINUOUS BODY FROM EXISTING SHORELINE; NO NON-UBIQUITOUS PLACEMENT SUCH AS LONG NARROW STRETCHES OF MATERIAL UNCONNECTED TO THE EXISTING SHORE OR ISLANDS ARE ALLOWED.
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NOTES:
1. ALL COORDINATES SHOWN REFERENCE TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83). ADD 20 FEET TO BOUNDARIES OF VARIOUS FEATURES, INCLUDING PERFORMANCE SPECIFICATIONS, THE FINAL BEACH FACING SOUTH TO NORTH IS SHOWN AS APPROXIMATELY 60 FEET WIDE.
2. CONTRACTOR SHALL PROVIDE BEACH CONDITIONS TO BE MET DURING THE PERFORMANCE OF THE CONTRACT.
3. CONTRACTOR SHALL PROVIDE A PRELIMINARY SUBMITTAL OF BEACH CONDITIONS TO THE INSPECTOR FOR REVIEW AND APPROVAL.
4. CONTRACTOR SHALL PROVIDE A FINAL SUBMITTAL OF BEACH CONDITIONS TO THE INSPECTOR FOR REVIEW AND APPROVAL.
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LEGEND

- SITE ACCESS (RIGHT OF WAY)
- WORK LIMITS
- PLACEMENT AREA - TYPICAL SECTION

PLACEMENT AREA - TYPICAL SECTION

NORTH

PLAN

TRUE N

400'

200'

0

SCALE: 1" = 200'
Attachment 2: Specifications
US Army Corps of Engineers®
CHICAGO DISTRICT
LEADERS IN CUSTOMER CARE

WAUKEGAN HARBOR APPROACH
CHANNEL DREDGING FY20
WAUKEGAN, ILLINOIS

CONSTRUCTION SOLICITATION
AND SPECIFICATIONS

Certified Final Documents - Ready to Advertise
W912P620B0009
July 24, 2020
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Project Title: Waukegan Harbor Dredging FY20 - (Waukegan, IL) Chicago District Project

Project Description: The contractor will be required to remove up to 300,000 Cubic Yards (CY) of sediment by mechanical dredging, at Waukgen Harbor.

COMPETITION FOR THIS ACQUISITION IS 100% SET-ASIDE FOR HUBZone SMALL BUSINESS CONCERNs; the applicable NAICS is 237990 with a small business size standard of $30M for dredging. Dredging projects: To be considered small for purposes of Government procurement, a firm must perform at least 40 percent of the volume dredged with its own equipment or equipment owned by another small dredging concern. The Estimated Magnitude of Construction Costs, in accordance with FAR 36.204 is between $1M and $5M. Construction Wage Rates: General Decision Number IL20200018, dated 03/05/2020 applies to this solicitation.

All BIDS in response to this Solicitation shall be submitted electronically, as described at Solicitation Section 00 21 13. -The only authorized transmission method for bids is electronically, online submission. NO OTHER TRANSMISSION METHODS (EMAIL, FACSIMILE, REGULAR MAIL, HAND CARRIED, ETC.) WILL BE ACCEPTED

NOTE: For the purposes of bidding this acquisition, wherein stated "RFP,” it means IFB and wherein stated "offer,” it means Bid.

Project Title: Waukegan Harbor Dredging FY20 - (Waukegan, IL) Chicago District Project

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10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS. (Title, identifying no., date):

Project Title: Waukegan Harbor Dredging FY20 - (Waukegan, IL) Chicago District Project

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11. The Contractor shall begin performance within _______10________ calendar days and complete it within _________430________ calendar days after receiving award. [X] notice to proceed. This performance period is [X] mandatory. [ ] negotiable. (See _________________________ )

12. A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES," indicate within how many calendar days after award in Item 12B.)

  X YES  [ ] NO

  12B. CALENDAR DAYS

  10

13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and ______0______ copies to perform the work required are due at the place specified in Item 8 by __________ (hour) local time ______________ (date). If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.

B. An offer guarantee [X] is, [ ] is not required.

C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.

D. Offers providing less than ______90______ calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.
### SOLICITATION, OFFER, AND AWARD (Continued)

*Construction, Alteration, or Repair*

#### OFFER (Must be fully completed by offeror)

<table>
<thead>
<tr>
<th>14. NAME AND ADDRESS OF OFFEROR</th>
<th>(Include ZIP Code)</th>
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<tbody>
<tr>
<td>15. TELEPHONE NO.</td>
<td>(Include area code)</td>
</tr>
<tr>
<td>16. REMITTANCE ADDRESS</td>
<td>(Include only if different than Item 14)</td>
</tr>
</tbody>
</table>

See Item 14

#### CODE

#### FACILITY CODE

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within ________ calendar days after the date offers are due. (Insert any number equal to or greater than the minimum requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)

#### AMOUNTS

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGMENT OF AMENDMENTS

(The offeror acknowledges receipt of amendments to the solicitation – give number and date of each)

<table>
<thead>
<tr>
<th>AMENDMENT NO.</th>
<th>DATE</th>
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</thead>
</table>

#### AMENDMENT NO.

#### DATE

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER | 20B. SIGNATURE |

#### OFFER | Type or print |

#### AWARD (To be completed by Government)

21. ITEMS ACCEPTED:

22. AMOUNT

23. ACCOUNTING AND APPROPRIATION DATA

24. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)

<table>
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<tr>
<th>ITEM</th>
<th>25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>[ ] 10 U.S.C. 2304(c) [ ] 41 U.S.C. 253(c)</td>
</tr>
</tbody>
</table>

26. ADMINISTERED BY | CODE |

27. PAYMENT WILL BE MADE BY: | CODE |

28. NEGOTIATED AGREEMENT

(Contractor is required to sign this document and return ______ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by reference in or attached to this contract.

29. AWARD

(Contractor is not required to sign this document.)

Your offer on this solicitation, is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.

<table>
<thead>
<tr>
<th>30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN</th>
<th>30B. SIGNATURE</th>
<th>30C. DATE</th>
</tr>
</thead>
</table>

31A. NAME OF CONTRACTING OFFICER | (Type or print) |

31B. UNITED STATES OF AMERICA | 31C. AWARD DATE |

TEL: |

EMAIL:
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<tr>
<th>ITEM NO</th>
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<th>UNIT</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
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<td>FFP</td>
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</table>

This is a parent Contract Line Item, linking its Sub-Items 0001AA through 0001AF. The actual work to be performed is described under the aforementioned Sub-Items. In that regard, the Contractor's pricing to perform the required services shall be provided therein Items 0001AA through 0001AF, wherein the sub-line items themselves identify the quantities required to perform said work.

### MOBILIZATION

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Under this CLIN, the contractor is required to perform mobilization activities. The contractor will be compensated for the totality of its activities needed to mobilize its equipment and labor force to the project site.

Payment Provisions:
The Government will pay all costs for the mobilization of all of the Contractor's plant and equipment at the lump sum price for this item. The Contracting Officer or its Representative may require the Contractor to furnish cost data to justify its bid price for this item if the Contracting Officer deems there's no reasonable relationship to the cost of the work in this contract. Failure to justify the line item price to the satisfaction of the Contracting Officer will result in payment determined by the Contracting Officer of the actual costs, which is not subject to appeal.

PURCHASE REQUEST NUMBER: W81G6693308033

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NET AMT
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<td></td>
<td>Under this CLIN, the contractor is required to perform demobilization activities. The contractor will be compensated for the totality of its activities needed to demobilize its equipment and labor force to the project site. Payment Provisions: The Government will pay all costs for the demobilization of all of the contractor's plant and equipment at the unit price for this item. The Contracting Officer or its Representative may require the Contractor to furnish cost data to justify its bid price for this item if the Contracting Officer deems there's no reasonable relationship to the cost of the work in this contract. Failure to justify the line item price to the satisfaction of the Contracting Officer will result in payment determined by the Contracting Officer of the actual costs, which is not subject to appeal.</td>
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Performance and Payment Bonds

Payment & Performance Bond for LINE ITEMS 0001AA THROUGH 0001AE -

The Government will reimburse the Contractor for the actual cost of acceptable
performance and payments bonds, upon receiving evidence of payment (paid
invoice) from the bonding company or agency, not to exceed the total amount of
the contract line item. The Government will not pay more than the total line item
amount for the performance and payment bonds. If the actual cost of the bonds is
less than the line item amount, the contract will modified to adjust the line item
accordingly. Adjustment(s) to the line item will also be made for any revisions to
the actual bond costs associated with contract changes re: FAR 52.232-5(g).

Option

This is a parent Contract Line Item, linking its Sub-Items 0002AA through
0002AF. The actual work to be performed is described under the aforementioned
Sub-Items. In that regard, the Contractor's pricing to perform the required services
shall be provided therein Items 0002AA through 0002AF, wherein the sub-line
items themselves identify the quantities required to perform said work.
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</table>

Payment & Performance Bond for LINE ITEMS 0002AA THROUGH 0002AE - The Government will reimburse the Contractor for the actual cost of acceptable performance and payments bonds, upon receiving evidence of payment (paid invoice) from the bonding company or agency, not to exceed the total amount of the contract line item. The Government will not pay more than the total line item amount for the performance and payment bonds. If the actual cost of the bonds is less than the line item amount, the contract will modified to adjust the line item accordingly. Adjustment(s) to the line item will also be made for any revisions to the actual bond costs associated with contract changes re: FAR 52.232-5(g).
This is a parent Contract Line Item, linking its Sub-Items 0003AA through 0003AU. The actual work to be performed is described under the aforementioned Sub-Items. In that regard, the Contractor's pricing to perform the required services shall be provided therein Items 0003AA through 0003AU, wherein the sub-line items themselves identify the quantities required to perform said work.

Payment Provisions:
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---

ITEM NO 0003AB
SUPPLIES/SERVICES DEMOBILIZATION
OPTION FFP
QUANTITY 1
UNIT Job
UNIT PRICE
AMOUNT

---

ITEM NO 0003AC
SUPPLIES/SERVICES ALTERNATIVE PLACEMENT LAKE BLUFF
OPTION FFP
QUANTITY A
UNIT Price
AMOUNT

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NET AMT
### PERFORMANCE AND PAYMENT BONDS

**FFP**

Payment & Performance Bond for LINE ITEMS 0003AA THROUGH 0001AT - The Government will reimburse the Contractor for the actual cost of acceptable performance and payments bonds, upon receiving evidence of payment (paid invoice) from the bonding company or agency, not to exceed the total amount of the contract line item. The Government will not pay more than the total line item amount for the performance and payment bonds. If the actual cost of the bonds is less than the line item amount, the contract will modified to adjust the line item accordingly. Adjustment(s) to the line item will also be made for any revisions to the actual bond costs associated with contract changes re: FAR 52.232-5(g).

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### GROUP 3 OPTION ITEMS

**FFP**

This is a parent Contract Line Item, linking its Sub-Items 0004AA through 0004AL. The actual work to be performed is described under the aforementioned Sub-Items. In that regard, the Contractor's pricing to perform the required services shall be provided therein Items 0004AA through 0004AL, wherein the sub-line items themselves identify the quantities required to perform said work. During the awarded option term the government at its discretion may award any of the option items with in the corresponding option year.

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**MOBILIZATION**

FFP

Under this CLIN, the contractor is required to perform mobilization activities. The contractor will be compensated for the totality of its activities needed to mobilize its equipment and labor force to the project site.

**Payment Provisions:**

The Government will pay all costs for the mobilization of all of the Contractor's plant and equipment at the lump sum price for this item. The Contracting Officer or its Representative may require the Contractor to furnish cost data to justify its bid price for this item if the Contracting Officer deems there's no reasonable relationship to the cost of the work in this contract. Failure to justify the line item price to the satisfaction of the Contracting Officer will result in payment determined by the Contracting Officer of the actual costs, which is not subject to appeal.

**NET AMT**

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**DEMOBILIZATION**

FFP

Under this CLIN, the contractor is required to perform demobilization activities. The contractor will be compensated for the totality of its activities needed to demobilize its equipment and labor force to the project site.

**Payment Provisions:**

The Government will pay all costs for the demobilization of all of the contractor's plant and equipment at the unit price for this item. The Contracting Officer or its Representative may require the Contractor to furnish cost data to justify its bid price for this item if the Contracting Officer deems there's no reasonable relationship to the cost of the work in this contract. Failure to justify the line item price to the satisfaction of the Contracting Officer will result in payment determined by the Contracting Officer of the actual costs, which is not subject to appeal.

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ITEM NO Suppliesservices Quantity Unit Unit Price Amount
0004AL Performance and Payment Bonds 1 Lot
Ffp
Payment & Performance Bond for LINE ITEMS 0004AA THROUGH 0004AK - The Government will reimburse the Contractor for the actual cost of acceptable performance and payments bonds, upon receiving evidence of payment (paid invoice) from the bonding company or agency, not to exceed the total amount of the contract line item. The Government will not pay more than the total line item amount for the performance and payment bonds. If the actual cost of the bonds is less than the line item amount, the contract will modified to adjust the line item accordingly. Adjustment(s) to the line item will also be made for any revisions to the actual bond costs associated with contract changes re: FAR 52.232-5(g).

Net AmT

ITEM NO Suppliesservices Quantity Unit Unit Price Amount
0005 Group 4 Option Items
Ffp
This is a parent Contract Line Item, linking its Sub-Items 0005AA through 0005AL. The actual work to be performed is described under the aforementioned Sub-Items. In that regard, the Contractor's pricing to perform the required services shall be provided therein Items 0005AA through 0005AL, wherein the sub-line items themselves identify the quantities required to perform said work.

Net AmT
### Mobilization

**Under this CLIN**, the contractor is required to perform mobilization activities. The contractor will be compensated for the totality of its activities needed to mobilize its equipment and labor force to the project site.

**Payment Provisions:**

The Government will pay all costs for the mobilization of all of the Contractor's plant and equipment at the lump sum price for this item. The Contracting Officer or its Representative may require the Contractor to furnish cost data to justify its bid price for this item if the Contracting Officer deems there's no reasonable relationship to the cost of the work in this contract. Failure to justify the line item price to the satisfaction of the Contracting Officer will result in payment determined by the Contracting Officer of the actual costs, which is not subject to appeal.

### Demobilization

Under this CLIN, the contractor is required to perform demobilization activities. The contractor will be compensated for the totality of its activities needed to demobilize its equipment and labor force to the project site.

**Payment Provisions:**

The Government will pay all costs for the demobilization of all of the contractor's plant and equipment at the unit price for this item. The Contracting Officer or its Representative may require the Contractor to furnish cost data to justify its bid price for this item if the Contracting Officer deems there's no reasonable relationship to the cost of the work in this contract. Failure to justify the line item price to the satisfaction of the Contracting Officer will result in payment determined by the Contracting Officer of the actual costs, which is not subject to appeal.
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ITEM NO 0005AL
SUPPLIES/SERVICES PERFORMANCE AND PAYMENT BONDS
QUANTITY 1
UNIT Lot
UNIT PRICE
AMOUNT

Payment & Performance Bond for LINE ITEMS 0005AA THROUGH 0005AK - The Government will reimburse the Contractor for the actual cost of acceptable performance and payments bonds, upon receiving evidence of payment (paid invoice) from the bonding company or agency, not to exceed the total amount of the contract line item. The Government will not pay more than the total line item amount for the performance and payment bonds. If the actual cost of the bonds is less than the line item amount, the contract will modified to adjust the line item accordingly. Adjustment(s) to the line item will also be made for any revisions to the actual bond costs associated with contract changes re: FAR 52.232-5(g).

ITEM NO 0006
SUPPLIES/SERVICES GROUP 5 OPTION ITEMS
QUANTITY
UNIT
UNIT PRICE
AMOUNT

This is a parent Contract Line Item, linking its Sub-Items 0006AA through 0006AJ. The actual work to be performed is described under the aforementioned Sub-Items. In that regard, the Contractor's pricing to perform the required services shall be provided therein Items 0006AJ through 0006AJ, wherein the sub-line items themselves identify the quantities required to perform said work.
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Payment & Performance Bond for LINE ITEMS 0006AA THROUGH 0006AH - The Government will reimburse the Contractor for the actual cost of acceptable performance and payments bonds, upon receiving evidence of payment (paid invoice) from the bonding company or agency, not to exceed the total amount of the contract line item. The Government will not pay more than the total line item amount for the performance and payment bonds. If the actual cost of the bonds is less than the line item amount, the contract will modified to adjust the line item accordingly. Adjustment(s) to the line item will also be made for any revisions to the actual bond costs associated with contract changes re: FAR 52.232-5(g).
GROUP 6 OPTION ITEMS

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This is a parent Contract Line Item, linking its Sub-Items 0007AA through 0007AL. The actual work to be performed is described under the aforementioned Sub-Items. In that regard, the Contractor's pricing to perform the required services shall be provided therein Items 0007AA through 0007AL, wherein the sub-line items themselves identify the quantities required to perform said work. During the awarded option term the government at its discretion may award any of the option items with in the corresponding option year.

MOBILIZATION

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Under this CLIN, the contractor is required to perform mobilization activities. The contractor will be compensated for the totality of its activities needed to mobilize its equipment and labor force to the project site.

Payment Provisions:
The Government will pay all costs for the mobilization of all of the Contractor's plant and equipment at the lump sum price for this item. The Contracting Officer or its Representative may require the Contractor to furnish cost data to justify its bid price for this item if the Contracting Officer deems there's no reasonable relationship to the cost of the work in this contract. Failure to justify the line item price to the satisfaction of the Contracting Officer will result in payment determined by the Contracting Officer of the actual costs, which is not subject to appeal.

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Under this CLIN, the contractor is required to perform demobilization activities. The contractor will be compensated for the totality of its activities needed to demobilize its equipment and labor force to the project site.

Payment Provisions:
The Government will pay all costs for the demobilization of all of the contractor's plant and equipment at the unit price for this item. The Contracting Officer or its Representative may require the Contractor to furnish cost data to justify its bid price for this item if the Contracting Officer deems there's no reasonable relationship to the cost of the work in this contract. Failure to justify the line item price to the satisfaction of the Contracting Officer will result in payment determined by the Contracting Officer of the actual costs, which is not subject to appeal.

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Payment & Performance Bond for LINE ITEMS 0007AA THROUGH 0007AK - The Government will reimburse the Contractor for the actual cost of acceptable performance and payments bonds, upon receiving evidence of payment (paid invoice) from the bonding company or agency, not to exceed the total amount of the contract line item. The Government will not pay more than the total line item amount for the performance and payment bonds. If the actual cost of the bonds is less than the line item amount, the contract will modified to adjust the line item accordingly. Adjustment(s) to the line item will also be made for any revisions to the actual bond costs associated with contract changes re: FAR 52.232-5(g).

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ITEM NO 0008AJ
OPTION

SUPPLIES/SERVICES PERFORMANCE AND PAYMENT BONDS

QUANTITY 1
UNIT Lot

UNIT PRICE

AMOUNT

OPTION
PERFORMANCE AND PAYMENT BONDS
FFP
Payment & Performance Bond for LINE ITEMS 0008AA THROUGH 0008AH - The Government will reimburse the Contractor for the actual cost of acceptable performance and payments bonds, upon receiving evidence of payment (paid invoice) from the bonding company or agency, not to exceed the total amount of the contract line item. The Government will not pay more than the total line item amount for the performance and payment bonds. If the actual cost of the bonds is less than the line item amount, the contract will modified to adjust the line item accordingly. Adjustment(s) to the line item will also be made for any revisions to the actual bond costs associated with contract changes re: FAR 52.232-5(g).

SUMMATION OF PRICES

TOTAL BASE BID ITEMS - LINE ITEMS 0001AA THROUGH 0001AF: $________________________

OPTION 1 – LINE ITEMS 0002AA THROUGH 0002AF: $________________________

OPTION 2 – LINE ITEMS 0003AA AND 0003AU: $________________________

OPTION 3 – LINE ITEMS 0004AA THROUGH 0004AL: $________________________

OPTION 4– LINE ITEMS 0005AA AND 0005AL: $________________________

OPTION 5 – LINE ITEMS 0006AA THROUGH 0006AJ: $________________________

OPTION 6 – LINE ITEMS 0007AA AND 0007AL: $________________________

OPTION 7 – LINE ITEMS 0008AA AND 0008AJ: $________________________

TOTAL OVERALL BID AMOUNT (ALL THE AFOREMENTIONED BID ITEMS AND OPTION ITEMS) $________________________
52.214-3  AMENDMENTS TO INVITATIONS FOR BIDS (DEC 2016)

(a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

(b) (1) Bidders shall acknowledge receipt of any amendment to this solicitation--

(i) By signing and returning the amendment;

(ii) By identifying the amendment number and date in space provided for this purpose on the form for submitting a bid;

(iii) By letter;

(iv) By facsimile, if facsimile bids are authorized in the solicitation; or

(v) By email, if email bids are authorized in the solicitation.

(2) The Government must receive the acknowledgement by the time and at the place specified for receipt of bids.

(End of provision)

52.214-18  PREPARATION OF BIDS--CONSTRUCTION (APR 1984)

(a) Bids must be (1) submitted on the forms furnished by the Government or on copies of those forms, and (2) manually signed. The person signing a bid must initial each erasure or change appearing on any bid form.

(b) The bid form may require bidders to submit bid prices for one or more items on various bases, including--

(1) Lump sum bidding;

(2) Alternate prices;
(3) Units of construction; or

(4) Any combination of subparagraphs (1) through (3) above.

(c) If the solicitation requires bidding on all items, failure to do so will disqualify the bid. If bidding on all items is not required, bidders should insert the words "no bid" in the space provided for any item on which no price is submitted.

(d) Alternate bids will not be considered unless this solicitation authorizes their submission.

(End of provision)

52.214-19 CONTRACT AWARD--SEALED BIDDING--CONSTRUCTION (AUG 1996)

(a) The Government will evaluate bids in response to this solicitation without discussions and will award a contract to the responsible bidder whose bid, conforming to the solicitation, will be most advantageous to the Government, considering only price and the price-related factors specified elsewhere in the solicitation.

(b) The Government may reject any or all bids, and waive informalities or minor irregularities in bids received.

(c) The Government may accept any item or combination of items, unless doing so is precluded by a restrictive limitation in the solicitation or the bid.

(d) The Government may reject a bid as nonresponsive if the prices bid are materially unbalanced between line items or subline items. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the Government even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advance payment.

(End of provision)

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a **Firm-Fixed Price Construction** contract resulting from this solicitation.

(End of provision)

52.217-5 EVALUATION OF OPTIONS (JUL 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(End of provision)

52.222-5 CONSTRUCTION WAGE RATE REQUIREMENTS--SECONDARY SITE OF THE WORK (MAY 2014)
(a)(1) The offeror shall notify the Government if the offeror intends to perform work at any secondary site of the work, as defined in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Construction Wage Rate Requirements, of this solicitation.

(2) If the offeror is unsure if a planned work site satisfies the criteria for a secondary site of the work, the offeror shall request a determination from the Contracting Officer.

(b)(1) If the wage determination provided by the Government for work at the primary site of the work is not applicable to the secondary site of the work, the offeror shall request a wage determination from the Contracting Officer.

(2) The due date for receipt of offers will not be extended as a result of an offeror's request for a wage determination for a secondary site of the work.

(End of provision)

52.225-10 NOTICE OF BUY AMERICAN REQUIREMENT--CONSTRUCTION MATERIALS (MAY 2014)

(a) Definitions. “Commercially available off-the-shelf (COTS) item,” “construction material,” “domestic construction material,” and “foreign construction material,” as used in this provision, are defined in the clause of this solicitation entitled “Buy American --Construction Materials” (Federal Acquisition Regulation (FAR) clause 52.225-9).

(b) Requests for determinations of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American statute should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American statute before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American statute, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers.

(1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the
equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested--

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

52.228-1   BID GUARANTEE (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer 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.

(c) The amount of the bid guarantee shall be 20% percent of the bid price or $3,000,000 whichever is less.

(d) 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 furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.

(e) 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, and the bid guarantee is available to offset the difference.

(End of provision)

52.233-2   SERVICE OF PROTEST (SEP 2006)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from

Regina G. Blair
Contracting Chief, Chicago District
Directorate of Contracting
USACE - Chicago District
231 South LaSalle Street, Suite 1500
Chicago, Illinois 60604

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)
52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) Site visits may be arranged during normal duty hours by contacting:

   Name:    Timothy Moya
   Address: 231 S. LaSalle St, Suite 1500, Chicago, IL 60604
   Telephone: (312) 846-5470

(End of provision)

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

   www.acquisition.gov

DFARS clauses and provisions can be found at https://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html

(End of provision)

252.236-7008 CONTRACT PRICES - BIDDING SCHEDULES. (DEC 1991)

(a) The Government's payment for the items listed in the Bidding Schedule shall constitute full compensation to the Contractor for --

   (1) Furnishing all plant, labor, equipment, appliances, and materials; and

   (2) Performing all operations required to complete the work in conformity with the drawings and specifications.

(b) The Contractor shall include in the prices for the items listed in the Bidding Schedule all costs for work in the specifications, whether or not specifically listed in the Bidding Schedule.
Section 00 21 13 - Instructions to Bidders

IMPORTANT BID NOTES

( THE ABOVE SOLICITATION SECTION 00 10 00 IS TO BE USED BY BIDDERS TO SUBMIT THEIR BIDS; IT IS ALSO CONSIDERED THE “BID SCHEDULE” AS TERMED THROUGHOUT THE SOLICITATION. )

1. BID CONDITIONS:

   a. The Contractor shall bid ALL items that are contained in the Bid Schedule INCLUDING ALL OPTION ITEMS, with no exceptions. Should a Contractor fail to fully complete the bid schedule, its bid will not be considered responsive to the solicitation and eligible for the resultant contract award. Therefore, the bidder’s total price for the work shall be based on the TOTAL of all BASE AND OPTION items included in the Bid Schedule. The Contractor shall enter both its unit price and extended price for each Bid Item.

   b. From this Solicitation, the government intends to award one firm-fixed price contract to the responsive, responsible bidder submitting the lowest overall aggregate price for all Base and Option Items. The intent is to immediately award the base bid items at the time of award.

   c. Split or multiple awards will not result from this Solicitation.

   d. Bidders are required to acknowledge the receipt of all amendments to the Solicitation on the Standard Form 1442 in the space provided, by completing Blocks 8 and 15 of the Amendment (Standard Form 30), by separate letter, or by telegram prior to opening of bids.

   e. SF 1442 BACK (Page 2 of the Solicitation): Bidders shall fully complete all the required areas located under the section designated as “BID” (refer to Items 14 through 20C).

   f. Section 00 45 00 (Representations and Certifications): The bidder must complete the applicable boxes found at Section 00 45 00 of this Solicitation and submit the completed Section along with all other documents required by this Solicitation. In order to place a bid in response to this Solicitation, the bidder must be registered in an “active status” at the System for Award Management (SAM) (registration can be completed online for free at www.sam.gov). Accordingly, any bid furnished from contractor without an active registration at SAM may be considered non-responsive to the material requirements of this Solicitation and ineligible for award.

2. OPTION PROVISIONS: SEE SECTION 00 70 00 CLAUSE NO. 52.217-7

3. BID SUBMISSION:

   a. HOW TO SUBMIT: ALL BIDS IN RESPONSE TO THIS SOLICITATION SHALL BE SUBMITTED VIA MAILED COPIES, EITHER BY REGULAR OR EXPRESS MAIL. DUE TO COVID 19, HAND-CARRIED BIDS WILL NOT BE PERMITTED.
Sealed Bids: Regardless of the method of delivery (regular or express mail), bids and all other documents called out in the Solicitation shall be enclosed and sealed in an envelope that is clearly marked “Bid” and shall include the assigned Solicitation Number, and the Bid Opening Date and Time.

Mailed Bids: It is the responsibility of each bidder to ensure that its Sealed Bid is received by the Chicago District’s – USACE Contracting Branch, located at 231 South LaSalle Street, Suite 1500, Chicago, IL 60604 prior to the date and time set for the opening of the bids – See Block 13A of Page 1 of the Solicitation.

b. **TIME OF SUBMISSION:** Bids are required no later than 3:00 p.m. Central time on **25 August 2020.**

c. **VIRTUAL BID OPENING:** For this procurement, Contracting will conduct a virtual Bid Opening in accordance with the below provisions. These procedures are being used because of the current public health concerns affiliated with COVID-19.

d. **VIRTUAL BID OPENING PROVISIONS/ PARTICIPATION:**

**THE VIRTUAL BID OPENING WILL BEGIN AT 3:00P.M. CDT ON 25 August 2020.**

Individuals interested in participating in the virtual bid opening can participate by following these instructions:

Interested individuals will navigate to a WEBEX link and enter their email address and name. Please provide your full name and information. This information will be utilized to obtain the list of attendees at the virtual bid opening.

The WEBEX Audio Meeting Information (call in number, access code) will be provided via an Amendment to the Solicitation WITHIN 2 days prior to the bid opening day and then posted to the corresponding Solicitation notice at beta.sam.gov.

The bids will be read aloud and individuals will be able to view the information on the WEBEX screen as the bids are entered into a bid tabulation sheet. Should technological issues ensue from the visual viewing at the WEBEX, the audio access will take precedence and satisfy the conditions of bids being communicated publicly/read aloud.

e. **BID GUARANTEE:**

Bidders are required to submit a Bid Guarantee for this project in accordance with the Federal Acquisition Regulation Clause 52.228-1, “Bid Guarantee” – Refer to Solicitation Section 00 21 00 for the full text of this Clause.

A bid guarantee shall be submitted at 20% of the bid price or $3M whichever is the lesser. Any bidder failing to submit an electronic Bid Guarantee will be considered non-responsive to the Solicitation and ineligible for award.

f. **ATTACHMENT A – PREAWARD SURVEY FORM** – The bidder shall complete the enclosed Attachment A and submit it electronically with its bid submission. The preaward survey form is to aid in expediting the award of this project. Only the winning bidder’s information will be surveyed.

g. **QUESTIONS SHALL BE SUBMITTED IN SUFFICIENT TIME TO BE ANSWERED VIA AN AMENDMENT PRIOR TO THE BID OPENING DAY AND TIME (25 August 2020 AT 3PM CDT).** (Re: 52.214-6 Explanation to Prospective Bidders)
ATTACHMENT A

PREAWARD SURVEY INFORMATION  
(RE: Subparts 9.104-1 and 9.105-1 of the Federal Acquisition Regulation)  
CONTRACTOR: ________________________________________  
SOLICITATION W912P620B0009, “Waukegan Harbor Dredging FY 20 - (WAUKEGAN HARBOR, IL)  
Chicago District Project”

Please complete the below form to assist in the completion of a Pre-award Survey:

1. Month and Year started in business: ________________________________

2. Year and State Incorporated: ________________________________

3. Key Personnel: _____________________________________________
   President/Owner: ___________________________________________
   Vice President/Partner: ______________________________________
   Secretary/Treasurer: _________________________________________

4. Number of Full-Time Employees: ________________________________

5. Surety -
   Agency: _____________________________________________________
   Agent: _____________________________________________________
   Address, City & State: _______________________________________
   Telephone#: ________________________________________________

6. Insurance Company -
   Agency: _____________________________________________________
   Agent: _____________________________________________________
   Address, City & State: _______________________________________
   Telephone#: ________________________________________________

7. Financial Institution Information -
   Name of Bank: ______________________________________________
Contact Person: ___________________________________________________________

Address, City & State: ______________________________________________________
Telephone#: ______________________________________________________________

8. References: Provide the names and contact information of three references. Information obtained from references will be used to determine if you have been diligent in the following areas: a) Quality of Work; b) Timely Performance; c) Effectiveness of Management; d) Compliance with Safety Standards; and e) Compliance with Labor Standards.

9. Does your company have any ongoing projects that may cause a problem with completing or beginning performance of the subject project?

END OF FORM
Section 00 45 00 - Representations and Certifications

CLAUSES INCORPORATED BY REFERENCE

52.209-13  Violation of Arms Control Treaties or Agreements -- Certification. JUN 2018
252.203-7005  Representation Relating to Compensation of Former DoD Officials NOV 2011
252.247-7022  Representation of Extent of Transportation by Sea. JUN 2019

CLAUSES INCORPORATED BY FULL TEXT

52.204-8  ANNUAL REPRESENTATIONS AND CERTIFICATIONS (MAR 2020)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 237990.

(2) The small business size standard is $27,500,000.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b)(1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the provision at 52.204-7, System for Award Management, is not included in this solicitation, and the Offeror has an active registration in the System for Award Management (SAM), the Offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The Offeror shall indicate which option applies by checking one of the following boxes:

(     ) Paragraph (d) applies.

(     ) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c) (1) The following representations or certifications in SAM are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed $150,000.
(iii) 52.203-18, Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements--Representation. This provision applies to all solicitations.

(iv) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.

(v) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(vi) 52.204-26, Covered Telecommunications Equipment or Services--Representation. This provision applies to all solicitations.

(vii) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations--Representation.

(viii) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(ix) 52.209-11, Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law. This provision applies to all solicitations.

(x) 52.214-14, Place of Performance--Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(xi) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(xii) 52.219-1, Small Business Program Representations (Basic, Alternates I, and II). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(C) The provision with its Alternate II applies to solicitations that will result in a multiple-award contract with more than one NAICS code assigned.

(xiii) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(xiv) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xv) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.
(xvi) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xvii) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xviii) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA-designated items.

(xix) 52.223-22, Public Disclosure of Greenhouse Gas Emissions and Reduction Goals--Representation. This provision applies to solicitations that include the clause at 52.204-7.)

(xx) 52.225-2, Buy American Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xxi) 52.225-4, Buy American--Free Trade Agreements--Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at 52.225-3.

(A) If the acquisition value is less than $25,000, the basic provision applies.

(B) If the acquisition value is $25,000 or more but is less than $50,000, the provision with its Alternate I applies.

(C) If the acquisition value is $50,000 or more but is less than $83,099, the provision with its Alternate II applies.

(D) If the acquisition value is $83,099 or more but is less than $100,000, the provision with its Alternate III applies.

(xxii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xxiii) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan--Certification. This provision applies to all solicitations.

(xxiv) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran—Representation and Certification. This provision applies to all solicitations.

(xxv) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions.

(2) The following representations or certifications are applicable as indicated by the Contracting Officer:

X (i) 52.204-17, Ownership or Control of Offeror.

X (ii) 52.204-20, Predecessor of Offeror.

(iii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.
(iv) 52.222-48, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Certification.

(v) 52.222-52 Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services--Certification.

(vi) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Alternate I only).

(vii) 52.227-6, Royalty Information.

(A) Basic.

(B) Alternate I.

(viii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

(d) The Offeror has completed the annual representations and certifications electronically in SAM accessed through https://www.sam.gov. After reviewing the SAM information, the Offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [offeror to insert changes, identifying change by clause number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

<table>
<thead>
<tr>
<th>FAR Clause</th>
<th>Title</th>
<th>Date</th>
<th>Change</th>
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Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

(End of provision)
Covered telecommunications equipment or services, critical technology, and substantial or essential component have the meanings provided in clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

(b) Prohibition. Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. Contractors are not prohibited from providing--

(1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

c) Procedures. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (https://www.sam.gov) for entities excluded from receiving federal awards for “covered telecommunications equipment or services”.

d) Representation. The Offeror represents that it [ ] will, [ ] will not provide covered telecommunications equipment or services to the Government in the performance of any contract, subcontract or other contractual instrument resulting from this solicitation.

e) Disclosures. If the Offeror has represented in paragraph (d) of this provision that it “will” provide covered telecommunications equipment or services”, the Offeror shall provide the following information as part of the offer-

(1) A description of all covered telecommunications equipment and services offered (include brand; model number, such as original equipment manufacturer (OEM) number, manufacturer part number, or wholesaler number; and item description, as applicable);

(2) Explanation of the proposed use of covered telecommunications equipment and services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b) of this provision;

(3) For services, the entity providing the covered telecommunications services (include entity name, unique entity identifier, and Commercial and Government Entity (CAGE) code, if known); and

(4) For equipment, the entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known).

(End of provision)

52.209-7 INFORMATION REGARDING RESPONSIBILITY MATTERS (OCT 2018)

(a) Definitions. As used in this provision--

Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative Proceedings, Civilian Board of Contract Appeals Proceedings, and Armed Services Board of Contract Appeals Proceedings). This includes administrative proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include agency actions such as contract audits, site visits, corrective plans, or inspection of deliverables.
Federal contracts and grants with total value greater than $10,000,000 means--

(1) The total value of all current, active contracts and grants, including all priced options; and

(2) The total value of all current, active orders including all priced options under indefinite-delivery, indefinite-quantity, 8(a), or requirements contracts (including task and delivery and multiple-award Schedules).

Principal means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

(b) The offeror ( ) has ( ) does not have current active Federal contracts and grants with total value greater than $10,000,000.

(c) If the offeror checked “has” in paragraph (b) of this provision, the offeror represents, by submission of this offer, that the information it has entered in the Federal Awardee Performance and Integrity Information System (FAPIIS) is current, accurate, and complete as of the date of submission of this offer with regard to the following information:

(1) Whether the offeror, and/or any of its principals, has or has not, within the last five years, in connection with the award to or performance by the offeror of a Federal contract or grant, been the subject of a proceeding, at the Federal or State level that resulted in any of the following dispositions:

(i) In a criminal proceeding, a conviction.

(ii) In a civil proceeding, a finding of fault and liability that results in the payment of a monetary fine, penalty, reimbursement, restitution, or damages of $5,000 or more.

(iii) In an administrative proceeding, a finding of fault and liability that results in--

(A) The payment of a monetary fine or penalty of $5,000 or more; or

(B) The payment of a reimbursement, restitution, or damages in excess of $100,000.

(iv) In a criminal, civil, or administrative proceeding, a disposition of the matter by consent or compromise with an acknowledgment of fault by the Contractor if the proceeding could have led to any of the outcomes specified in paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this provision.

(2) If the offeror has been involved in the last five years in any of the occurrences listed in (c)(1) of this provision, whether the offeror has provided the requested information with regard to each occurrence.

(d) The offeror shall post the information in paragraphs (c)(1)(i) through (c)(1)(iv) of this provision in FAPIIS as required through maintaining an active registration in the System for Award Management, which can be accessed via https://www.sam.gov (see 52.204-7).

(End of provision)
cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

Small business concern means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (d) of this clause. Such a concern is "not dominant in its field of operation" when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

(b) If the Contractor represented that it was any of the small business concerns identified in 19.000(a)(3) prior to award of this contract, the Contractor shall rerepresent its size and socioeconomic status according to paragraph (f) of this clause or, if applicable, paragraph (h) of this clause, upon occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts--

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and

(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) If the Contractor represented that it was any of the small business concerns identified in 19.000(a)(3) prior to award of this contract, the Contractor shall rerepresent its size and socioeconomic status according to paragraph (f) of this clause or, if applicable, paragraph (h) of this clause, when the Contracting Officer explicitly requires it for an order issued under a multiple-award contract.

(d) The Contractor shall rerepresent its size status in accordance with the size standard in effect at the time of this rerepresentation that corresponds to the North American Industry Classification System (NAICS) code(s) assigned to this contract. The small business size standard corresponding to this NAICS code(s) can be found at http://www.sba.gov/content/table-small-business-size-standards.

(e) The small business size standard for a Contractor providing a product which it does not manufacture itself, for a contract other than a construction or service contract, is 500 employees.

(f) Except as provided in paragraph (h) of this clause, the Contractor shall make the representation(s) required by paragraph (b) and (c) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause, or with its offer for an order (see paragraph (c) of this clause), that the data have been validated or updated, and provide the date of the validation or update.

(g) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (f) or (h) of this clause.

(h) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:
(1) The Contractor represents that it [     ] is, [     ] is not a small business concern under NAICS Code 237990 assigned to contract number W912P620B0009.

(2) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [     ] is, [     ] is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [     ] is, [     ] is not, a women-owned small business concern.

(4) Women-owned small business (WOSB) concern eligible under the WOSB Program. [Complete only if the Contractor represented itself as a women-owned small business concern in paragraph (h)(3) of this clause.] The Contractor represents that--

(i) It [     ] is, [     ] is not a WOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It [     ] is, [     ] is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (h)(4)(i) of this clause is accurate for each WOSB concern eligible under the WOSB Program participating in the joint venture.

[The Contractor shall enter the name or names of the WOSB concern eligible under the WOSB Program and other small businesses that are participating in the joint venture:      .] Each WOSB concern eligible under the WOSB Program participating in the joint venture shall submit a separate signed copy of the WOSB representation.

(5) Economically disadvantaged women-owned small business (EDWOSB) concern. [Complete only if the Contractor represented itself as a women-owned small business concern eligible under the WOSB Program in (h)(4) of this clause.] The Contractor represents that--

(i) It [     ] is, [     ] is not an EDWOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It [     ] is, [     ] is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (h)(5)(i) of this clause is accurate for each EDWOSB concern participating in the joint venture. [The Contractor shall enter the name or names of the EDWOSB concern and other small businesses that are participating in the joint venture:      .] Each EDWOSB concern participating in the joint venture shall submit a separate signed copy of the EDWOSB representation.

(6) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [     ] is, [     ] is not a veteran-owned small business concern.

(7) [Complete only if the Contractor represented itself as a veteran-owned small business concern in paragraph (h)(6) of this clause.] The Contractor represents that it [     ] is, [     ] is not a service-disabled veteran-owned small business concern.

(8) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that--

(i) It [     ] is, [     ] is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no
material changes in ownership and control, principal office, or HUBZone employee percentage have occurred since it was certified in accordance with 13 CFR part 126; and

(ii) It [     ] is, [     ] is not a HUBZone joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (h)(8)(i) of this clause is accurate for each HUBZone small business concern participating in the HUBZone joint venture. [The Contractor shall enter the names of each of the HUBZone small business concerns participating in the HUBZone joint venture:    .] Each HUBZone small business concern participating in the HUBZone joint venture shall submit a separate signed copy of the HUBZone representation.

[Contractor to sign and date and insert authorized signer's name and title.]

(End of clause)

252.204-7007 ALTERNATE A, ANNUAL REPRESENTATIONS AND CERTIFICATIONS (APR 2020)

Substitute the following paragraphs (b), (d) and (e) for paragraphs (b) and (d) of the provision at FAR 52.204-8:

(b)(1) If the provision at FAR 52.204-7, System for Award Management, is included in this solicitation, paragraph (e) of this provision applies.

(2) If the provision at FAR 52.204-7, System for Award Management, is not included in this solicitation, and the Offeror has an active registration in the System for Award Management (SAM), the Offeror may choose to use paragraph (e) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The Offeror shall indicate which option applies by checking one of the following boxes:

__ (i) Paragraph (e) applies.

__ (ii) Paragraph (e) does not apply and the Offeror has completed the individual representations and certifications in the solicitation.

(d)(1) The following representations or certifications in the SAM database are applicable to this solicitation as indicated:

(i) 252.204-7016, Covered Defense Telecommunications Equipment or Services--Representation. Applies to all solicitations.

(ii) 252.209-7003, Reserve Officer Training Corps and Military Recruiting on Campus--Representation. Applies to all solicitations with institutions of higher education.

(iii) 252.216-7008, Economic Price Adjustment--Wage Rates or Material Prices Controlled by a Foreign Government. Applies to solicitations for fixed-price supply and service contracts when the contract is to be performed wholly or in part in a foreign country, and a foreign government controls wage rates or material prices and may during contract performance impose a mandatory change in wages or prices of materials.

(iv) 252.225-7042, Authorization to Perform. Applies to all solicitations when performance will be wholly or in part in a foreign country.

(v) 252.225-7049, Prohibition on Acquisition of Certain Foreign Commercial Satellite Services--Representations. Applies to solicitations for the acquisition of commercial satellite services.

(vi) 252.225-7050, Disclosure of Ownership or Control by the Government of a Country that is a State Sponsor of Terrorism. Applies to all solicitations expected to result in contracts of $150,000 or more.
(vii) 252.229-7012, Tax Exemptions (Italy)--Representation. Applies to solicitations when contract performance will
be in Italy.

(viii) 252.229-7013, Tax Exemptions (Spain)--Representation. Applies to solicitations when contract performance
will be in Spain.

(ix) 252.247-7022, Representation of Extent of Transportation by Sea. Applies to all solicitations except those for
direct purchase of ocean transportation services or those with an anticipated value at or below the simplified
acquisition threshold.

(2) The following representations or certifications in SAM are applicable to this solicitation as indicated by the
Contracting Officer: [Contracting Officer check as appropriate.]

X (i) 252.209-7002, Disclosure of Ownership or Control by a Foreign Government.


____ (iii) 252.225-7020, Trade Agreements Certificate.

____ Use with Alternate I.

____X_ (iv) 252.225-7031, Secondary Arab Boycott of Israel.


____ Use with Alternate I.

____ Use with Alternate II.

____ Use with Alternate III.

____ Use with Alternate IV.

____ Use with Alternate V.

____ (vi) 252.226-7002, Representation for Demonstration Project for Contractors Employing Persons with
Disabilities.

____ (vii) 252.232-7015, Performance-Based Payments--Representation.

(e) The offeror has completed the annual representations and certifications electronically via the SAM Web site at
https://www.acquisition.gov/. After reviewing the SAM database information, the offeror verifies by submission of
the offer that the representations and certifications currently posted electronically that apply to this solicitation as
indicated in FAR 52.204-8(c) and paragraph (d) of this provision have been entered or updated within the last 12
months, are current, accurate, complete, and applicable to this solicitation (including the business size standard
applicable to the NAICS code referenced for this solicitation), as of the date of this offer, and are incorporated in
this offer by reference (see FAR 4.1201); except for the changes identified below ____ [offeror to insert changes,
identifying change by provision number, title, date]. These amended representation(s) and/or certification(s) are also
incorporated in this offer and are current, accurate, and complete
as of the date of this offer.

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Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications located in the SAM database.

(End of provision)

252.204-7016 COVERED DEFENSE TELECOMMUNICATIONS EQUIPMENT OR SERVICES -- REPRESENTATION (DEC 2019)

(a) Definitions. As used in this provision, covered defense telecommunications equipment or services has the meaning provided in the clause 252.204-7018, Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services.

(b) Procedures. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (https://www.sam.gov) for entities excluded from receiving federal awards for “covered defense telecommunications equipment or services”.

(c) Representation. The Offeror represents that it [ ] does, [ ] does not provide covered defense telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument.

(End of provision)

252.204-7017 PROHIBITION ON THE ACQUISITION OF COVERED DEFENSE TELECOMMUNICATIONS EQUIPMENT OR SERVICES--REPRESENTATION (DEC 2019)

The Offeror is not required to complete the representation in this provision if the Offeror has represented in the provision at 252.204-7016, Covered Defense Telecommunications Equipment or Services--Representation, that it “does not provide covered defense telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument.”

(a) Definitions. Covered defense telecommunications equipment or services, covered mission, critical technology, and substantial or essential component, as used in this provision, have the meanings given in the 252.204-7018 clause, Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services, of this solicitation.

(b) Prohibition. Section 1656 of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91) prohibits agencies from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service to carry out covered missions that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(c) Procedures. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) at https://www.sam.gov for entities that are excluded when providing any equipment, system, or service to carry out covered missions that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless a waiver is granted.

(d) Representation. If in its annual representations and certifications in SAM the Offeror has represented in paragraph (c) of the provision at 252.204-7016, Covered Defense Telecommunications Equipment or Services--Representation, that it “does” provide covered defense telecommunications equipment or services as a part of any system, the Offeror shall take such actions as are necessary to bring its representations into compliance with the provisions of this solicitation.
of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument, then the Offeror shall complete the following additional representation:

The Offeror represents that it [ ] will [ ] will not provide covered defense telecommunications equipment or services as a part of its offered products or services to DoD in the performance of any award resulting from this solicitation.

(e) Disclosures. If the Offeror has represented in paragraph (d) of this provision that it “will provide covered defense telecommunications equipment or services,” the Offeror shall provide the following information as part of the offer:

(1) A description of all covered defense telecommunications equipment and services offered (include brand or manufacturer; product, such as model number, original equipment manufacturer (OEM) number, manufacturer part number, or wholesaler number; and item description, as applicable).

(2) An explanation of the proposed use of covered defense telecommunications equipment and services and any factors relevant to determining if such use would be permissible under the prohibition referenced in paragraph (b) of this provision.

(3) For services, the entity providing the covered defense telecommunications services (include entity name, unique entity identifier, and Commercial and Government Entity (CAGE) code, if known).

(4) For equipment, the entity that produced or provided the covered defense telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known).

(End of provision)

252.225-7974  REPRESENTATION REGARDING BUSINESS OPERATIONS WITH THE MADURO REGIME (DEVIATION 2020-O0005) (FEB 2020)
(a) Definitions. As used in this provision -
Agency or instrumentality of the government of Venezuela means an agency or instrumentality of a foreign state as defined in section 28 U.S.C. 1603(b), with each reference in such section to "a foreign state" deemed to be a reference to "Venezuela".
Business operations means engaging in commerce in any form, including acquiring, developing, maintaining, owning, selling, possessing, leasing, or operating equipment, facilities, personnel, products, services, personal property, real property, or any other apparatus of business or commerce.
Government of Venezuela means the government of any political subdivision of Venezuela, and any agency or instrumentality of the government of Venezuela.
Person means -
(1) A natural person, corporation, company, business association, partnership, society, trust, or any other nongovernmental entity, organization, or group;
(2) Any governmental entity or instrumentality of a government, including a multilateral development institution (as defined in section 1701(c)(3) of the International Financial Institutions Act (22 U.S.C. 262r(c)(3)); and
(3) Any successor, subunit, parent entity, or subsidiary of, or any entity under common ownership or control with, any entity described in paragraphs (1) or (2) of this definition.
(b) Prohibition. In accordance with section 890 of the National Defense Authorization Act for Fiscal Year 2020 (Pub. L. 116-92), contracting officers are prohibited from entering into a contract for the procurement of products or services with any person that has business operations with an authority of the government of Venezuela that is not recognized as the legitimate government of Venezuela by the United States Government, unless the person has a valid license to operate in Venezuela issued by the Office of Foreign Assets Control of the Department of the Treasury.
(c) Representation. By submission of its offer, the Offeror represents that the Offeror -
(1) Does not have any business operations with an authority of the Maduro regime or the government of Venezuela that is not recognized as the legitimate government of Venezuela by the United States Government; or
(2) Has a valid license to operate in Venezuela issued by the Office of Foreign Assets Control of the Department of the Treasury.
(End of provision)
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When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR 2.101 in effect at the time the solicitation was issued, unless--

(a) The solicitation, or amended solicitation, provides a different definition;

(b) The contracting parties agree to a different definition;

(c) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning;

or

(d) The word or term is defined in FAR Part 31, for use in the cost principles and procedures.

(End of clause)

52.204-21  BASIC SAFEGUARDING OF COVERED CONTRACTOR INFORMATION SYSTEMS (JUN 2016)

(a) Definitions. As used in this clause--

Covered contractor information system means an information system that is owned or operated by a contractor that processes, stores, or transmits Federal contract information.

Federal contract information means information, not intended for public release, that is provided by or generated for the Government under a contract to develop or deliver a product or service to the Government, but not including information provided by the Government to the public (such as on public Web sites) or simple transactional information, such as necessary to process payments.

Information means any communication or representation of knowledge such as facts, data, or opinions, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual (Committee on National Security Systems Instruction (CNSSI) 4009).

Information system means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information (44 U.S.C. 3502).

Safeguarding means measures or controls that are prescribed to protect information systems.

(b) Safeguarding requirements and procedures.

(1) The Contractor shall apply the following basic safeguarding requirements and procedures to protect covered contractor information systems. Requirements and procedures for basic safeguarding of covered contractor information systems shall include, at a minimum, the following security controls:

(i) Limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems).

(ii) Limit information system access to the types of transactions and functions that authorized users are permitted to execute.

(iii) Verify and control/limit connections to and use of external information systems.

(iv) Control information posted or processed on publicly accessible information systems.
(v) Identify information system users, processes acting on behalf of users, or devices.

(vi) Authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.

(vii) Sanitize or destroy information system media containing Federal Contract Information before disposal or release for reuse.

(viii) Limit physical access to organizational information systems, equipment, and the respective operating environments to authorized individuals.

(ix) Escort visitors and monitor visitor activity; maintain audit logs of physical access; and control and manage physical access devices.

(x) Monitor, control, and protect organizational communications (i.e., information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems.

(xi) Implement subnetworks for publicly accessible system components that are physically or logically separated from internal networks.

(xii) Identify, report, and correct information and information system flaws in a timely manner.

(xiii) Provide protection from malicious code at appropriate locations within organizational information systems.

(xiv) Update malicious code protection mechanisms when new releases are available.

(xv) Perform periodic scans of the information system and real-time scans of files from external sources as files are downloaded, opened, or executed.

(2) Other requirements. This clause does not relieve the Contractor of any other specific safeguarding requirements specified by Federal agencies and departments relating to covered contractor information systems generally or other Federal safeguarding requirements for controlled unclassified information (CUI) as established by Executive Order 13556.

(c) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (c), in subcontracts under this contract (including subcontracts for the acquisition of commercial items, other than commercially available off-the-shelf items), in which the subcontractor may have Federal contract information residing in or transiting through its information system.

(End of clause)
(1) Is developed or provided by a covered entity;

(2) Includes any hardware, software, or service developed or provided in whole or in part by a covered entity; or

(3) Contains components using any hardware or software developed in whole or in part by a covered entity.

Covered entity means--

(1) Kaspersky Lab;

(2) Any successor entity to Kaspersky Lab;

(3) Any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or

(4) Any entity of which Kaspersky Lab has a majority ownership.

(b) Prohibition. Section 1634 of Division A of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91) prohibits Government use of any covered article. The Contractor is prohibited from--

(1) Providing any covered article that the Government will use on or after October 1, 2018; and

(2) Using any covered article on or after October 1, 2018, in the development of data or deliverables first produced in the performance of the contract.

(c) Reporting requirement.

(1) In the event the Contractor identifies a covered article provided to the Government during contract performance, or the Contractor is notified of such by a subcontractor at any tier or any other source, the Contractor shall report, in writing, to the Contracting Officer or, in the case of the Department of Defense, to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.

(2) The Contractor shall report the following information pursuant to paragraph (c)(1) of this clause:

(i) Within 1 business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; brand; model number (Original Equipment Manufacturer (OEM) number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the report pursuant to paragraph (c)(1) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of a covered article, any reasons that led to the use or submission of the covered article, and any additional efforts that will be incorporated to prevent future use or submission of covered articles.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts, including subcontracts for the acquisition of commercial items.

(End of clause)
52.204-25 PROHIBITION ON CONTRACTING FOR CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (AUG 2019)

(a) Definitions. As used in this clause--

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means--

(1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);

(2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);

(3) Telecommunications or video surveillance services provided by such entities or using such equipment; or

(4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means--

(1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;

(2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled--

(i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or

(ii) For reasons relating to regional stability or surreptitious listening;

(3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);

(4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);

(5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or


Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition. Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or
obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in Federal Acquisition Regulation 4.2104.

(c) Exceptions. This clause does not prohibit contractors from providing--

(1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(d) Reporting requirement.

(1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:

(i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

(End of clause)
time stated for completion shall include final cleanup of the premises.

(End of clause)

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(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 $1,655.23 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.

(End of clause)

52.217-7 OPTION FOR INCREASED QUANTITY--SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor as follows.

AWARD OF OPTION ITEMS (0002AA through 0008AJ): The government is under no obligation to award each and every option sub-item. At the discretion of the government, any, all or none of the Option Items under the Bid Schedule may be exercised as follows:

The purpose of the Option Group numbering is used for contract line item distinction not to numerically prioritize the Option Group Items. IMPORTANT NOTE: Regarding the categorizing of Option Groups, in particular, the alphabetical labeling that follows the Line Item Titles, e.g. “QUANTITY A,” “QUANTITY B,” etc., it is meant to differentiate the line items of the same titles within the Option Group. Further, they are not meant to suggest an order of importance. Nonetheless, each and every option item regardless of the labeling must be bid.

Option Sub-Items 0002AA through 0003AU– May be exercised within 230 calendar days following the Contractor’s acknowledgement of the Notice to Proceed. If any Option is exercised, the work must be performed within the time remaining under the Contract, meaning no additional time will be added to the Contract.

Option Sub-Items 0004AA through 0004AL – May be exercised within 425 calendar days following the Contractor’s acknowledgement of the Notice to Proceed. If any Option is exercised, there will be an additional 365 calendar days will be added to the Contract.

Option Sub-Items 0005AA through 0006AJ – The exercising of these options consider the aforementioned additional time being added to the Contract (re: Option Sub-Items 0004AA through 0004AL).– May be exercised within 595 calendar days following the Contractor’s acknowledgement of the Notice to Proceed. If any Option is exercised, the work must be performed within the time remaining under the Contract, meaning no additional time will be added to the Contract.

Option Sub-Items 0007AA through 0007AL– The exercising of these options consider the aforementioned additional time being added to the Contract (re: Option Sub-Items 0004AA through 0004AL).– May be exercised within 790 calendar days following the Contractor’s acknowledgement of the Notice to Proceed. If any Option is exercised, there will be an additional 365 calendar days will be added to the Contract.
Option Sub-Items 0008AA through 0008AJ – The exercising of these options consider the aforementioned additional time being added to the Contract (re: Option Sub-Items 0007AA through 0007AL).- May be exercised within 960 calendar days following the Contractor’s acknowledgement of the Notice to Proceed. If any Option is exercised, the work must be performed within the time remaining under the Contract, meaning no additional time will be added to the Contract.

Reference the Performance and Payment Bond sub-items. Should any option under a group be awarded, the applicable bond item will also be awarded, as bonding is required once the contract price is increased – see provision at Solicitation Section 00 70 00, Federal Acquisition Regulation Clause No. 52.228-15.

(End of clause)

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

<table>
<thead>
<tr>
<th>Goals for minority participation for each trade</th>
<th>Goals for female participation for each trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.9%</td>
<td>6.9%</td>
</tr>
</tbody>
</table>

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

(1) Name, address, and telephone number of the subcontractor;

(2) Employer's identification number of the subcontractor;

(3) Estimated dollar amount of the subcontract;
(4) Estimated starting and completion dates of the subcontract; and

(5) Geographical area in which the subcontract is to be performed.

e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is STATE OF ILLINOIS, COUNTY OF LAKE, AND CITY OF WAUKEGAN.

(End of provision)

52.222-35 EQUAL OPPORTUNITY FOR VETERANS (OCT 2015)

(a) Definitions. As used in this clause--

``Active duty wartime or campaign badge veteran,'' ``Armed Forces service medal veteran,'' ``disabled veteran,'' ``protected veteran,'' ``qualified disabled veteran,'' and ``recently separated veteran'' have the meanings given at FAR 22.1301.

(b) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts of $150,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

52.222-36 EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES (JUL 2014)

(a) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of $15,000 unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)
52.225-9 BUY AMERICAN—CONSTRUCTION MATERIALS (MAY 2014)

(a) Definitions. As used in this clause--

Commercially available off-the-shelf (COTS) item—

(1) Means any item of supply (including construction material) that is--

(i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4) such as agricultural products and petroleum products.

Component means an article, material, or supply incorporated directly into a construction material.

Construction material means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

Domestic construction material means--

(1) An unmanufactured construction material mined or produced in the United States;

(2) A construction material manufactured in the United States, if--

(i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic; or

(ii) The construction material is a COTS item.

Foreign construction material means a construction material other than a domestic construction material.

United States means the 50 States, the District of Columbia, and outlying areas.
(b) Domestic preference.

(1) This clause implements 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the component test of the Buy American statute is waived for construction material that is a COTS item. (See FAR 12.505(a)(2)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows:

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.
(2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

<table>
<thead>
<tr>
<th>Construction material description</th>
<th>Unit of measure</th>
<th>Quantity</th>
<th>Price (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1 Foreign construction material</td>
<td>........</td>
<td>__</td>
<td>__</td>
</tr>
<tr>
<td>Domestic construction material</td>
<td>........</td>
<td>__</td>
<td>__</td>
</tr>
<tr>
<td>Item 2 Foreign construction material</td>
<td>........</td>
<td>__</td>
<td>__</td>
</tr>
<tr>
<td>Domestic construction material</td>
<td>........</td>
<td>__</td>
<td>__</td>
</tr>
</tbody>
</table>

Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).
List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.
Include other applicable supporting information.

(End of clause)

52.228-5 INSURANCE--WORK ON A GOVERNMENT INSTALLATION (JAN 1997)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the State in which this contract is to be performed prescribe, or (2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

52.228-15 PERFORMANCE AND PAYMENT BONDS--CONSTRUCTION (OCT 2010)
(a) Definitions. As used in this clause--

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) Amount of required bonds. Unless the resulting contract price is $150,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance bonds (Standard Form 25). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) Payment Bonds (Standard Form 25-A). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) Additional bond protection. (i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of the Treasury, Financial Management Service, Surety Bond Branch, 3700 East West Highway, Room 6F01, Hyattsville, MD 20782. Or via the internet at http://www.fms.treas.gov/c570/.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 3133(c)). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

52.232-39 UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS (JUN 2013)

(a) Except as stated in paragraph (b) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:

(1) Any such clause is unenforceable against the Government.

(2) Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar
(End of clause)

52.233-4   APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004)

United States law will apply to resolve any claim of breach of this contract.

(End of clause)

52.236-16   QUANTITY SURVEYS (APR 1984)

(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 original and final surveys and make the computations based on them. The Contractor shall conduct the surveys for any periods for which progress payments are requested and shall make the computations based on these surveys. All 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, who shall use them as necessary to determine the amount of progress payments. The Contractor shall retain copies of all such material furnished to the Contracting Officer.

(End of clause)

52.243-4   CHANGES (JUN 2007)

(a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes--

(1) In the specifications (including drawings and designs);

(2) In the method or manner of performance of the work;

(3) In the Government-furnished property or services; or

(4) Directing acceleration in the performance of the work.
(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating

(1) the date, circumstances, and source of the order and

(2) that the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after

(1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

(End of clause)

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

www.acquisition.gov

DFARS clauses and provisions can be found at https://www.acq.osd.mil/dpap/dars/dfarspgi/c

(End of clause)

52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter I) clause with an authorized deviation is indicated by the addition of "(DEVIAION)" after the date of the clause.

(b) The use in this solicitation or contract of any DFARS (48 CFR II) clause with an authorized deviation is indicated by the addition of "(DEVIAION)" after the name of the regulation.
252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown --

(1) Must include sufficient detail to permit an analysis of profit, and of all costs for --

(i) Material;
(ii) Labor;
(iii) Equipment;
(iv) Subcontracts; and
(v) Overhead; and

(2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.

(c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.

(d) The Contractor's proposal shall include a justification for any time extension proposed.

252.236-7001 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)

(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 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 govern small-scale 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 that 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 the 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 specifications and the contract drawings identified on the following index of drawings:

1  G-001- TITLE, LOCATION AND VICINITY MAPS
2  V-001- SURVEY CONTROL
3  C-001- DREDGING & DISPOSAL AREAS
4  C-002- WAUKEGAN HARBOR - DREDGING AREA
5  C-003- FOSS BEACH - PLACEMENT AREA
6  C-004- SUNRISE PARK BEACH - PLACEMENT AREA
7  C-005- GLENCOE BEACH - PLACEMENT AREA
8  C-006- DOG, LEE ST., GREENWOOD ST. - PLACEMENT AREAS

(End of clause)

252.236-7002  OBSTRUCTION OF NAVIGABLE WATERWAYS. (DEC 1991)

(a) The Contractor shall --

(1) Promptly recover and remove any material, plant, machinery, or appliance which the contractor loses, dumps, throws overboard, sinks, or misplaces, and which, in the opinion of the Contracting Officer, may be dangerous to or obstruct navigation;

(2) Give immediate notice, with description and locations of any such obstructions, to the Contracting Officer; and

(3) When required by the Contracting Officer, mark or buoy such obstructions until the same are removed.

(b) The Contracting Officer may --

(1) Remove the obstructions by contract or otherwise should the Contractor refuse, neglect, or delay compliance with paragraph (a) of this clause; and

(2) Deduct the cost of removal from any monies due or to become due to the Contractor; or

(3) Recover the cost of removal under the Contractor's bond.

(c) The Contractor's liability for the removal of a vessel wrecked or sunk without fault or negligence is limited to that provided in sections 15, 19, and 20 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 410 et. seq.).

252.243-7002  REQUESTS FOR EQUITABLE ADJUSTMENT (DEC 2012)

(a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.

(b) In accordance with 10 U.S.C. 2410(a), any request for equitable adjustment to contract terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:
I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official's Name)

---------------------------------------------------------------------

(Title)

(c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including--

(1) Certified cost or pricing data if required in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and

(2) Data other than certified cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if certified cost or pricing data are not required.

(d) The certification requirement in paragraph (b) of this clause does not apply to----

(1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or

(2) Final adjustment under an incentive provision of the contract.
POST AWARD DOCUMENTS

SUBMISSION OF POST AWARD CONTRACT DOCUMENTATION

Following contract award, the Contractor shall provide contract documentation in an electronic format to the greatest extent practicable. Contract documentation to be submitted electronically may include, but is not limited to, the following:

- Submittals, including ENG 4025 transmittal form
- Meeting Minutes
- Requests for Information
- Payroll Documents
- Construction Photographs
- Correspondence
- Statement and Acknowledgement Forms (SF 1413)
- Request for Additional Classification (SF 1444)
- Progress Payment Requests and Supporting Documentation
- Contract Modification Documentation, including SF 30, Contractor’s Offer, Cost/Pricing Audit Report, and Certificate of Current Cost or Pricing Data
- Contractor Quality Control Reports (with attachments)
- Accident Reports
- Schedules and Schedule Updates
- Closeout Documentation, including Release of Claims

Electronic files must be of sufficient quality that all information is legible. Electronic format shall be in Adobe.PDF format, unless otherwise specified or directed by the Contracting Officer’s Representative (COR). Whenever possible and can be copied. If documents are scanned, Optical Character Resolution (OCR) routines are required. Files exceeding 30 pages shall be indexed and bookmarked to allow efficient navigation of the file. When required, the electronic file must include a valid electronic signature, or scan of a signature.

Email electronic documents fewer than 10MB to an email address as directed by the COR. Electronic documents over 10MB shall be provided on a CD/DVD, or through an electronic file sharing system such as the AMRDEC SAFE Web Application located at the following website:

https://safe.amrdec.army.mil/safe/

The Government reserves the right to request hard copy submission of any item, if deemed necessary. The Contractor shall be prepared to provide up to eight (8) additional paper hard copies of any contract document at the discretion of the COR, at no additional cost to the Government. In addition to the electronic file format described above, the following list of documents shall be provided in their original format because law or other regulations require signed originals be kept in accordance with FAR 4.805 -- Storage, Handling, and Disposal of Contract Files:

- Advance Payment Bond
- Bid Bond including Annual Bid Bond
- Performance Bond including Annual Performance Bond
- Payment Bond
- Patent Infringement Bond
- Any performance security instruments
- Certificate of Insurance
- Novation/Change of Name Agreement
- Assignment of Claims
- Any document containing a raised seal. Examples include Notarized documents
- Architecture Drawings
- Paper Payroll Documents
- Physical signatures on contracts and modifications
- SF 1442
- SF 30

End of List of Post Documentation
VETERANS EMPLOYMENT EMPHASIS

Veterans Employment Emphasis for U.S. Army Corps of Engineers Contracts

In addition to complying with the requirements outlined in FAR Part 22.13, FAR Provision 52.222-38, FAR Clause 52.222-35, FAR Clause 52.222-37, DFARS 222.13 and Department of Labor regulations, U.S. Army Corps of Engineers (USACE) contractors and subcontractors at all tiers are encouraged to promote the training and employment of U.S. veterans while performing under a USACE contract. While no set-aside, evaluation preference, or incentive applies to the solicitation or performance under the resultant contract, USACE contractors are encouraged to seek out highly qualified veterans to perform services under this contract. The following resources are available to assist USACE contractors in their outreach efforts:

- Federal Veteran Employment Information: https://www.fedshirevets.gov/
- Veterans Opportunity to Work (VOW) Program: https://www.benefits.va.gov/vow/
- Hiring Our Heroes: https://www.uschamberfoundation.org/hiring-our-heroes

(End of special contract requirement)
General Decision Number: IL20200018 03/06/2020

Superseded General Decision Number: IL20190018

State: Illinois

Construction Types: Heavy (Dredging and Marine)

Counties: Illinois Statewide.

MECHANICAL DREDGING (CLAMSHELL, DRAGLINE, AND BACKHOE) AND MARINE CONSTRUCTION:

ILLINOIS, INDIANA, MICHIGAN, MINNESOTA, NEW YORK, OHIO, PENNSYLVANIA AND WISCONSIN DREDGING AND MARINE CONSTRUCTION

Dredging and Marine Construction Projects: floating/land equipment engaged in clamshell, backhoe and dragline dredging, marine construction, bridges, salvage operations and cranes, loaders, dozers, or other equipment used for disposal of dredge spoils or marine construction materials on land at the slip or dock, at the project site, where the above material/spoils is being handled, and all equipment utilized on breakwall/breakwater structures on the Great Lakes, Islands therein, their connecting and tributary waters, including the Illinois Waterway to the Lock at Lockport, Illinois, the New York State Barge Canal System between Tonawanda, New York and Waterford, New York and Oswego, New York, the Duluth-Superior area to the Fond du Lac Bridge Crossing (Minnesota State Highway 23) on the St. Louis River and on the St. Lawrence River eastward to the International Boundary near St. Regis, New York.

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

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* SU1L2003-001 01/01/2020
MECHANICAL DREDGING (CLAMSHELL, DRAGLINE, AND BACKHOE) AND MARINE CONSTRUCTION):

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Class III .................. $ 39.95 22.23+b&c
Class IV .................. $ 33.75 22.23+b&c

FLOATING EQUIPMENT:

Wisconsin: Includes all marine/floating type work on projects in the Superior/Duluth Harbor, Lake Superior.

Class I .................... $ 48.85 23.03+b&c
Class II-A .................. $ 47.35 23.03+b&c
Class II-B .................. $ 47.85 23.03+b&c
Class III ................... $ 42.15 23.03+b&c
Class IV ................... $ 35.05 23.03+b&c

PAID HOLIDAYS (WHERE APPLICABLE):
A- NEW YEAR'S DAY
B- MEMORIAL DAY
C- INDEPENDENCE DAY
D- LABOR DAY
E- THANKSGIVING DAY
F- CHRISTMAS DAY
G- PRESIDENT'S DAY
H- VETERANS DAY.

FOOTNOTES:
a. $30.10 per day per employee for medical
b. Eight paid holidays: A thru H
c. Hazardous/Toxic Waste Material:
*Level A $2.50 per hour
*Level B 2.00 per hour
*Level C 1.00 per hour
*Level D 0.50 per hour

Such wages shall be above the classifications of work listed under mechanical dredging and Marine construction of this general wage decision. *Working with Hazardous Waste at this level as defined by the U. S. Environmental Protection Agency.

CLASSIFICATION DESCRIPTIONS
Class I - Master Mechanic - assist and direct
Class II, Class III, and Class IV, diver/wet tender, engineer (hydraulic dredge)
Class II-A Crane/Backhoe Operator, 70 Ton or over Tug Operator, Mechanic/Welder, assistant engineer/hydraulic dredge, leverman (hydraulic dredge, diver tender
Class II-B Friction, Lattice Boom, or any Crane
Certifications
Class III - Deck Equipment Operator (Machineryman)
Maintenance of Crane (over 50 ton capacity) or Backhoe (115,000 pounds or more), Tug/launch operator, Loader/dozer and like equipment on Barge, breakwater wall, slip/dock, Scow, Deck Machinery, etc.
Class IV - Deck Equipment Operator (Machineryman/Fireman)
(4 equipment units or more) Off Road Trucks, Deck Hand, Tug Engine and Crane Maintenance 50 ton capacity and under or Backhoe weighing 115,000 pounds or less, assistant tug operator.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "Identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all
rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request
review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION"
PART 1  GENERAL

1.1 REFERENCES
1.2 CERTIFICATES OF COMPLIANCE
1.3 RESPONSIBILITY OF THE CONTRACTOR
1.4 SUBMITTALS
1.5 DRUG FREE WORKPLACE
1.6 REAL ESTATE
   1.6.1 Additional Real Estate Rights
1.7 CONSTRUCTION SCHEDULE
1.8 INSPECTION
1.9 CONDITION OF EXISTING STRUCTURES
1.10 PRESERVATION OF HISTORICAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES
1.11 MINIMUM AMOUNT OF INSURANCE REQUIRED
1.12 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER
1.13 PERMITS AND RESPONSIBILITIES
1.14 COORDINATION WITH OTHERS
1.15 SPECIAL SAFETY REQUIREMENTS
1.16 ONE CALL SYSTEMS FOR EXCAVATORS
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1.20 TEMPORARY LIGHTS AND SIGNALS REQUIRED BY THE USCG
1.21 ACCOMMODATIONS FOR INSPECTORS
1.22 PRIOR, AFTER, AND QUANTITY SURVEYS
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1.24 BARRICADES AND WARNING SIGNS
1.25 PRECONSTRUCTION CONFERENCE
1.26 PROGRESS MEETINGS
1.27 VETERANS EMPLOYMENT EMPHASIS FOR U.S. ARMY CORPS OF ENGINEERS CONTRACTS
1.28 SECURITY REQUIREMENTS
   1.28.1 CLAUSE 15 - E-Verify Program

PART 2  PRODUCTS  (NOT USED)

PART 3  EXECUTION  (NOT USED)

-- End of Section Table of Contents --
1.1 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)


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

33 CFR 81 COLREGS: Implementing Rules

33 CFR 84 Positioning and Technical Details of Lights and Shapes

33 CFR 89 Inland Navigation Rules: Implementing Rules

1.2 CERTIFICATES OF COMPLIANCE

Any certificates required for demonstrating proof of compliance of materials with specification requirements must be executed in two copies. Each certificate must be signed by an official authorized to certify on behalf of the manufacturing company and must contain the name and address of the Contractor, the project name and location, and the quantity and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates must contain the name and address of the testing laboratory and the date or dates of the tests to which the report applies. Certification shall not be construed as relieving the Contractor from furnishing satisfactory material, if, after tests are performed on selected samples, the material is found not to meet specific requirements.

1.3 RESPONSIBILITY OF THE CONTRACTOR

The Contractor shall be responsible for the professional quality, technical accuracy and the coordination of all designs, drawings and specifications furnished by the Contractor under this contract. The Contractor shall, without additional compensation, correct or revise designs, drawings and specifications.

Neither the Government's review, approval or acceptance of, nor payment for, any of the services required under this contract shall be construed to operate as a waiver of any rights under this contract or of any cause
or action arising out of the performance of this contract, and the Contractor shall be and remain liable to the Government in accordance with applicable law for all damages to the Government caused by the Contractor's negligence in connection with designs, drawings and specifications, furnished under this contract.

The rights and remedies of the Government provided for under the contract are in addition to any other rights and remedies provided by law.

1.4 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. The following must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

- Construction Schedule; G, CN
- Condition of Existing Structures
- Coordination with Others; G, CN
- Drug Free Workplace
- List of E-Verified/Eligible Candidates; G, GSE

1.5 Drug Free Workplace

Refer to FAR CLAUSE 52.223-6 entitled DRUG FREE WORKPLACE in Section 00 70 0 - Conditions of the Contract. Submit within 45 calendar days of Contractor's receipt of the "Development and Submission of Initial Project Submittals".

1.6 REAL ESTATE

The rights of access for equipment and work areas are shown on the drawings. If no access is shown, that location has only water based access; unless the contractor coordinates with local entities for an alternative route.

1.6.1 Additional Real Estate Rights

If additional property agreements and/or real estate rights are desired by the Contractor, they may obtain them at their own expense. Additional real estate rights obtained by the Contractor must be coordinated and acknowledged as sufficient by USACE Real Estate prior to execution. Such agreements shall clearly relieve the Government of any liability resulting from the Contractor's use of such grounds.
1.7 CONSTRUCTION SCHEDULE

An initial baseline Construction Schedule shall be submitted within 14 calendar days of Notice to Proceed. This schedule shall use the date of Notice to Proceed as the start date and shall show the work completed on the Contract Required Completion Date, as indicated in the FAR clause entitled COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK in Section 00 70 00 – Conditions of the Contract. At a minimum, the schedule shall include the following items:

a. Submittal, Government review, and approval of preconstruction submittals, including the Contractor Quality Control Plan, the Accident Prevention Plan, the Environmental Protection Plan, and other major work plan and materials submittals;

b. Procurement of any long lead-time equipment or materials, if any;

c. Mobilization;

d. The sequencing of each major on-site work activity from preparatory work through completion of the field work;

e. Pre-final inspection, correction of punch list items, and final inspection;

f. Demobilization; and

g. Preparation, submittal, and Government review and approval of as-built drawings and closeout submittals.

In addition to the initial baseline schedule, electronic and hard copies of an updated Construction Schedule Submittal shall be included with each payment estimate/request for payment. These schedule updates shall compare the initial baseline schedule to an updated schedule showing the actual work progress to date and a projection of the work schedule for the remainder of the Contract.

All schedule submittals shall include a tabulated earnings projection, in a format acceptable to the COR, that lists the estimated earnings for each month of the Contract duration.

1.8 INSPECTION

The presence or absence of a Quality Assurance representative shall not relieve the Contractor of responsibility for the proper execution of work in accordance with the plans and specifications.

1.9 CONDITION OF EXISTING STRUCTURES

Prior to commencement of operations by the Contractor at the site, a detailed survey will be made of all existing structures that may be affected by the Contractor’s operations. The survey will be conducted in coordination with local interests, Contractor, Corps of Engineers Representative, and private parties concerned and will be sufficient in scope to provide advance agreement among all concerned as to the condition of the existing structures. Participate in pre-construction surveys of existing structures as deemed necessary to permit determination and accurate assessment of any subsequent damage to existing structures that may be incurred during the period of the contract.
1.10 PRESERVATION OF HISTORICAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES

If, during construction activities, the Contractor observes items that might have historical or archaeological value, such observations must be reported immediately to the COR so that the appropriate authorities may be notified and a determination can be made as to their significance and what, if any, special disposition of the finds should be made. Cease all activities that may result in the destruction of these resources and prevent employees from trespassing on, removing, or otherwise damaging such resources.

1.11 MINIMUM AMOUNT OF INSURANCE REQUIRED

In accordance with FAR CLAUSE entitled INSURANCE - WORK IN A GOVERNMENT INSTALLATION, the following minimum insurance coverages and limits are required. The term "Installation" referred to in this clause is deemed to mean Corps of Engineers project site or Federal property.

a. Evidence of the following minimum insurance coverages and limits, with concurrent policy expiration dates, must be received by the Department of the Army, Corps of Engineers before the Contractor can begin work. This evidence must be on a fully-completed, signed and dated ACORD Certificate of Insurance. In addition, policy endorsements must be issued by or in behalf of the insuring company or companies naming the Department of the Army, Corps of Engineers as Additional Interest Insured regarding the work. The endorsements must also provide that the Department of the Army, Corps of Engineers receive direct written notice at least 30 calendar days before the effective date of any material changes to, any cancellation of, or any non-renewal of these coverages during the time period of the Contractor's work. These endorsements must also be received by the Department of the Army, Corps of Engineers before the Contractor can begin work.

b. Should the coverages expire or be terminated during the time period of the Contractor's work, the Department of the Army, Corps of Engineers must receive an ACORD Certificate of Insurance as evidence of renewal or replacement insurance coverage and the supporting policy endorsements as specified above. The required evidence of renewal replacement insurance must be received by either the Contracting Officer or Contracting Officer's Representative at least 10 calendar days before the coverage expires or is being terminated.

c. All insuring companies must be rated A- or Excellent or better, by A.M. Best Company, an independent insurance rating service. The ACORD Certificate must list the A.M. Best Company insurance company code of listed insurance companies being offered.

<table>
<thead>
<tr>
<th>Insurance Coverage</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive General Liability</td>
<td></td>
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<tr>
<td>(Occurrence policy form only)</td>
<td></td>
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<tr>
<td>General Aggregate</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Products/Completed Operations</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Each Occurrence</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Fire Damage Legal Liability</td>
<td>$ 50,000</td>
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</tbody>
</table>

Comprehensive Automobile Liability
(Including Hired Automobile Liability and Non-Owned Automobile Liability)
Combined Single Limit               $1,000,000

Employers' Liability
Each Occurrence                    $  500,000
Policy Limit                       $  500,000
Each Employee                      $  500,000

Workers Compensation
(As required by state law or Federal law)

Umbrella Liability
(Occurrence policy form only)
Each Occurrence and Aggregate      $5,000,000

1.12 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER

This clause specifies the procedure for the determination of time extensions for unusually severe weather in accordance with the CONTRACT CLAUSE entitled "DEFAULT (FIXED PRICE CONSTRUCTION)". In order for the Contracting Officer to award a time extension under this clause, the weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.

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

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY
BUSINESS DAYS BASED ON A FIVE DAY WORK WEEK

<table>
<thead>
<tr>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
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<td>8</td>
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<td>4</td>
<td>5</td>
<td>6</td>
<td>13</td>
<td>26</td>
</tr>
</tbody>
</table>

Upon acknowledgement of Notice to Proceed (NTP) and continuing throughout the contract, record on the daily Contractor Quality Control report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled business day.

The number of actual adverse weather delay days must include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delays exceeds the number of days anticipated in paragraph 2, above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather business days, and issue a modification in accordance with the contract clause entitled "Default (Fixed Price Construction)".

1.13 PERMITS AND RESPONSIBILITIES

Obtain all permits/licenses required for this project as required under CONTRACT CLAUSES paragraph entitled "PERMITS AND RESPONSIBILITIES".
1.14 **COORDINATION WITH OTHERS**

Schedule and coordinate operations affecting other Contractors, Government hired labor forces, utilities, and/or property within the work limits. Schedule with lead time sufficient for coordination of all involved parties as necessary for timely completion of each contract feature. As evidence of this compliance with this General Provision, furnish the COR with a copy of each coordinated schedule prior to commencing operations affecting such other Contractors, utilities, and/or property.

1.15 **SPECIAL SAFETY REQUIREMENTS**

Comply with all applicable Federal, state and local safety requirements including, but not limited to, those provided in EM 385-1-1.

1.16 **ONE CALL SYSTEMS FOR EXCAVATORS**

One call systems, established by law, are operated by owners of underground facilities for excavators. Upon notification by an excavator through a one call system, all participating operators of underground facilities in a covered area will identify and locate their facilities. One call systems will be identified by contacting the following:

**ILLINOIS**

JULIE UTILITIES PROTECTION SERVICES  
1-800-892-0123

1.17 **ELECTRICAL POWER LINES**

Study the construction plans and site and know in detail all locations of power lines within the rights of way. Prior to performing any construction operation adjacent to power lines, appropriate danger signs must be provided where any equipment scheduled for use on the site is capable of contacting such lines. Confirm the location of underground lines, contact the appropriate council listed in paragraph ONE CALL SYSTEMS FOR EXCAVATORS. Aerial power lines must either be shut off and a positive means taken to prevent the lines from being energized, or clearances required by EM 385-1-1, Safety and Health Requirements Manual, must be maintained. Work must not proceed into dangerous areas without an additional workman being assigned the crew to watch the movements of other personnel and equipment to assure that designated clearances are maintained.

1.18 **PLACEMENT SITES**

Dredge material placement sites include littoral placement south of marina, littoral zone placement at Illinois Beach State Park (IBSP), and four different on-beach locations specified in the drawings (some on-beach locations have multiple placement sites within the vicinity). See section 01 57 20.01 03, ENVIRONMENTAL PROTECTION FOR ILLINOIS, for additional information and requirements. The COR may direct specific placement within the work limits of these sites after contract award.

1.19 **SIGNAL LIGHTS**

**FOR MARINE PLANTS**

Display signal lights and conduct his operations in accordance with the General Regulations of the Department of the Army and of the United States
Coast Guard (USCG), governing the following: lights and day signals to be displayed by towing vessels with tows on which no signals can be displayed, vessels working on wrecks, dredges, and vessels engaged in laying cables or pipe or in submarine or bank protection operations, lights to be displayed on dredge pipe lines; 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 of floating plant working in navigable channels, as set forth in Commandant USCG Instruction M16672.2, Navigation Rules: International-Inland (COMDTINST M16672.2), or 33 CFR 81 Appendix A (International) and 33 CFR 84 through 33 CFR 89 (Inland), as applicable.

1.20 TEMPORARY LIGHTS AND SIGNALS REQUIRED BY THE USCG

FOR MARINE PLANTS

All temporary lights and signals required by the USCG must be displayed during the required work. Information regarding required signals and lights may be obtained from the Commander, United States Ninth Coast Guard District, 1240 East Ninth Street, Cleveland, Ohio 44199.

1.21 ACCOMMODATIONS FOR INSPECTORS

FOR MARINE PLANTS

Provide the inspectors transportation accommodations to (and from) the breakwater and within the work limits for duration of the contract as deemed necessary by the Contracting Officer. The cost is incidental to the contract; however, failure to provide transportation accommodations will result in the Contracting Officer obtaining transportation accommodations and the cost will be deducted from payments to the Contractor.

Furnish regularly to inspectors on board the dredge or other craft upon which they are employed, a Contractor's field office with suitable separate room for office purposes and transportation to and from the dredge or other craft. The room must be fully equipped and maintained to the satisfaction of the COR; it must be properly heated, ventilated, and lighted, and must have a desk which can be locked, a chair for each inspector, and washing convenience. The entire for providing, equipping, and maintaining these accommodations must be included in the contract price. If the Contractor fails to meet these requirements, the facilities referred to above will be secured by the Contracting Officer, and the cost will be deducted from payments to the Contractor.

1.22 PRIOR, AFTER, AND QUANTITY SURVEYS

FOR MARINE WORK

General: Perform such surveys and computations as are necessary to determine the quantities of work performed or placed during each period for which a progress payment is to be made. Both a prior and after dredging survey are required for progress payment surveys. Soundings shall be continuous and ranges shall be no greater than 100 foot intervals with actual soundings taken at least every 20 feet along each range line. Prior sounding borders shall be the dredging boundaries as shown on the plans. The Government will make such computations as necessary to determine the final quantities of work performed or finally in place. Unless waived by the COR in each specific case, quantity surveys made by
the Contractor must be witnessed and approved by the COR. All surveys must be performed in accordance with the Class I Contract Payment Survey as specified in EM 1110-2-1003.

Documented Information: All original field notes, computations, digital sounding data and other records of the Contractor for the purposes of layout, original, progress, and final surveys must be furnished no later than two business days after completing surveys to the COR at the site of the work and must be used by the COR to the extent necessary in determining the proper amounts of progress and final payments. A copy of the original notes, computation, digital sounding data and records furnished to the COR must be retained by the Contractor.

Prior and After Soundings for Progress Payments: "Prior" soundings need to be plotted by the Contractor and submitted within five business days after the prior soundings are completed. Progress Quantity Surveys shall be used during the job for progress payments during the contract. "After" soundings are to be plotted by the Contractor and submitted within five business days after the soundings are completed. All soundings must be plotted at a scale of 1:50 and submitted in digital format per the COR request.

Format for Digital Sounding Data: Any sounding data provided to the Government must be on compact disk in ASCII tabular format or another format approved by the COR.

Verification: The Government may make checks as the work progresses to verify lines and grades established by the Contractor and to determine the conformance of the completed work as it progresses with the requirements of the contract specifications and drawings. Such checking by the COR shall not relieve the Contractor of his responsibility to perform all work in accordance with the contract drawings and specifications and the lines and grades given therein.

Format and Survey Notes: The format in which survey notes are recorded must be approved by the COR prior to any survey work being performed.

1.23 TAX EXEMPTION

ILLINOIS RETAILER'S OCCUPATIONAL TAX AND USE TAX EXEMPTION

Pursuant to the rulings of the Illinois Department of Revenue, materials which are to be physically incorporated into real estate owned by the Government are exempt from Illinois Retailers' Occupational Tax and Use Tax. However, sales of tools, fuel, lumber for forms and other end use or consumption items which are not physically incorporated into real estate are taxable sales. After contract award, the Contractor may request the Government Sales Tax Exemption Number, which must be used when purchasing tax exempt material. Nothing herein shall be construed to affect the provisions contained in Section 00700, Contract Clause entitled FEDERAL, STATE, AND LOCAL TAXES.

1.24 BARRICADES AND WARNING SIGNS

Provide and maintain barricades, danger and warning signs and suitable and efficient lights at all points of entry to the section or sections of roadway which are to be closed to public travel during construction operations under the contract. Furnish flagmen and watchmen to warn and direct traffic or to prevent travel on any portion of roadways during the
periods in which operations under the contract are performed as may be required to ensure safety and prevent accidents. All facilities furnished by the Contractor under this paragraph must be as prescribed by local highway authorities and must be subject to approval by the Contracting Officer. Traffic control must be in accordance with the by the State and local authorities having jurisdiction. A copy of the plan must be submitted to the Contracting Officer for approval. Separate payment shall not be made for any costs incurred by the Contractor in compliance with the provisions of this paragraph but all costs therefore shall be considered as a subsidiary obligation of the Contractor and are included in the contract price for other contract items as applicable.

1.25 PRECONSTRUCTION CONFERENCE

After award of the contract but prior to commencement of any work at the site, meet with the Contracting Officer to discuss and develop a mutual understanding relative to the administration of the value engineering and safety program, preparation of the schedule of prices or earned value report, shop drawings, and other submittals, scheduling programming, and prosecution of the work. Major subcontractors who will engage in the work must also attend.

1.26 PROGRESS MEETINGS

A progress meeting will be held once every week (weekly). The meetings must be held telephonically, unless the Government elects to hold the meetings at an alternate off-site location. The day and time for conducting meetings will be mutually agreed to between the Contractor, the Government, the Local Sponsors and other participants as required, within 30 calendar days after receipt of the notice to proceed. The Contractor is required to fully participate in the progress meeting. Unless the COR specifically indicates in writing otherwise, Contractor is to prepare meeting agendas and meeting minutes for each meeting.

Progress meeting will consist of a written agenda of topics and issues to be discussed during the meeting and followed up with draft meeting minutes prepared by the Contractor. The draft progress meeting minutes will be emailed out to all attendees one business day after the meeting for review and approval. The review and approval process will allow for mutual acceptance of the draft minutes as written, or editing to add, delete, and/or correct items that were covered in the weekly meeting. The edited draft meeting minutes will be published and handed out by the Contractor at each following week's progress meeting. If all attendees agree the minutes have been properly edited; then those minutes become the official final minutes of the previous week's progress meeting. All attendees will be required to sign an attendance sheet that will become an attachment to the official final meeting minutes.

The progress meeting agendas will at a minimum contain the following items:

a. A listing of all meeting participants.

b. The financial progress, including original and current contract amounts, the amount paid to date, the original and current contract completion dates, and the expiration dates listed on the Contractor's ACORD Certificate of Insurance.

c. A list of work completed since the last meeting.
d. A list of work activities scheduled for the upcoming two weeks.

e. Critical work activities in the project schedule.

f. Old business, including summaries of the status of unresolved issues discussed at previous progress meetings.

g. New business, including summaries of issues that need to be addressed and have not been included in previous meeting minutes.

h. Potential items of interest to the public, local sponsor, or local community.

i. The status of submittals, including lists of outstanding submittals, key submittals in review, and upcoming submittals.

j. A discussion of safety, including a summary of project accident and injury statistics, an overview of the primary safety concerns related to ongoing and upcoming work, and a discussion of the status of accident reports, if any.

k. A listing of all field changes/modifications.

The progress meeting minutes must be submitted to the Government and all other meeting participants for review and approval within three calendar days of the meeting. The review and approval process will allow for mutual acceptance of the minutes as written. As directed by the Government, edit the minutes to add, delete, and/or correct items that were covered in the weekly meeting. The edited meeting minutes must then be resubmitted before next weekly meeting (or seven days from original meeting) calendar days of the receipt of the Government comments.

1.27 VETERANS EMPLOYMENT EMPHASIS FOR U.S. ARMY CORPS OF ENGINEERS CONTRACTS

In addition to complying with the requirements outlined in FAR Part 22.13, FAR Clause 52.222-35, FAR Clause 52.222-37, DFARS 222.13, and Department of Labor regulations, United States Army Corps of Engineers (USACE) contractors and subcontractors at all tiers are encouraged to promote the training and employment of United States veterans while performing under a USACE contract. While no set-aside, evaluation preference, or incentive applies to the solicitation or performance under the resultant contract, USACE contractors are encouraged to seek out highly qualified veterans to perform services under this contract. The following resources are available to assist USACE contractors in their outreach efforts.

U.S. Department of Labor Veteran Employment: www.vets.gov/


Veterans' Employment and Training Services (VETS): http://www.doi.gov/vets/

Veterans Opportunity to Work (VOW) Program: https://benefits.va.gov/vow/

Hiring Our Heroes Initiative: www.uschamberfoundation.org/hiring-our-heroes
1.28 SECURITY REQUIREMENTS

1.28.1 CLAUSE 15 – E-Verify Program

The Contractor must pre-screen candidates using the E-verify Program (http://www.uscis.gov/e-verify) website to meet the established employment eligibility requirements. The Vendor must ensure that the candidate has two valid forms of Government issued identification prior to enrollment to ensure the correct information is entered into the E-verify system. The vendor must ensure the correct information is entered into the E-verify system. A list of E-verified/eligible candidates for each verified/eligible contractor candidate, working on this contract, shall be submitted to the COR no later than three business days after the initial contract award.

When contracts are with individuals, the individuals will be required to complete a Form I-9, Employment Eligibility Verification, with the designated Government representative. Form I-9 will be provided to the Contracting Officer and shall become part of the official contract file. (The purpose of using E-Verify is to ensure all contractors are U.S. citizens or documented foreign citizens with authority to work in the United States of America).

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

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SECTION 01 11 00
SUMMARY OF WORK
08/15

PART 1   GENERAL

1.1   WORK COVERED BY CONTRACT DOCUMENTS

1.1.1   Project Description

This project is to allow dredging in the Waukegan Harbor approach channel, outer harbor and advance maintenance area (dredging in any area will not occur unless proper permits are acquired). The contract will be a three year contract to include a base and two option years. The base work (year one) includes mechanically dredging up to 50,000 cubic yards of material in either or combination of the approach channel, outer harbor, and advance maintenance area. There are options to award up to an additional 50,000 cubic yards in the base year. Placement of dredged sediment will be in the littoral zone with options to place sediment at one, all, or a combination of six different beach zones listed below for the communities participating in the section 1122 pilot program. Option work for year two (option year 1) will include dredging up to 100,000 cubic yards of additional material within the same work limits as the base work. Placement of dredged sediment will be in either the littoral zone or an option will be exercised to place sediment at one of the six beaches in the pilot 1122 program, or at Illinois Beach State Beach Park (IBSP). Option work for year three (Option year 2) will include dredging up to 100,000 cubic yards of additional material within the same work limits as the base work. Placement of dredged sediment will be either in the littoral zone or IBSP. The dredge depth in the approach channel is minus 22 foot Lower Water Datum (LWD), the outer harbor is minus 18 foot LWD, the advance maintenance area is minus 22 foot LWD. The dredging areas will have an allowable one-foot over-dredge tolerance, but the advance maintenance area will have a two-foot over-dredge tolerance.

1122 Pilot Program Alternative On-Beach Locations:

1. Lake Bluff - Sunset Park and Beach
2. North Chicago - Foss Park
3. Glencoe - Glencoe Beach
4. Evanston - Dog Beach
5. Evanston - Greenwood Street Beach
6. Evanston - Lee Street Beach

Contract Dredging: No dredging can occur before January 1, 2021. Dredging activities must be completed in their entirety by 30 June for each dredging season for this three year contract.

1.1.2   Location

The work is located at the Waukegan Harbor located on the Lake Michigan shore of Illinois, as indicated on the drawings. The exact dredging locations within Waukegan Harbor and the Approach Channel will be provided to the Contractor prior to dredging with the Government's pre-dredge survey data.
PART 2   PRODUCTS (NOT USED)

PART 3   EXECUTION (NOT USED)

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DIVISION 01 - GENERAL REQUIREMENTS

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PRICE AND PAYMENT PROCEDURES

08/15

PART 1   GENERAL

1.1   SINGLE JOB PAYMENT ITEMS

1.1.1   Mobilization (Base Bid Item 0001AA, Option 2 Bid Item 0003AA, Option 3 Bid Item 0004AA, Option 4 Bid Item 0005AA, and Option 6 Bid Item 0007AA)
   1.1.1.1   Payment
   1.1.1.2   Unit of Measure

1.1.2   Demobilization (Base Bid Item 0001AB, Option 2 Bid Item 0003AB, Option 3 Bid Item 0004AB, Option 4 Bid Item 0005AB, and Option 6 Bid Item 0007AB)
   1.1.2.1   Payment
   1.1.2.2   Unit of Measure

1.1.3   Sediment Sampling for Approach Channel (Base Bid Item 0001AC, Option 3 Bid Item 0004AC, and Option 6 Bid Item 0007AC)
   1.1.3.1   Payment
   1.1.3.2   Unit of Measure

1.1.4   Scow Silent Inspector (Base Bid Item 0001AD, Option 3 Bid Item 0004AD, and Option 6 Bid Item 0007AD)
   1.1.4.1   Payment
   1.1.4.2   Unit of Measure

1.1.5   Performance and Payment Bonds (Base Bid Items 0001AF, Option 1 Bid Item 0002AF, Option 2 Bid Item 0003AU, Option 3 Bid Item 0004AL, Option 4 Bid Item 0005AL, Option 5 Bid Item 0006AJ, Option 6 Bid Item 0007AL, and Option 7 Bid Item 0008AJ)
   1.1.5.1   Payment
   1.1.5.2   Unit of Measure

1.2   UNIT PRICE PAYMENT ITEMS

1.2.1   Dredging and Placement (Base Bid Item 0001AE, Option 1 Bid Items 0002AA, 0002AB, 0002AC, 0002AD, 0002AE, Option 3 Bid Items 0004AE, 0004AF, 0004AG, 0004AH, 0004AJ, 0004AK, Option 6 Bid Items 0007AE, 0007AF, 0007AG, 0007AH, 0007AJ, and 0007AK)
   1.2.1.1   Payment
   1.2.1.2   Measurement
   1.2.1.3   Unit of Measure

1.2.2   Illinois Beach State Park (IBSP) Placement Area (Option 5 Bid Items 0006AA, 0006AB, 0006AC, 0006AD, 0006AE, 0006AF, 0006AG, 0006AH Option 7 Bid Items 0008AA, 0008AB, 0008AC, 00068D, 0008AE, 0008AF, 0008AG, 0008AH)
   1.2.2.1   Payment
   1.2.2.2   Measurement
   1.2.2.3   Unit of Measurement

1.2.3   Lake Bluff Placement Area On-Beach (Option 2 Bid Items 0003AC, 0003AD, 0003AE, 0003AF and Option 4 Bid Items 0005AC, and 0005AD)
   1.2.3.1   Payment
1.2.3.2 Measurement
1.2.3.3 Unit of Measurement

1.2.4 North Chicago Placement Area On-Beach (Option 2 Bid Items 0003AG, 0003AH, 0003AJ, 0003AK and Option 4 Bid Items 0005AE, and 0005AF)
1.2.4.1 Payment
1.2.4.2 Measurement
1.2.4.3 Unit of Measurement

1.2.5 Glencoe Placement Area On-Beach (Option 2 Bid Items 0003AL, 0003AM, 0003AN, 0003AP and Option 4 Bid Items 0005AG, and 0005AH)
1.2.5.1 Payment
1.2.5.2 Measurement
1.2.5.3 Unit of Measurement

1.2.6 Evanston Placement Area On-Beach (Option 2 Bid Items 0003AQ, 0003AR, 0003AS, 0003AT and Option 4 Bid Items 0005AJ, and 0005AK)
1.2.6.1 Payment
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1.2.6.3 Unit of Measurement

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 CONTRACT COST BREAKDOWN

-- End of Section Table of Contents --
PART 1   GENERAL

1.1 SINGLE JOB PAYMENT ITEMS

Payment items for the work of this contract for which contract job payments will be made are listed in the BIDDING SCHEDULE and described below. 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.

1.1.1 Mobilization (Base Bid Item 0001AA, Option 2 Bid Item 0003AA, Option 3 Bid Item 0004AA, Option 4 Bid Item 0005AA, and Option 6 Bid Item 0007AA)

Under this CLIN, the contractor is required to perform mobilization activities. The Contractor will be compensated for the totality of its activities needed to mobilize its equipment and labor force to the project site.

1.1.1.1 Payment

The Government will pay all costs for the mobilization of all of the Contractor's plant and equipment at the job price for this item. The Contracting Officer Representative (COR) may require the Contractor to furnish cost data to justify its bid price for this item if the COR deems there is no reasonable relationship to the cost of the work in this contract. Failure to justify the line item price to the satisfaction of the COR will result in payment determined by the COR of the actual cost, which is not subject to appeal.

1.1.1.2 Unit of Measure

Unit of Measure: JOB

1.1.2 Demobilization (Base Bid Item 0001AB, Option 2 Bid Item 0003AB, Option 3 Bid Item 0004AB, Option 4 Bid Item 0005AB, and Option 6 Bid Item 0007AB)

Under this CLIN, the contractor is required to perform demobilization activities. The Contractor will be compensated for the totality of its activities needed to demobilize its equipment and labor force to the project site.

1.1.2.1 Payment

The Government will pay all costs for the demobilization of all of the...
Contractor's plant and equipment at the job price for this item. The COR may require the Contractor to furnish cost data to justify it's bid price for this item if the COR deems there's no reasonable relationship to the cost of the work in this contract. Failure to justify the line item price to the satisfaction of the COR will result in payment determined by the Contracting Officer of the actual cost, which is not subject to appeal.

1.1.2.2 Unit of Measure

Unit of Measure: JOB

1.1.3 Sediment Sampling for Approach Channel (Base Bid Item 0001AC, Option 3 Bid Item 0004AC, and Option 6 Bid Item 0007AC)

1.1.3.1 Payment

Payment at the applicable lump sum price shall include costs for sampling, analyzing, and reporting for sediment sampling in the approach channel, as required in Section 01 35 45, SEDIMENT SAMPLING FOR APPROACH CHANNEL.

1.1.3.2 Unit of Measure

Unit of Measure: JOB

1.1.4 Scow Silent Inspector (Base Bid Item 0001AD, Option 3 Bid Item 0004AD, and Option 6 Bid Item 0007AD)

1.1.4.1 Payment

Payment will be made at the contract job price for the payment item "Silent Inspector" and the price must constitute full compensation for all labor, equipment, tools, and incidentals necessary to install, operate and maintain the system including data transmissions as specified in Section 35 21 23.13 NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM SCOW - MONITORING PROFILE, Scow Tracking Profile for the duration of the dredging operations including Option Bid Items. Fifty percent of the job bid must be for providing the necessary equipment and 50 percent of the amount bid must be for operating and maintaining the system. Any down time due to fault of the Contractor or Contractor's equipment will be an amount determined by percentage of time deducted from 50 percent of the bid amount.

1.1.4.2 Unit of Measure

Unit of Measure: JOB

1.1.5 Performance and Payment Bonds (Base Bid Items 0001AF, Option 1 Bid Item 0002AF, Option 2 Bid Item 0003AU, Option 3 Bid Item 0004AL, Option 4 Bid Item 0005AL, Option 5 Bid Item 0006AJ, Option 6 Bid Item 0007AL, and Option 7 Bid Item 0008AJ)

1.1.5.1 Payment

Payment will be made for the performance and payment bonds that are required as part of this contract. The Government will pay the actual cost of the bonds or the Contractor's bid price, whichever is less, after receiving evidence of payment (paid invoice) from the bonding company or agency.
1.1.5.2 Unit of Measure

Unit of Measure: LOT

1.2 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.

1.2.1 Dredging and Placement (Base Bid Item 0001AE, Option 1 Bid Items 0002AA, 0002AB, 0002AC, 0002AD, 0002AE, Option 3 Bid Items 0004AE, 0004AF, 0004AG, 0004AH, 0004AJ, 0004AK, Option 6 Bid Items 0007AE, 0007AF, 0007AG, 0007AH, 0007AJ, and 0007AK)

Maintenance dredging and optional maintenance dredging process must be mechanical dredging and littoral zone placement must be by bottom dump (split hull) scow. The dredging areas are shown in the drawings, exact locations will be determined by the COR after pre-dredge survey is completed. Submit dredging operation plan for selected dredging process in accordance with Section 35 20 23 DREDGING.

1.2.1.1 Payment

Payment for dredging, handling and placement of dredged materials will be made at the contract unit price per cubic yard as described in Section 35 20 23 DREDGING. Payment constitutes all labor, equipment and materials necessary to perform this work. Existing conditions shown on the drawings indicate conditions at the time of survey. Actual conditions may vary. Monthly partial payments will be based on approximate quantities determined by the progress payment quantity surveys taken by the Contractor or other means acceptable to the Contracting Officer's Representative (COR). Perform all surveys for progress payments in accordance with Section 01 10 00 GENERAL PROVISIONS. The Contractor's final payment will be based on the Government's prior and after dredge survey.

1.2.1.2 Measurement

The Contractor must, in the presence of the COR, take soundings after dredging to confirm that the proposed dredging depths have been completed for progress payments. Perform surveys in accordance to Section 35 20 23 DREDGING. The program and methods for calculating quantities for progress payments must be submitted in the dredging plans and agreed to prior to pre-dredging survey by the Contractor. The Contractor should note that the Approach Channel and Advance Maintenance dredge areas shown on the plans are possible areas to be dredged and are for bidding purposes. The actual area(s) selected to be dredged will be determined utilizing the pre-dredge survey completed by the Government.

a. Method of Measurement. The total amount of materials removed and to be paid for under the contract will be measured by the cubic yard in place by computing, within the limits of the allowances and tolerances the volume between the bottom surfaces shown by the prior and after survey soundings. The Government shall complete the final "after
dredging survey" as soon as practicable after all work specified has been completed. Results of soundings will be the basis for final payment.

b. During Progress of Work. The contract drawings are believed to accurately represent the conditions existing at the time of survey, however, all soundings of the proposed dredging areas shown on the drawings shall be verified and corrected by a "prior dredging survey" taken by the Government before dredging occurs. The contract depth will be determine by soundings or sweeping taken behind the dredge as work progresses. The Contractor shall take progress soundings or sweepings. The measurement and computation of payable quantities within the allowances and tolerances described in this section after having once been made, will not be reopened, except on evidence of collusion, fraud, or obvious error.

c. Excessive Dredging. Material taken from beyond the limits specified in paragraphs "Allowable Dredging Prism" and "Side Slope" of Section 35 20 23 DREDGING, will be deducted as excessive channel or sideslope dredging, from the total amount dredged for which payment will not be made. The final determination of the amounts of excessive dredging will be based wholly on the surveys made for final examination and acceptance.

d. Progress Payment Quantity Surveys. Progress Payment Quantity Surveys shall be performed in accordance with the class I Contract Payment Survey as specified in EM 1110-2-1003. Additional soundings will be taken as the COR may deem necessary.

e. Monthly Estimate. Monthly estimates of work completed will be based on the result of soundings taken during the progress of the work based on an estimated percent of completion. Deductions will be made for dredging and placement not in accordance with the specifications.

1.2.1.3 Unit of Measure

Unit of Measure: Cubic Yard (CY)

1.2.2 Illinois Beach State Park (IBSP) Placement Area (Option 5 Bid Items 0006AA, 0006AB, 0006AC, 0006AD, 0006AE, 0006AF, 0006AG, 0006AH Option 7 Bid Items 0008AA, 0008AB, 0008AC, 00068D, 0008AE, 0008AF, 0008AG, 0008AH)

The contractor will be responsible for the incremental cost increase for transport and placement of dredged material to the alternate placement site per the applicable plan sheet and permit. Littoral zone placement must be by bottom dump (split hull) scow. The contractor shall price this line item based upon placement costs from the Waukegan Harbor to the ALTERNATE PLACEMENT AREA (IBSP). The Contractor will be paid the unit price per cubic yard.

1.2.2.1 Payment

Full compensation for all labor, equipment, and materials for the transportation of Approach Channel, Advance Maintenance Area, and Outer Harbor dredged material to Optional Placement Area, as shown in the contract drawings and in accordance with 35 20 23 DREDGING, shall be paid at the contract unit price.
1.2.2.2 Measurement

The total amount of materials to be disposed of at the Optional Placement Area will be measured by identifying volume of material in the scow used to transport and dispose of in this area. Contractor will provide either barge displacement tables or dimensions of each scow to be used in the work. These will be used to calculate the volume each scow can accommodate. The contractor will also provide data from scow monitoring profile 35 21 23.13 NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM SCOW MONITORING PROFILE relating to barge displacement for each load to the optional displacement area or the positioning data for each placement.

1.2.2.3 Unit of Measurement

Unit of Measure: Cubic Yard (CY)

1.2.3 Lake Bluff Placement Area On-Beach (Option 2 Bid Items 0003AC, 0003AD, 0003AE, 0003AF and Option 4 Bid Items 0005AC, and 0005AD)

This is the difference in cost for transportation AND PLACEMENT of dredged material at the alternative on-beach placement site, including all finishing and grading. Sediment placement method is at the discretion of the contractor. The contractor shall price this line item based upon placement costs from the Waukegan Harbor to the ALTERNATE PLACEMENT AREA (Lake Bluff) and any applicable sub-locations in the vicinity shown in the drawings. The Contractor will be paid the unit price per cubic yard.

1.2.3.1 Payment

Full compensation for all labor, equipment, and materials for the transportation of Approach Channel, Advance Maintenance Area, and Outer Harbor dredged material to Optional Placement Area, as shown in the contract drawings and in accordance with 35 20 23 DREDGING, shall be paid at the contract unit price.

1.2.3.2 Measurement

The total amount of materials to be disposed of at the Optional Placement Area will be measured by identifying volume of material in the scow used to transport and dispose of in this area. Contractor will provide either barge displacement tables or dimensions of each scow to be used in the work. These will be used to calculate the volume each scow can accommodate. The contractor will also provide data from scow monitoring profile 35 21 23.13 NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM SCOW MONITORING PROFILE relating to barge displacement for each load to the optional displacement area or the positioning data for each placement.

1.2.3.3 Unit of Measurement

Unit of Measure: Cubic Yard (CY)

1.2.4 North Chicago Placement Area On-Beach (Option 2 Bid Items 0003AG, 0003AH, 0003AJ, 0003AK and Option 4 Bid Items 0005AE, and 0005AF)

This is the difference in cost for transportation AND PLACEMENT of dredged material at the alternative on-beach placement site, including all finishing and grading. Sediment placement method is at the discretion of
the contractor. The contractor shall price this line item based upon placement costs from the Waukegan Harbor to the ALTERNATE PLACEMENT AREA (North Chicago) and any applicable sub-locations in the vicinity shown in the drawings. The Contractor will be paid the unit price per cubic yard.

1.2.4.1 Payment

Full compensation for all labor, equipment, and materials for the transportation of Approach Channel, Advance Maintenance Area, and Outer Harbor dredged material to Optional Placement Area, as shown in the contract drawings and in accordance with 35 20 23 DREDGING, shall be paid at the contract unit price.

1.2.4.2 Measurement

The total amount of materials to be disposed of at the Optional Placement Area will be measured by identifying volume of material in the scow used to transport and dispose of in this area. Contractor will provide either barge displacement tables or dimensions of each scow to be used in the work. These will be used to calculate the volume each scow can accommodate. The contractor will also provide data from scow monitoring profile 35 21 23.13 NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM SCOW MONITORING PROFILE relating to barge displacement for each load to the optional placement area or the positioning data for each placement.

1.2.4.3 Unit of Measurement

Unit of Measure: Cubic Yard (CY)

1.2.5 Glencoe Placement Area On-Beach (Option 2 Bid Items 0003AL, 0003AM, 0003AN, 0003AP and Option 4 Bid Items 0005AG, and 0005AH)

This is the difference in cost for transportation AND PLACEMENT of dredged material at the alternative on-beach placement site, including all finishing and grading. Sediment placement method is at the discretion of the contractor. The contractor shall price this line item based upon placement costs from the Waukegan Harbor to the ALTERNATE PLACEMENT AREA (Glencoe) and any applicable sub-locations in the vicinity shown in the drawings. The Contractor will be paid the unit price per cubic yard.

1.2.5.1 Payment

Full compensation for all labor, equipment, and materials for the transportation of Approach Channel, Advance Maintenance Area, and Outer Harbor dredged material to Optional Placement Area, as shown in the contract drawings and in accordance with 35 20 23 DREDGING, shall be paid at the contract unit price.

1.2.5.2 Measurement

The total amount of materials to be disposed of at the Optional Placement Area will be measured by identifying volume of material in the scow used to transport and dispose of in this area. Contractor will provide either barge displacement tables or dimensions of each scow to be used in the work. These will be used to calculate the volume each scow can accommodate. The contractor will also provide data from scow monitoring profile 35 21 23.13 NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM SCOW MONITORING PROFILE relating to barge displacement for each load to the
optional displacement area or the positioning data for each placement.

1.2.5.3 Unit of Measurement

Unit of Measure: Cubic Yard (CY)

1.2.6 Evanston Placement Area On-Beach (Option 2 Bid Items 0003AQ, 0003AR, 0003AS, 0003AT and Option 4 Bid Items 0005AJ, and 0005AK)

This is the difference in cost for transportation AND PLACEMENT of dredged material at the alternative on-beach placement site, including all finishing and grading. Sediment placement method is at the discretion of the contractor. The contractor shall price this line item based upon placement costs from the Waukegan Harbor to the ALTERNATE PLACEMENT AREA (Evanston) and any applicable sub-locations in the vicinity shown in the drawings. The Contractor will be paid the unit price per cubic yard.

1.2.6.1 Payment

Full compensation for all labor, equipment, and materials for the transportation of Approach Channel, Advance Maintenance Area, and Outer Harbor dredged material to Optional Placement Area, as shown in the contract drawings and in accordance with 35 20 23 DREDGING, shall be paid at the contract unit price.

1.2.6.2 Measurement

The total amount of materials to be disposed of at the Optional Placement Area will be measured by identifying volume of material in the scow used to transport and dispose of in this area. Contractor will provide either barge displacement tables or dimensions of each scow to be used in the work. These will be used to calculate the volume each scow can accommodate. The contractor will also provide data from scow monitoring profile 35 21 23.13 NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM SCOW MONITORING PROFILE relating to barge displacement for each load to the optional displacement area or the positioning data for each placement.

1.2.6.3 Unit of Measurement

Unit of Measure: Cubic Yard (CY)

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 CONTRACT COST BREAKDOWN

The Contractor must furnish within 30 calendar 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 COR 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.
PART 1   GENERAL

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1.3   SUBMITTALS

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PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

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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.

Contractors to check and approve all items prior to submittal and stamp, sign, and date indicating action taken. Proposed deviations from the contract requirements are to be clearly identified. Include within submittals items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals.

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**

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. Some typical Preconstruction Submittals are listed below:

Certificates Of Insurance

Surety Bonds

List Of Proposed Subcontractors
List Of Proposed Products
Construction Progress Schedule
Baseline Network Analysis Schedule (NAS)
Submittal Register
Schedule Of Prices Or Earned Value Report
Work Plan
Quality Control (QC) Plan
Accident Prevention Plan
Environmental Protection Plan

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" 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 this section.

SD-01 Preconstruction Submittals

Submittal Register; G, CN

1.4 SUBMITTAL CLASSIFICATION

1.4.1 Government Approved (G)

Government approval is required for any variations from the Solicitation or the Accepted Proposal and for other items as designated by the Government.

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 (ENG FORM 4025)

Use the attached sample transmittal form (ENG Form 4025) for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These 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 inches by 11 inches nor more than 30 inches 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 Two Inches by Three Inches: Built up to 8 1/2 inches by 11 inches.

c. Sample of Materials Exceeding 8 1/2 Inches by 11 Inches: Cut down to 8 1/2 inches 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
Waukegan Harbor Dredging, Illinois

 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: Two inches by four 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: Four feet by four 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 inches by 11 inches 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 inches by 11 inches 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)

When O&M data submittals are required, their format shall comply with the requirements specified in the respective section where the submittal requirement is made.

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).

1.5.4 Electronic File Format

Provide submittals other than material samples in electronic format. The Transmittal Form described in the above paragraph shall be completed in RMS. The electronic submittal files must be compiled as a single, complete document submitted with the Transmittal Form in RMS. The electronic submittal file must be named specifically according to its contents (e.g., 01 45 00.00-1.2_Quality Control Plan.pdf).

Electronic files must be of sufficient quality that all information is legible. Use PDF as the electronic format, unless otherwise specified or directed by the Contracting Officer. Generate PDF files from original documents with bookmarks so that the text included in the PDF file is searchable and can be copied. If documents are scanned, optical character resolution (OCR) routines are required. Index and bookmark files exceeding 30 pages to allow efficient navigation of the file. When required, the electronic file must include a valid electronic signature or a scan of a signature.

Electronic submittal documents larger than 150MB cannot be uploaded into RMS and shall be sent through an electronic file sharing system such as the Department of Defence Secure Access File Exchange (DoD SAFE) Web Application located at the following website: https://safe.apps.mil.

1.6 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained. No payment will be made for any materials incorporated into the work for any conformance review submittals or information only submittals found to contain errors or deviations from the Solicitation or Accepted Proposal.
1.7 DELIVERABLES

1.7.1 Quantity of SD-04 Samples

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.

Submit one sample panel or provide one sample installation where directed. Include components listed in the technical section or as directed.

Submit one sample installation, where directed.

Submit one sample of nonsolid materials.

1.7.2 Address

Submittals designated for hard-copy submission must be sent to the following address in the number of copies specified:

U.S. Army Corps of Engineers
Northern Area Office
620 Barry Road
Building No. 158
Great Lakes, Illinois 60088.

1.8 SUBMITTAL REGISTER

At the end of this section is 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).

1.8.1 Maintain Submittal Register

Prepare and maintain submittal register, as the work progresses. Do not change data which is output in columns (c), (d), (e), and (f) as delivered by Government; retain data which is output in columns (a), (g), (h), and (i) as approved. A submittal register showing items of equipment and materials for which submittals are required by the specifications is provided as an attachment. 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 with the following fields completed, to the extent that will be required by the Government during subsequent usage.

Column (c): Lists specification section in which submittal is required.

Column (d): Lists each submittal description (SD No. and type, e.g., SD-02 Shop Drawings) required in each specification section.

Column (e): Lists one principal paragraph in 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 project requirements.

Column (f): Indicate approving authority for each submittal.

Thereafter, the Contractor is to track all submittals by maintaining a
complete list, including completion of all data columns, including dates
on which submittals are received and returned by the Government.

1.8.2 Use of Submittal Register

Submit submittal register. Submit with QC plan and project schedule.
Verify that all submittals required for 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 approving
authority to receive submittals.

Column (h) Contractor Approval Date: Date 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 with each submittal throughout contract.

Column (b) Transmittal Number: Contractor assigned list of
consecutive numbers.

Column (j) Action Code (k): Date of action used to record
Contractor's review when forwarding submittals to QC.

Column (l) List date of submittal transmission.

Column (q) List date approval received.

1.8.4 Approving Authority Use of Submittal Register

Update the following fields.

Column (b) Transmittal Number: Contractor assigned list of
consecutive numbers.

Column (l) List date of submittal receipt.

Column (m) through (p) List Date related to review actions.

Column (q) List date returned to Contractor.

1.8.5 Preconstruction Use of Submittal Register

Input the submittal register electronically using RMS. Include the QC
plan and the project schedule. Verify that all submittals required for the project are listed and add missing submittals.

1.8.6 Action Codes

1.8.6.1 Government Review Action Codes

"A" - "Approved as submitted"; "Completed"

"B" - "Approved, except as noted on drawings"; "Completed"

"C" - "Approved, except as noted on drawings; resubmission required"; "Resubmit"

"D" - "Returned by separate correspondence"; "Completed"

"E" - "Disapproved (See attached)"; "Resubmit"

"F" - "Receipt acknowledged"; "Completed"

"G" - "Other (Specify)"; "Resubmit"

"X" - "Receipt acknowledged, does not comply with contract requirements"; "Resubmit"

1.8.7 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 or as required by the COR.

1.9 SCHEDULING

Submittals covering component items forming a system or items that are interrelated must be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings must be so scheduled. Adequate time (a minimum of 30 calendar days exclusive of mailing time) must be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

Schedule and submit concurrent submittals covering component items forming a system or items that are interrelated. Include certifications to be submitted with the pertinent drawings 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. Allow for potential resubmittal of requirements.

b. Submittals called for by the contract documents will be listed on the register. If a submittal is called for 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 which have been omitted from the register or marked "N/A".
c. Re-submit register and annotate monthly by the Contractor with actual submission and approval dates. When all items on the register have been fully approved, no further re-submittal is required.

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

1.10 DEVIATIONS

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

1.11 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being coded in RMS. If rejected the Government will provide a comment sheet in RMS detailing the deficiencies.

1.12 INFORMATION ONLY SUBMITTALS

Submittals without a "G" designation must be certified by the QC manager and submitted to the Contracting Officer for information-only. 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.

1.13 VARIATIONS

Variations from contract requirements require Government approval pursuant to contract Clause FAR 52.236-21 Specifications and Drawings for Construction, and will be considered where advantageous to the Government.

1.13.1 Considering Variations

Discussion of variations with the Contracting Officer before submission will help ensure that functional and quality requirements are met and minimize rejections and resubmittals. When contemplating a variation that results in lower cost, consider submission of the variation as a Value Engineering Change Proposal (VECP).

Specifically point out variations from contract requirements in transmittal letters. Failure to point out variations may cause the
Government to require rejection and removal of such work at no additional cost to the Government.

1.13.2 Proposing Variations

When proposing variation, deliver written request to the Contracting Officer, with documentation of the nature and features of the variation and why the variation is desirable and beneficial to Government, including the DOR's written analysis and approval. 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.

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

1.13.3 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.

1.13.4 Review Schedule Extension

In addition to the normal submittal review period, a period of 10 business days will be allowed for the Government to consider submittals with variations.

1.14 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, code submittals in RMS. Coded submittals can be accessed by the Contractor in RMS-CM.

1.15 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.

1.16 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals is not to be construed as a complete check, and indicates only that the general method of construction, materials, detailing, and other information are satisfactory.

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.

1.17 APPROVED SAMPLES

Approval of a sample is only for the characteristics or use named in such approval and is not to 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.

Approval of the Contractor's samples by the Contracting Officer does not relieve the Contractor of his responsibilities under the contract.

1.18 STAMPS

Stamps on the submittal data to certify that the submittal meets contract requirements are to be similar to the following:
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION OF SUBMITTAL ITEM (Type size, model number/ etc.)</th>
<th>SUBMITTAL TYPE CODE (See Note 6)</th>
<th>NO. OF COPIES</th>
<th>CONTRACT DOCUMENT REFERENCE</th>
<th>CONTRACTOR REVIEW CODE</th>
<th>VARIATION</th>
<th>USACE ACTION CODE (Note 9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS**

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**

**SECTION 2 - APPROVAL ACTION**

**ENCLOSURES RETURNED (List by Item No.)**

**NAME AND TITLE OF APPROVING AUTHORITY**

**SIGNATURE OF APPROVING AUTHORITY**

**DATE**

ENG FORM 4025-R, MAR 2012

REPLACES EDITION OF VAR 95, WHICH IS OBSOLETE.
INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.

2. Each Transmittal shall be numbered consecutively. The Transmittal Number typically includes two parts separated by a dash (-). The first part is the specification section number. The second part is a sequential number for the submittals under that specification. If the Transmittal is a resubmittal, then add a decimal point to the end of the original Transmittal Number and begin numbering the resubmittal packages sequentially after the decimal.

3. The "Item No." for each entry on this form will be the same "Item No." as indicated on ENG FORM 4288-R.

4. Submittals requiring expeditious handling will be submitted on a separate ENG Form 4025-R.

5. Items transmitted on each transmittal form will be from the same specification section. Do not combine submittal information from different specification sections in a single transmittal.

6. If the data submitted are intentionally in variance with the contract requirements, indicate a variation in column h, and enter a statement in the Remarks block describing the detailed reason for the variation.

7. ENG Form 4025-R is self-transmitting - a letter of transmittal is not required.

8. When submittal items are transmitted, indicate the "Submittal Type" (SD-01 through SD-11) in column c of Section I.

   Submittal types are the following:
   SD-01 - Preconstruction
   SD-02 - Shop Drawings
   SD-03 - Product Data
   SD-04 - Samples
   SD-05 - Design Data
   SD-06 - Test Reports
   SD-07 - Certificates
   SD-08 - Manufacturer's Instructions
   SD-09 - Manufacturer's Field Reports
   SD-10 - O&M Data
   SD-11 - Closeout

9. For each submittal item, the Contractor will assign Submittal Action Codes in column g of Section I. The U.S. Army Corps of Engineers approving authority will assign Submittal Action Codes in column h of Section I. The Submittal Action Codes are:

   A = Approved as submitted.
   B = Approved, except as noted on drawings. Resubmission not required.
   C = Approved, except as noted on drawings. Refer to attached comments. Resubmission required.
   D = Will be returned by separate correspondence.
   E = Disapproved. Refer to attached comments.
   F = Receipt acknowledged.
   X = Receipt acknowledged, does not comply with contract requirements, as noted.
   O = Other action required (Specify)
   K = Government concurs with intermediate design (For D-B contracts)
   R = Design submittal is acceptable for release for construction. (For D-B contracts)

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract.
<table>
<thead>
<tr>
<th>ACTIVITY NO.</th>
<th>CONTRACTOR: SCHEDULE DATES</th>
<th>CONTRACTOR ACTION</th>
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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 SAFETY ENGINEERS (ASSE/SAFE)

ASSE/SAFE A10.22 (2007; R 2012) Safety Requirements for Rope-Guided and Non-Guided Workers’ Hoists
ASSE/SAFE A10.34 (2001; R 2012) Protection of the Public on or Adjacent to Construction Sites
ASSE/SAFE A10.44 (2014) Control of Energy Sources (Lockout/Tagout) for Construction and Demolition Operations
ASSE/SAFE Z244.1 (2003; R 2014) Control of Hazardous Energy Lockout/Tagout and Alternative Methods
ASSE/SAFE Z359.0 (2012) Definitions and Nomenclature Used for Fall Protection and Fall Arrest
ASSE/SAFE Z359.1 (2007) Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components
ASSE/SAFE Z359.11 (2014) Safety Requirements for Full Body Harnesses
ASSE/SAFE Z359.12 (2009) Connecting Components for Personal Fall Arrest Systems
ASSE/SAFE Z359.13 (2013) Personal Energy Absorbers and Energy Absorbing Lanyards
ASSE/SAFE Z359.15 (2014) Safety Requirements for Single Anchor Lifelines and Fall Arresters for Personal Fall Arrest Systems
ASSE/SAFE Z359.2 (2007) Minimum Requirements for a Comprehensive Managed Fall Protection Program
ASSE/SAFE Z359.3 (2007) Safety Requirements for Positioning
and Travel Restraint Systems


ASSE/SAFE Z359.6 (2009) Specifications and Design Requirements for Active Fall Protection Systems

ASSE/SAFE Z359.7 (2011) Qualification and Verification Testing of Fall Protection Products

ASME INTERNATIONAL (ASME)


ASME B30.22 (2016) Articulating Boom Cranes


ASME B30.3 (2016) Tower Cranes

ASME B30.5 (2014) Mobile and Locomotive Cranes

ASME B30.7 (2011) Winches

ASME B30.8 (2015) Floating Cranes and Floating Derricks


ASTM INTERNATIONAL (ASTM)


INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)


NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10 (2013) Standard for Portable Fire Extinguishers

NFPA 241 (2013; Errata 2015) Standard for Safeguarding Construction, Alteration, and
Demolition Operations

**NFPA 306**  
(2014) Standard for Control of Gas Hazards on Vessels

**NFPA 51B**  
(2014) Standard for Fire Prevention During Welding, Cutting, and Other Hot Work

**NFPA 70**  
(2017; ERTA 1-2 2017; TIA 17-1; TIA 17-2; TIA 17-3; TIA 17-4; TIA 17-5; TIA 17-6; TIA 17-7; TIA 17-8; TIA 17-9; TIA 17-10; TIA 17-11; TIA 17-12; TIA 17-13; TIA 17-14) National Electrical Code

**NFPA 70E**  
(2015; ERTA 1 2015) Standard for Electrical Safety in the Workplace

**TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA)**

**TIA-1019**  
(2012; R 2016) Standard for Installation, Alteration and Maintenance of Antenna Supporting Structures and Antennas

**TIA-222**  
(2005G; Add 1 2007; Add 2 2009; Add 3 2014; Add 4 2014; R 2014; R 2016) Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

**U.S. ARMY CORPS OF ENGINEERS (USACE)**

**EM 385-1-1**  

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

**29 CFR 1910**  
Occupational Safety and Health Standards

**29 CFR 1910.146**  
Permit-required Confined Spaces

**29 CFR 1910.147**  
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 1926.1400**  
Cranes and Derricks in Construction

**29 CFR 1926.16**  
Rules of Construction

**29 CFR 1926.450**  
Scaffolds
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 Appendix Q, 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 Appendix Q, is a person meeting the competent person requirements as defined in EM 385-1-1 Appendix Q and 29 CFR 1926, 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 Appendix Q 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 Appendix Q and in accordance with ASSE/SAFE 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 Appendix Q, 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 and include 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 Section 22.B.02.

1.2.7 Competent Person (CP) Trainer

A competent person trainer as defined in EM 385-1-1 Appendix Q, who is qualified in the 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 through 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 requirements of EM 385-1-1 Appendix Q, and ASSE/SAFE Z359.0, with 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 USACE Property and Equipment

Interpret "USACE" property and equipment specified in USACE EM 385-1-1 as Government property and equipment.

1.2.17 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" 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 Preconstruction Submittals
   Accident Prevention Plan (APP); G,CN,SO

SD-06 Test Reports
   Monthly Exposure Reports
   Notifications and Reports
   Accident Reports; G,CN,SO
   LHE Inspection Reports

SD-07 Certificates
   Crane Operators/Riggers
   Standard Lift Plan; G, CN
   Critical Lift Plan; G, CN
   Naval Architecture Analysis; G, CN
   Activity Hazard Analysis (AHA); G, CN
   Confined Space Entry Permit; G, CN
   Hot Work Permit
   Certificate of Compliance
   License Certificates
   Radiography Operation Planning Work Sheet
   Portable Gauge Operations Planning Worksheet

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 Section 1. 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 Section 01.A.17, and all associated sub-paragraphs.

If the SSHO is off-site for a period longer than 24 hours, an equally-qualified alternate SSHO must be provided and must fulfill the same roles and responsibilities as the primary SSHO. When the SSHO is temporarily (up to 24 hours) off-site, a Designated Representative (DR), as identified in the AHA may be used in lieu of an Alternate SSHO, and must be on the project site at all times when work is being performed. Note that the DR is a collateral duty safety position, with safety duties in addition to their full time occupation.

1.6.1.1.1 Additional Site Safety and Health Officer (SSHO) Requirements and Duties

The SSHO may 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, Appendix Q 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 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, Appendix Q, and herein. The CP for Confined Space Entry
must supervise the entry into each confined space in accordance with EM 385-1-1, Section 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 1910.147 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, Section 22.B.02 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, Section 21.C.04 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

Dredging safety personnel requirements are as follows:
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. For individual dredging projects or sites with a dredge crew and fill crew on watch of eight employees or less, a CDSO must be appointed, instead of an SSHO. The CDSO assumes the same responsibilities as a full-time SSHO.

d. 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.)

e. For Hopper Dredges with the United States Coast Guard (USCG), documented crews may designate an officer as a Collateral Duty Safety Officer (CDSO) instead of having a full-time SSHO onboard if the officer meets the SSHO training and experience requirements.

1.6.1.4.2 SSHO Requirements for Dredging

In addition to requirements stated elsewhere in this specification, an individual serving as a SSHO must be present at the project site, located so that they have full mobility and reasonable access to all major work operations, for at least one shift in each 24 hour period when work is being performed. The SSHO must be available during their shift for immediate verbal consultation and notification, either by phone or radio.

The SSHO is a full-time, dedicated position, except as noted above, who must report to a senior project (or corporate) official. When the SSHO is permitted to be a collateral duty, the SSHO is not permitted to be in another position requiring continuous mechanical or equipment operations, such as equipment operators.

The SSHO must inspect all work areas and operations during initial set-up and at least monthly observe and provide personal oversight on each shift during dredging operations for projects with many work sites, more often for those with less work sites.

If the SSHO is off-site for a period longer than 24 hours, another qualified SSHO must be provided and fulfill the same roles and responsibilities as the SSHO during their absence.

1.6.1.4.3 Collateral Duty Safety Officer (CDSO) Requirements for Dredging

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. The 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.

A CDSO performs 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 Appendix A, paragraph 3.d.(3), applicable to dredging work, and given by qualified instructors. In exception to EM 385-1-1, Section 01.A.17, comply with the following:

a. The SSHO must maintain competency through having taken 8 hours of formal classroom or online safety and health related coursework every year. 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 one-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 three years of experience within the past five years in one of the following:

(1) Supervising/managing dredging activities,

(2) Supervising/managing marine construction activities,

(3) Supervising/managing land-based construction activities,

(4) Work managing safety programs or processes, or

(5) Conducting hazard analyses and developing controls in activities or environments with similar hazards.

1.6.1.5 Crane Operators/Riggers


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 duties are not being effectively carried out. If 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

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).

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 at the conference 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.
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 work 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 on 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 seven calendar days in advance.

1.7 ACCIDENT PREVENTION PLAN (APP)

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, Appendix A, and as supplemented herein. Cover all paragraph and subparagraph elements in EM 385-1-1, Appendix A. 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. 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 15 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 ASSE/SAFE A10.34), and the environment.

1.7.1 Names and Qualifications

Provide plans in accordance with the requirements outlined in Appendix A 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.

1.7.2 Plans

Provide plans in the APP in accordance with the requirements outlined in Appendix A of EM 385-1-1, including the following:

1.7.2.1 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.

1.7.2.2 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, Section 16.A.03, using Form 16-2 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.

1.7.2.3 Critical Lift Plan - Crane or Load Handling Equipment

Provide a Critical Lift Plan as required by EM 385-1-1, Section 16.H.01, using Form 16-3. 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.

1.7.2.3.1 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, Section 16.F.03.

1.7.2.3.2 Lifts of Personnel

In addition to the requirements of EM 385-1-1, Section 16.H.02, for lifts of personnel, demonstrate compliance with the requirements of 29 CFR 1926.1400 and EM 385-1-1, Section 16.T.

1.7.2.4 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, Section 16.L.03.

1.7.2.5 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.

1.7.2.6 Fall Protection and Prevention (FP&P) Plan

The plan must comply with the requirements of EM 385-1-1, Section 21.D and ASSE/SAFE 2359.2, 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 six 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 FP&P 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 FP&P Plan documentation at the job site for the duration of the project. Include the FP&P Plan documentation in the APP.

1.7.2.7 Rescue and Evacuation Plan

Provide a Rescue and Evacuation Plan in accordance with EM 385-1-1 Section 21.N and ASSE/SAFE 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.

1.7.2.8 Hazardous Energy Control Program (HECP)

Develop a HECP in accordance with EM 385-1-1 Section 12, 29 CFR 1910.147, 29 CFR 1910.333, 29 CFR 1915.89, ASSE/SAFE Z244.1, and ASSE/SAFE 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, Section 12.A.02. Ensure that each employee is familiar with and complies with these procedures.

1.7.2.9 Excavation Plan

Identify the safety and health aspects of excavation, and provide and prepare the plan in accordance with EM 385-1-1, Section 25.A.

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, Section 1 or as directed by the Contracting Officer. Submit the AHA for review at least 15 business 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

Within one calendar day after 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, Section 01.A.07. 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, and

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. 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 Appendix Q, 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 4 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 (e.g., 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

General: 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 five calendar days of the accident. The Contracting Officer will provide copies of any required or special forms.

Near Misses: For Army projects, report all "Near Misses" to the GDA, using local mishap reporting procedures, within 24 hours. The Contracting Officer will provide the Contractor the required forms. Near miss reports are considered positive and proactive Contractor safety management actions.

Load Handling Equipment Accident: 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 FORM 16-1 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, Section 16.H.03 using Form 16-2 Standard Pre-Lift Crane Plan/Checklist 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 City of Waukegan Fire Department. 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 City of Waukegan Fire Department 911 phone number. REPORT ANY FIRE, NO MATTER HOW SMALL, TO THE RESPONSIBLE CITY OF WAUKEGAN FIRE DEPARTMENT IMMEDIATELY.

1.13.2 **Work Around Flammable Materials**

Obtain permit approval from a NFPA Certified Marine Chemist 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, Section 06.H

1.14 **CONFINED SPACE ENTRY REQUIREMENTS**

Confined space entry must comply with Section 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.
1.14.1 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, Section 34 for entry procedures. Hazards pertaining to the space must be reviewed with each employee during review of the AHA.

1.14.2 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.

1.14.3 Sewer Wet Wells

Sewer wet wells require continuous atmosphere monitoring with audible alarm for toxic gas detection.

1.14.4 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.

1.15 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) for review and acceptance at least 15 business 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.

1.16 SEVERE STORM PLAN

In the event of a severe storm warning, the Contractor must:

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.

d. Ensure that barges, boats, and tubs are securely anchored and moored.
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, and

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. An employee check-in/check-out communication procedure must be developed 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 PRE-OUTAGE COORDINATION MEETING

Apply for utility outages at least 15 business days in advance. As a minimum, the request must include the location of the outage, utilities being affected, duration of outage and any necessary sketches. Once approved, and prior to beginning work on the utility system requiring shut down, attend a pre-outage coordination meeting with the Contracting Officer to review the scope of work and the lock-out/tag-out procedures for worker protection. No work will be performed on energized electrical circuits unless proof is provided that no other means exist.

3.3 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 ASSE/SAFE Z359.2 and EM 385-1-1, Sections 21.A and 21.D.

3.3.1 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. Provide training by a competent person for fall protection in accordance with EM 385-1-1, Section 21.C. Document training and practical application of the competent person in accordance with EM 385-1-1, Section 21.C.04 and ASSE/SAFE Z359.2 in the AHA.

3.3.2 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, Section 21.


3.3.2.1 Additional Personal Fall Protection

In addition to the required fall protection systems, other protection 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,
Sections 21.0 through 21.0.06. 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.

3.3.2.2 Personal Fall Protection Harnesses

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 carabiners 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 pounds 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 six 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. All full body harnesses must be equipped 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, Section 21.I.06.

3.3.3 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 six feet of an edge, on a roof having a slope less than or equal to 4:12 (vertical to horizontal), protect personnel from falling by use of personal fall arrest/restraint systems, guardrails, or safety nets. A safety monitoring system is not adequate fall protection and is not authorized. Provide in accordance with 29 CFR 1926.500.

   (2) For work greater than six feet from an edge, erect and install warning lines in accordance with 29 CFR 1926.500 and EM 385-1-1, Section L.

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.

3.3.4 Horizontal Lifelines (HLL)

Provide HLL in accordance with EM 385-1-1, Section 21.I.08.d.2. 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 two (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.

3.3.5 Guardrails and Safety Nets

Design, install and use guardrails and safety nets in accordance with EM 385-1-1, Section 21.F.01 and 29 CFR 1926 Subpart M.

3.3.6 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 comply with the requirements of EM 385-1-1, ASSE/SAFE Z359.2, and ASSE/SAFE Z359.4.

3.4 EQUIPMENT

3.4.1 Material Handling Equipment (MHE)

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.

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.

Operators of forklifts or power industrial trucks must be licensed in accordance with OSHA.

3.4.2 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, Section 16.

b. Notify the Contracting Officer 15 working days in advance of any LHE entering the activity, in accordance with EM 385-1-1, Section 16.A.02, 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 comply 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 Section 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, Section 16.D, 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, Section 16.F, 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.

3.4.3 Machinery and Mechanized Equipment

Proof of qualifications for operator must be kept on the project site for review. 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.

3.4.4 Base Mounted Drum Hoists

Base mounted drum hoists conform to the following requirements:

a. Operation of base mounted drum hoists must comply with EM 385-1-1 and ASSE/SAFE A10.22.

b. Rigging gear must comply with applicable ASME/OSHA standards.

c. When used on telecommunication towers, base mounted drum hoists must comply 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 Section 16.B.05 and trained, at a minimum, in accordance with EM 385-1-1 Section 16.U and 16.T. 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.

3.4.5 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.

3.5 EXCAVATIONS

Soil classification must be performed by a competent person in accordance with 29 CFR 1926 and EM 385-1-1.

3.5.1 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.

3.5.2 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 three feet of the underground system.

3.5.3 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.

3.6 ELECTRICAL

Perform electrical work in accordance with EM 385-1-1, Appendix A, Sections 11 and 12.

3.6.1 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.
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.

3.6.2 Qualifications

Electrical work must be performed by QP personnel 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 Journeymen Electrician may hold, depending on work being performed, and must be identified in the appropriate AHA. Journeymen/Apprentice ratio must be in accordance with State and local requirements applicable to where work is being performed.

3.6.3 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.

3.6.4 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.

3.6.5 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.

-- End of Section --
PART 1 GENERAL

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SECTION 01 35 45

SEDIMENT SAMPLING FOR APPROACH CHANNEL

10/12

PART 1  GENERAL

1.1  SCOPE

This section describes the collection and analysis of environmental samples in Lake Michigan. The sampling and analysis described in this section must be completed before any 2021 maintenance dredging activities in the Approach Channel/Advanced Maintenance area are begun. A total of five grain size samples, one background water sample, and five supernatant samples shall be analyzed.

1.2  REFERENCES

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

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)


The SW-846 document is continually being updated, and the most recent versions of the SW-846 test methods are available on-line at http://www.epa.gov/epaoswer/hazwaste/test/main.htm.

ASTM INTERNATIONAL (ASTM)

ASTM D422  (1963; R 2007) Particle-Size Analysis of Soils

1.3  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 Preconstruction Submittals

Sampler Qualifications; G, DH

Sampling Quality Control Plan; G, DH

SD-06 Test Reports
1.4 **SAMPLER QUALIFICATIONS**

The individual(s) responsible for sampling shall be knowledgeable and practiced in environmental sample collection and have a minimum of three years experience in sample collection. Submit a Statement of Qualifications for the person(s) responsible for sample collection at least 30 calendar days prior to any sampling.

1.5 **SAMPLING QUALITY CONTROL PLAN**

Provide a Sampling Quality Control Plan. At a minimum, the plan shall include sampling procedures, sampling equipment, sample handling and custody, sampling schedule, project organization (points of contact for sampling and testing), analytical methods, required reporting limits, and quality assurance objectives for sampling. Any analytical methods that differ from the specified methods shall be noted. The sampling plan shall be approved by the COR prior to the start of any sampling as covered in this section. No sampling activities may begin without an approved sampling plan.

1.6 **SAMPLING FIELD LOG**

Prepare a field log for the date of sample collection. This log shall include the following items: identification of the sampler and equipment used, weather and water conditions, times, dates, actual locations of sampling activities and corresponding sampling point number (if applicable), map showing actual sampling locations, field measurements, preservatives (if any), sample appearance, photos of samples, chains of custody, and any other information that appears significant. Copies of the field log shall be submitted to the Contracting Officer's Representative (COR). The field log shall be submitted and emailed no later than one business day after the sampling event.

1.7 **FINAL REPORT**

Submit the Final Report within 30 calendar days of sample receipt. The Government will review the document and the Contractor must revise as needed and resubmit. The report shall be one complete pdf file (on CD if needed) and an editable excel file of all field and analytical results. The report shall include the following:

a. Analytical Data. Analytical Data, including laboratory QA/QC data.

b. Field Log. Field log including chains of custody shall be included.

c. Quality Control Documentation. Describe any sampling or testing procedures, methods, or circumstances which may have limited or biased the accuracy of analytical results. The Quality Control (QC) results and analytical methods shall be reported along with calibration checks and all laboratory-generated QC acceptance criteria, as outlined in the "Laboratory Quality Control" paragraph of this section.
3.1 ADVANCED MAINTENANCE AREA SAMPLING

3.1.1 General

Sediment samples shall be taken in Lake Michigan from the Waukegan Harbor Approach Channel, Advanced Maintenance Area, or Outer Harbor (see project drawings) before dredging and sediment disposal operations have begun. No sediment samples shall be taken from a location which has been dredged to project depth. The sediment in this area is sand, so the sampling equipment needs to be appropriate for this material such as a clam shell dredge. This sampling requires the Contractor to maneuver a vessel and employ sediment sampling equipment to collect samples from five different pre-determined sampling locations possessing one foot to five feet of shoaling. The vessel shall have the capacity to seat two Government representatives as extra passengers. The vessel requires a depth indicator and GPS unit to help assess shoaling and provide guidance to the pre-determined sampling locations. See Table 1 in the following Attachment. The vessel must also have the capability to be completely stabilized prior to sampling to ensure that the vessel does not drift and the sampling equipment can be utilized repeatedly at the same location, if necessary. The use of a spud barge would be appropriate for these conditions. Samples shall be collected, handled, preserved and analyzed in accordance with publications listed in the EPA 600/4-79/020, EPA SW-846.3-3 and ASTM D422. The Contractor shall collect sufficient amount of sample to perform all the laboratory analyses outlined in this paragraph. The COR shall be notified one week in advance of scheduled sampling date so that a Government representative may be present at the site during sampling operations. The COR shall also be notified of changes to sampling scheduled date as soon as possible.

3.1.2 Sampling

No sediment samples shall be taken from a pre-determined sampling location which falls within an area dredged to project depth; if adequate material is not present at the indicated locations final sediment sampling locations may be adjusted in the field by the COR. The sediment samples from each shoaled location must be representative of the column of material, and the sample must include the material from the top of the sediment surface down to a depth of 24 feet below Low Water Datum (LWD). The project depth is 22 feet below LWD. For shoaling to be present, the top of the sediment surface must be higher than the project depth, and then the amount of shoaling is the distance from the top of the sediment surface down to the project depth. Due to inaccuracies of the dredging processes, typically an additional two feet of over-depth dredging below project depth are allowed. Therefore in order to remain representative, sediment samples must include the entire depth of material, from the top of the sediment surface down to a depth of 24 feet below LWD. Depth shall be measured by checking the NOAA website to determine the lake level with respect to LWD, then in the field using a weighted tape measure to measure the depth or using a calibrated depth finder with a tolerance of plus/minus six inches.

The Contractor shall document the date and time of the sampling and the sample depth below LWD at each location. The Contractor shall also
document the measured latitude/longitude of the sample locations using GPS or other approved technology and name the corresponding pre-determined sample location. All information on the date, times, depths, and locations of the samples shall be reported in the Field Log and be submitted to the Government for approval, as required in paragraph "SAMPLING FIELD LOG".

3.1.3 Sediment Sampling Procedure

The Contractor maneuvers the vessel to the pre-determined sampling location using the GPS unit and completely stabilizes it prior to sampling. Once a predetermined sampling location has been found with sufficient shoaling, a sediment sample is collected. See paragraph "Sampling" for how to determine shoaling. Small sediment samples are collected from throughout the column of sediment, and these sub-samples are placed in a large stainless steel mixing bowl. When the collection of sub-samples is complete, the remainder of the sediment from that sample is emptied away from the original sampling spot and the sampling equipment is lowered again to the site of the original sample. The Contractor shall evenly distribute any sediment returned to the water to avoid the artificial creation of additional shoaling. This procedure is repeated until a depth of 24 feet below LWD is reached. If the sampling equipment is lowered and no noticeable change in depth is seen on the depth indicator of the sampling equipment, then the sample load shall be lifted and dumped without sampling to avoid re-sampling sediment that has collapsed back into the original hole. Once the complete sample has been acquired, the sediment is homogenized in the mixing bowl and placed into different containers for testing. The vessel shall proceed to the next pre-determined sampling location and repeat this process until all five samples have been collected. The Contractor shall collect an amount of sediment sufficient to perform all analyses outlined in this section, including supernatant testing.

3.1.4 Sampling Schedule

The Contractor shall coordinate the sample collection date with the Contracting Officer Representative at least one week prior to the proposed sampling date. Sediment samples shall be collected before dredging and disposal operations begin and sediment samples shall not be taken from locations which are already at project depth. Sampling shall not be performed if there are adverse weather conditions, such as high wind and waves. Locations of sediment sampling shall be coordinated with the Contracting Officer Representative prior to sample collection date.

3.1.5 Sample Analysis

Laboratory analysis of samples shall include the parameters listed in Table 2 of the following Attachment. This table also shows the required reporting limits for analysis and reporting. The laboratory MUST meet the required reporting limits. The five sediment samples shall be analyzed separately for particle size. Particle size shall be performed in accordance with ASTM D422, employing a No. 230 sieve. In addition to ASTM D422, particle size analysis shall be conducted using the IEPA procedures for Material Analysis for Dredge and Fill Activities (See 01 35 45_Attachment 1, attached at the end of this specification section). The sieve analysis shall include a No. 230 U.S. sieve.

Supernatant testing shall be conducted as follows:
One supernatant analysis shall be prepared for each sediment sample, using background water and shall be analyzed for the appropriate set of parameters listed in Table 2 of the following attachment. A total of five supernatant samples shall be analyzed, one from each discrete sediment sample. The supernatant testing must be based on four hour settling time. The sample must have a 1:4 ratio of sediment to natural background water (volume/volume) using water collected from near-shore Lake Michigan at the reference site. On the same day as the sediment collection event, sufficient water shall be collected to perform all analyses including background water analysis and supernatant analysis. The concentrations for supernatant analyses need to be reported in mass per unit volume. See supernatant procedure requirements in accordance with Attachment 1.

Background Water Quality testing shall be conducted as follows: one background water sample (collected as described above in "Supernatant testing") shall be analyzed for the list of supernatant parameters listed in Table 2 of the attachment.

3.2 SAMPLE PRESERVATION AND CONTROL

3.2.1 Samples

All samples shall be placed in non-contaminating containers provided by the Contractor. Either before or immediately after filling, all containers must be properly labeled to include the sample location, date, and time of collection. If a sample requires the addition of a preservative, it must be added immediately using a solution made from fresh reagent stock. Samples must be maintained at a temperature less than four degrees Celcius (C) plus or minus two degrees C until analyses are performed.

3.2.2 Chain of Custody

Proper chain of custody documentation shall accompany the collected samples. The chain of custody shall contain the sample numbers, analyses to be performed on each sample, the time and date of transfer, the condition of the samples, and the signature of each person involved in the transfer of samples. The chain of custody shall be placed in a water-resistant plastic bag and securely attached to the inside lid of the cooler. Indelible ink shall be used on the container labels and chain of custody. The chain of custody documentation shall be included in the Final Report.

3.3 LABORATORY TURNAROUND TIME

The results from measurements using field instrumentation, for pH and temperature, shall be submitted via email no later than one day following the day when the measurements were performed as required in paragraph "SEDIMENT SAMPLING FIELD LOG". The QC results, calibration checks, all laboratory-generated QC acceptance criteria, and final analytical results shall be submitted within 30 calendar days of sample receipt as required in paragraph "FINAL REPORT".

3.4 LABORATORY REQUIREMENTS

Submittals of the laboratory results shall be in accordance with the "Submittals" paragraph of this section. The Contractor shall use the services of an analytical laboratory that has been accredited in
accordance with the Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP). The laboratory shall be accredited for the Clean Water Act (CWA) and Resource Conservation and Recovery Act (RCRA) fields of testing. See the following web site for the DoD Environment, Safety and Occupational Health Network and Information Exchange (DENIX) which has a list of ELAP laboratories and their accredited fields of testing: http://www.denix.osd.mil/edqw then click on "Accreditation" or "Search Accredited Labs".

3.5 LABORATORY QUALITY CONTROL

3.5.1 Batch of Samples

Laboratory quality control shall include calibration checks, method blanks, matrix spike, matrix spike duplicate, surrogate recoveries, laboratory control samples, and laboratory control samples duplicates. The QC results, sample results, calibration checks, and all laboratory-generated QC acceptance criteria must be reported in the final report in accordance with the "Final Report" paragraph of this section.

3.5.2 Pre-Sampling Quality Assurance/Quality Control Meeting

A Pre-Sampling Quality Assurance/Quality Control meeting shall be held after the sampling plan submittal is received but before sampling begins. This meeting can be held as a conference call. The meeting will be attended by members of USACE - Chicago District, the Contractor performing the field sampling, and at least one lab chemist/analyst from each of the Contractors' laboratories. The purpose of this meeting is to discuss specific Data Quality Objectives required for this sampling project. Topics discussed at the meeting shall include but not be limited to: sampling methods and equipment, GPS location accuracy, decontamination methods, sample preservation and shipment, chain-of-custody procedures, laboratory certification, holding times, analytical methods, required detection limits, types and frequency of QC samples, and case narratives. It is critical that the laboratory personnel performing the physical and chemical testing of the samples be aware of the data quality issues associated with this project. This analytical testing and analysis is to comply with a Clean Water Act Section 401 Water Quality Certification, so it is very important that the laboratory produces data of known and acceptable quality. The Contractor MUST achieve the required reporting limits listed in Table 2 as these are permit requirements. The Contractor and the Contractors' laboratories shall incorporate any Quality Assurance/Quality Control reporting requirements into their protocol.

-- End of Section --
MATERIAL ANALYSIS FOR DREDGE AND FILL ACTIVITIES
Section 401 Water Quality Certification

Generally, a particle size analysis (sand/fine split) is required for all projects or activities involving the movement of any material. This analysis is necessary for the issuance of a Section 401 Water Quality Certification in conjunction with the US Army Corps of Engineers Section 404 Dredge and Fill permit. Excluded from the following analysis are concrete, commercially graded sand and gravel, and other nondegradable, nontoxic, clean fill materials. Testing is not necessary for mechanically excavated material used for fill in upland areas, which is nonpolluting, placed away from public water supplies, and is prevented from returning to the waterway. For further clarification on these exclusions, contact the IEPA. IF YOUR PROPOSED PROJECT INVOLVES THE MOVEMENT OF MATERIAL INTO OR OUT OF A WATERWAY, YOU MUST PROVIDE THE FOLLOWING INFORMATION:

1. Provide the results of PARTICLE SIZE ANALYSIS (SAND/FINE SPLIT). The analysis will follow procedures detailed below for the separation of sand from fines, and results will be reported as the percentage by weight passing a 62-micron sieve (#230 US sieve). The physical characteristics of the material should be noted.

   a. Significant organic matter should be removed as follows: Add 5ml of 6% solution of hydrogen peroxide for each gram of dry sample which is in 40 ml water. Stir and cover. Large fragments may be skimmed off if they are free of sediment. If oxidation is slow or has slowed, the mixture is heated to 93°C and stirred. More hydrogen peroxide solution may be necessary to complete oxidation. After the reaction has completely stopped, wash with distilled water.

   b. The composted sediment is placed in the soil dispersion cup and diluted to 250-300 ml with distilled water. Mix for 5 minutes at 10,000 RPM.

   c. The sediment is then wet-sieved using distilled water and a #230 US sieve (62 micron mesh). Washing should be continued until no sediment passes the screen. Material is then oven-dried at 100°-105°C prior to weighing.

2. If the particle size analysis shows 20% or greater passage of material through a #230 US sieve (or 20% of the material has settling velocities of particles with diameters of 62 microns or less), chemical constituent testing of the sediment and receiving disposal waters will be required and must demonstrate that the sediment does not contain significant levels of toxic materials.

   a. For hydraulically moved material, a SUPERNATANT TEST for nonsettleable material from 2540 (f) of Standard Methods for Water and Wastewater Analysis (20th edition, 1998) is required. This analysis for a four-hour settling of 1:4 sediment to natural background water slurry (vol./vol.) is to be compared to the receiving waters. Provide laboratory analysis on the sediment/background water slurry and the receiving water for the following parameters: total suspended solids (TSS), total volatile solid (TVS), ammonia-nitrogen (as N), lead (total), and zinc. Additional parameters may be required based on documented sediment contamination. If supernatant test results exceed background TSS or the TSS standard of 35 IL Adm. Code, Subtitle C: Water Pollution, additional supernatant tests are required. These detailed tests should be conducted with the same settling time(s) as the proposed disposal facilities. Consideration should be given to background variability with differences in flow volume and flow rate, and subsequent project scheduling. Contact the Illinois EPA (Watershed Management Section at 217/782-3362) for further information concerning additional suspended phase testing.

   b. For mechanically moved material placed out of the water, an ELUTRIATE TEST using 2540(f) of Standard Methods is required for lead, zinc, and ammonia-nitrogen as N. Additional testing and/or additional parameters may be required.

   c. For mechanically moved material placed in a waterway, follow procedures in 2a.

[Revised: 10/2000] dredgf1il.ms
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### Table 2: Analytical Parameters

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Notes:

1. Units are in mg/L unless otherwise noted
2. NA indicates "Not Applicable" to that category
3. Particle size testing by method ASTM D422 is to be performed down to the #230 sieve
4. Other methods may be approved in order to obtain the required reporting limits
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SECTION 01 42 00

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PART 3   EXECUTION  (NOT USED)

-- End of Section Table of Contents --
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.

AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)
1800 East Oakton Street
Des Plaines, IL 60018
Ph: 847-699-2929
Internet: http://www.asse.org

ASME INTERNATIONAL (ASME)
Two Park Avenue, M/S 10E
New York, NY 10016-5990
Ph: 800-843-2763
Fax: 973-882-1717
E-mail: customercare@asme.org
Internet: http://www.asme.org

ASSOCIATION OF ILLINOIS SOIL AND WATER CONSERVATION DISTRICTS (AISWCD)
4285 N Walnut Street Road
Springfield, IL 62707
Ph: 217-744-3414
Fax: 217-744-3420
E-Mail: Use on-line inquiry form
Internet: http://www.aiswcd.org

ASTM INTERNATIONAL (ASTM)
100 Barr Harbor Drive, P.O. Box C700
West Conshohocken, PA 19428-2959
Ph: 877-909-2786
Internet: http://www.astm.org

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA)
1021 North Grand Avenue East
P.O. Box 19276
SPRINGFIELD, IL 62764-9276
Ph: 217-782-3397
Internet:

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
1 Batterymarch Park
Quincy, MA  02169-7471
Ph:  617-770-3000
Fax: 617-770-0700
Internet:  http://www.nfpa.org

U.S. ARMY CORPS OF ENGINEERS (USACE)
CRD-C DOCUMENTS available on Internet:
http://www.wbdg.org/ccb/browse_cat.php?c=68
Order Other Documents from:
USACE Publications Depot
Attn:  CEHEC-IM-PD
2803 52nd Avenue
Hyattsville, MD  20781-1102
Ph:  301-394-0081
Fax: 301-394-0084
E-mail: pubs-army@usace.army.mil
Internet:  http://www.publications.usace.army.mil/
          or
          http://www.hnc.usace.army.mil/Missions/Engineering/TECHINFO.aspx

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20004
Ph:  202-272-0167
Internet:  http://www2.epa.gov/libraries
--- Some EPA documents are available only from:
National Technical Information Service (NTIS)
5301 Shawnee Road
Alexandria, VA 22312
Ph:  703-605-6050 or 1-688-584-8332
Fax: 703-605-6900
E-mail: info@ntis.gov
Internet:  http://www.ntis.gov

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)
8601 Adelphi Road
College Park, MD 20740-6001
Ph:  866-272-6272
Fax: 301-837-0483
Internet:  http://www.archives.gov
Order documents from:
Superintendent of Documents
U.S.Government Printing Office (GPO)
710 North Capitol Street, NW
Washington, DC 20401
Ph:  202-512-1800
Fax:  202-512-2104
E-mail: contactcenter@gpo.gov
Internet:  http://www.gpoaccess.gov
PART 2  PRODUCTS  (NOT USED)

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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.

ASTM INTERNATIONAL (ASTM)


ASTM D3740  (2012a) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction


U.S. ARMY CORPS OF ENGINEERS (USACE)


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 Preconstruction Submittals

Quality Control Plan (QCP); G, CN

1.3 INFORMATION FOR THE CONTRACTING OFFICER (KO)

Prior to commencing work on construction, the Contractor can obtain a single copy set of the current report forms from the KO. The report forms

Deliver the following to the KO:

a. CQC Report: Enter into RMS by 10:00 AM the next working day after each week that work is performed;

b. Contractor Production Report: Enter into RMS by 10:00 AM the next working day after each week that work is performed;

c. Preparatory Phase Checklist: Enter into RMS attached to the original CQC Report attached to each copy;

d. Initial Phase Checklist: Enter into RMS attached to the original CQC Report attached to each copy;

e. Field Test Reports: Enter into RMS, within two working days after the test is performed, attached to the CQC Report;

f. Quality Control (QC) Meeting Minutes: Enter into RMS, within two working days after the meeting; and

g. QC Certifications: As required by the paragraph entitled "QC Certifications".

1.4 QC PROGRAM REQUIREMENTS

Establish and maintain a QC program as described in this section. The QC program consists of a QC Manager, a QC Plan (QCP), a Coordination and Mutual Understanding Meeting, QC meetings, three phases of control, submittal review and approval, testing, and QC certifications and documentation necessary to provide materials, equipment, workmanship, fabrication, construction and operations which comply with the requirements of this contract. The QC program shall cover on-site and off-site work and shall be keyed to the work sequence. No work or testing may be performed unless the QC Manager is on the work site.

1.4.1 Preliminary Work Authorized Prior to Acceptance

The only work that is authorized to proceed prior to the acceptance of the QCP is mobilization of storage and office trailers, temporary utilities, and surveying.

1.4.2 Acceptance

Acceptance of the QCP is required prior to the start of construction. The KO reserves the right to require changes in the QCP and operations as necessary, including removal of personnel, to ensure the specified quality of work. The KO reserves the right to interview any member of the QC organization at any time in order to verify the submitted qualifications.

1.4.3 Notification of Changes

Notify the KO, in writing, of any proposed change, including changes in the QC organization personnel, a minimum of seven calendar days prior to a proposed change. Proposed changes shall be subject to the acceptance by
1.5 QC ORGANIZATION

1.5.1 QC Manager

1.5.1.1 Duties

Provide a QC Manager at the work site to implement and manage the QC program. In addition to implementing and managing the QC program, the QC Manager may perform the duties of SSHO, but not the project superintendent. The QC Manager is required to attend the 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 others.

1.5.1.2 Qualifications

An individual with a minimum of five years combined experience as a superintendent, inspector, QC Manager, project manager, or construction manager on similar size and type construction contracts which included the major trades that are part of this contract. The individual must be familiar with the requirements of the EM 385-1-1 and have experience in the areas of hazard identification and safety compliance.

1.5.1.3 Construction Quality Management Training

In addition to the above experience and education requirements, the QC Manager shall have completed the course Construction Quality Management for Contractors and will have a current certificate.

1.5.2 Alternate QC Manager Duties and Qualifications

Designate an alternate for the QC Manager to serve in the event of the designated QC Manager's absence. The period of absence may not exceed two weeks at one time, and not more than 30 workdays during a calendar year. The qualification requirements for the Alternate QC Manager shall be the same as for the QC Manager.

1.6 QUALITY CONTROL PLAN (QCP)

1.6.1 Requirements

Submit a QCP within 15 calendar days after receipt of Notice of Award.

Provide, for acceptance by the KO, a QCP submitted in a three-ring binder that covers both on-site and off-site work and includes the following with a table of contents listing the major sections identified with tabs.

I. QC ORGANIZATION: A chart showing the QC organizational structure and its relationship to the production side of the organization.

II. NAMES AND QUALIFICATIONS: In resume format, for each person in the QC organization. Include the CQM for Contractors course certification required by the paragraph entitled "Construction Quality Management Training".
III. DUTIES, RESPONSIBILITY AND AUTHORITY OF QC PERSONAL: Of each person in the QC organization.

IV. 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.

V. 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 managing and implementing the QC program as described in this contract. Include in this letter the QC Manager's authority to direct the removal and replacement of non-conforming work.

VI. SUBMITTAL PROCEDURES AND INITIAL SUBMITTAL REGISTER: Procedures for reviewing, approving and managing submittals. Provide the name(s) of the person(s) in the QC organization authorized to review and certify submittals prior to approval.

VII. TESTING LABORATORY INFORMATION: Testing laboratory information required by the paragraphs "Accredited Laboratories" or "Testing Laboratory Requirements", as applicable.

VIII. TESTING PLAN AND LOG: A Testing Plan and Log that includes the tests required, referenced by the specification paragraph number requiring the test, the frequency, and the person responsible for each test.

IX. PROCEDURES TO COMPLETE REWORK ITEMS: Procedures to identify, record, track and complete rework items.

X. DOCUMENTATION PROCEDURES: Use Government formats.

XI. LIST OF DEFINABLE FEATURES: A Definable Feature of Work (DFOW) is a task, which is separate and distinct from other tasks, has the same control requirements and work crews. The list shall be cross-referenced to the Contractor's Construction Schedule and the specification sections. For projects requiring a Progress Chart, the list of definable features of work shall include but not be limited to all items of work on the schedule. For projects requiring a Network Analysis Schedule, the list of definable features of work shall include but not be limited to all critical path activities.

XII. PROCEDURES FOR PERFORMING THREE PHASES OF CONTROL: For each DFOW provide Preparatory and Initial Phase Checklists. Each list shall include a breakdown of quality checks that will be used when performing the quality control functions, inspections, and tests required by the contract documents. The preparatory and initial phases shall be conducted with a view towards obtaining quality construction by planning ahead and identifying potential problems.

XIII. PERSONNEL MATRIX: Not Applicable.

XIV. PROCEDURES FOR COMPLETION INSPECTION: See the paragraph entitled "COMPLETION INSPECTIONS".
XV. TRAINING PROCEDURES AND TRAINING LOG: Not Applicable.

1.7 COORDINATION AND MUTUAL UNDERSTANDING MEETING

During the Pre-Construction conference and prior to the start of construction, discuss the QC program required by this contract. 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, and the coordination of the Contractor's management, production and the QC personnel. At the meeting, the Contractor will be required to explain how three phases of control will be implemented for each DFOW. Contractor's personnel required to attend shall include the QC Manager, project manager, and superintendent. Minutes of the meeting will be prepared by the QC Manager and signed by both the Contractor and the KO. The Contractor shall provide a copy of the signed minutes to all attendees. Repeat the coordination and mutual understanding meeting when a new QC Manager is appointed.

1.8 QC MEETINGS

After the start of construction, the QC Manager shall conduct QC meetings once every two weeks at the work site with the superintendent and the foreman responsible for the ongoing and upcoming work. The QC Manager shall prepare the minutes of the meeting and provide a copy to the KO within two working days after the meeting. As a minimum, the following shall be accomplished at each meeting:

a. Review the minutes of the previous meeting;

b. Review the schedule and the status of work and rework;

c. Review the status of submittals;

d. Review the work to be accomplished in the next two weeks and documentation required;

e. Resolve QC and production problems (Requests for Information (RFIs), etc.);

f. Address items that may require revising the QCP; and

g. Review Accident Prevention Plan (APP).

1.9 THREE PHASES OF CONTROL

The three phases of control shall adequately cover both on-site and off-site work and shall include the following for each DFOW.

1.9.1 Preparatory Phase

Notify the KO at least two work days in advance of each preparatory phase. Conduct the preparatory phase with the superintendent and the foreman responsible for the definable feature of work. Document the results of the preparatory phase actions in the daily CQC Report and in the QC checklist. Perform the following prior to beginning work on each definable feature of work:

a. Review each paragraph of the applicable specification sections;
b. Review the contract drawings;

c. 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;

d. Review the testing plan and ensure that provisions have been made to provide the required QC testing;

e. Examine the work area to ensure that the required preliminary work has been completed;

f. 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;

g. 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; and

h. Discuss specific controls used and the construction methods and the approach that will be used to provide quality construction by planning ahead and identifying potential problems for each DFOW.

1.9.2 Initial Phase

Notify the KO at least two work days in advance of each initial phase. When construction crews are ready to start work on a DFOW, conduct the Initial Phase with the foreman responsible for that DFOW. Observe the initial segment of the work to ensure that it complies with contract requirements. Document the results of the Initial Phase in the daily CQC Report and in the QC checklist. Perform the following for each DFOW:

a. Establish the quality of workmanship required,

b. Resolve conflicts,

c. Ensure that testing is performed by the approved laboratory, and

d. Check work procedures for compliance with the APP and the appropriate AHA to ensure that applicable safety requirements are met.

1.9.3 Follow-Up Phase

Perform the following for on-going work daily, or more frequently as necessary, until the completion of each DFOW and document in the daily CQC Report and in the QC checklist:

a. Ensure the work is in compliance with contract requirements,

b. Maintain the quality of workmanship required,

c. Ensure that testing is performed by the approved laboratory,

d. Ensure that rework items are being corrected, and

e. Assure manufacturers representatives have performed necessary inspections, if required.
1.9.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted 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 is resumed after substantial period of inactivity, or if other problems develop.

1.9.5 Notification of Three Phases of Control for Off-Site Work

Notify the KO at least two weeks prior to the start of the preparatory and initial phases.

1.10 SUBMITTAL REVIEW AND APPROVAL

Procedures for submission, review, and approval of submittals are described in the submittal section of the specification.

1.11 TESTING

Except as stated otherwise in the specification sections, perform sampling and testing required under this contract.

1.11.1 Accreditation Requirements

Construction materials testing laboratories must be accredited by a laboratory accreditation authority and will be required to submit a copy of the Certificate of Accreditation and Scope of Accreditation. The laboratory's scope of accreditation must include the appropriate ASTM standards (i.e., ASTM E329, ASTM C1077, ASTM D3666, ASTM D3740, ASTM E543) listed in the technical sections of the specifications. Laboratories engaged in Hazardous Materials Testing shall meet the requirements of OSHA and EPA. The policy applies to the specific laboratory performing the actual testing, not just the "Corporate Office".

1.11.2 Laboratory Accreditation Authorities

Laboratory Accreditation Authorities include the National Voluntary Laboratory Accreditation Program (NVLAP) administered by the National Institute of Standards and Technology, the American Association of State Highway and Transportation Officials (AASHTO), International Accreditation Services, Inc. (IAS), U. S. Army Corps of Engineers Materials Testing Center (MTC), the American Association for Laboratory Accreditation (A2LA), the Washington Association of Building Officials (WABO) (Approval authority for WABO is limited to projects within Washington State), and the Washington Area Council of Engineering Laboratories (WACEL) (Approval authority by WACEL is limited to projects within the NAVFAC WASH and Public Works Center Washington geographical area).

1.11.3 Capability Check

The KO 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.
1.11.4 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 KO 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 shall be signed by a testing laboratory representative authorized to sign certified test reports. Furnish the signed reports, certifications, and other documentation to the KO.

1.12 QC CERTIFICATIONS

1.12.1 Contractor Quality Control Report Certification

Each CQC Report shall contain the following statement: "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."

1.12.2 Invoice Certification

Furnish a certificate to the KO with each payment request, signed by the QC Manager, attesting that as-built drawings are current and attesting that the work for which payment is requested, including stored material, is in compliance with contract requirements.

1.12.3 Completion Certification

Upon completion of work under this contract, the QC Manager shall furnish a certificate to the KO attesting that "the work has been completed, inspected, tested and is in compliance with the contract".

1.13 COMPLETION INSPECTIONS

1.13.1 Punch-Out Inspection

Near the completion of all work or any increment thereof established by a completion time stated in the Contract clause "Commencement, Prosecution, and Completion of Work", or stated elsewhere in the specifications, the QC Manager shall conduct an inspection of the work and develop a punch list of items which do not conform to the approved drawings and specifications. Include in the punch list any remaining items of the "Rework Items List", which were not corrected prior to the Punch-Out inspection. The punch list shall include the estimated date by which the deficiencies will be corrected. A copy of the punch list shall be provided to the KO. The QC Manager or staff shall make follow-on inspections to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government "Pre-Final Inspection".

1.13.2 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 may be developed as a result of this inspection. The QC Manager shall ensure that all items on this list are corrected prior to
notifying the Government that a "Final" inspection with the customer can be scheduled. Any items noted on the "Pre-Final" inspection shall be corrected in a timely manner and shall be accomplished before the contract completion date for the work or any particular increment thereof if the project is divided into increments by separate completion dates.

1.13.3 Final Acceptance Inspection

The QC Manager, the superintendent, or other Contractor management personnel and the KO will be in attendance at this inspection. Additional Government personnel may be in attendance. The final acceptance inspection will be formally scheduled by the KO based upon results of the "Pre-Final Inspection". Notice shall be given to the KO at least 14 calendar days prior to the final inspection. The notice shall state that all specific items previously identified to the Contractor as being unacceptable will be complete by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the KO to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause "Inspection of Construction".

1.14 DOCUMENTATION

Maintain current and complete records of on-site and off-site QC program operations and activities. The forms identified under the paragraph "INFORMATION FOR THE CONTRACTING OFFICER (KO)" shall be used. Reports are required for each day work is performed. Account for each calendar day throughout the life of the contract. Every space on the forms must be filled in. Use N/A if nothing can be reported in one of the spaces. The superintendent and the QC Manager must prepare and sign the Contractor Production and CQC Reports, respectively. The reporting of work shall be identified by terminology consistent with the construction schedule. In the "remarks" section in this report which will contain 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 and a record of visitors to the work site. For each remark given, identify the Schedule Activity No. that is associated with the remark.

1.14.1 Quality Control Validation

Establish and maintain the following in a series of three ring binders. Binders shall be divided and tabbed as shown below. These binders shall be readily available to the Government's Quality Assurance Team during all business hours.

a. All completed Preparatory and Initial Phase Checklists, arranged by specification section.

b. All milestone inspections, arranged by Activity/Event Number.

c. A current up-to-date copy of the Testing and Plan Log with supporting field test reports, arranged by specification section.

d. Copies of all contract modifications, arranged in numerical order. Include documentation that modified work was accomplished.

e. A current up-to-date copy of the Rework Items List.
f. Maintain up-to-date copies of all punch lists issued by the QC Staff on the Contractor and Sub-Contractors and all punch lists issued by the Government.

1.15 NOTIFICATION ON NON-COMPLIANCE

The KO will notify the Contractor of any detected non-compliance with the foregoing requirements. The Contractor shall take immediate corrective action. If the contractor fails or refuses to correct the non-compliant work, the KO will issue a non compliance notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the KO may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall make no part of the time lost due to such stop orders the subject of claim for extension of time, for excess costs, or damages.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --
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)


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 Contractor mode user manuals, updates, and training information can be downloaded from the RMS web site (http://rms.usace.army.mil). 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

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. Some correspondence, including pay requests and payrolls, are also to be provided in paper format with original signatures. Paper documents will govern, in the event of discrepancy with the electronic version.
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 Contract Clause, 52.236-15 "Schedules for Construction Contracts"; Contract Clause, 52.232-27 "Prompt Payment for Construction Contracts"; Contract Clause, 52.232-5 "Payments Under Fixed-Priced Construction Contracts"; Section 01 33 00 SUBMITTAL PROCEDURES; Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS; and Section 01 45 00.10 20 QUALITY CONTROL FOR MINOR CONSTRUCTION.

1.4 RMS SOFTWARE

RMS is a Windows-based program that can be run on a Windows-based PC meeting the requirements as specified in paragraph SYSTEM REQUIREMENTS. Download, install and be able to utilize the latest version of the RMS software within seven calendar days of receipt of the Notice to Proceed. RMS software, user manuals, access and installation instructions, program updates and training information are available from the RMS website (http://rmsdocumentation.com). 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 SYSTEM REQUIREMENTS

The following is the recommended system configuration to run the Contractor Mode RMS for full utilization of all features for all types and sizes of contracts. Smaller, less complicated, projects may not require the configuration levels described below. Required configuration also noted below.

<table>
<thead>
<tr>
<th>Recommended RMS System Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hardware</strong></td>
</tr>
<tr>
<td>Windows-based PC</td>
</tr>
<tr>
<td>RAM</td>
</tr>
<tr>
<td>Hard drive disk</td>
</tr>
<tr>
<td>Monitor</td>
</tr>
<tr>
<td>Mouse or other pointing device</td>
</tr>
<tr>
<td>Windows compatible printer</td>
</tr>
<tr>
<td>Connection to the Internet</td>
</tr>
<tr>
<td><strong>Software</strong></td>
</tr>
<tr>
<td>MS Windows</td>
</tr>
</tbody>
</table>
Recommended RMS System Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word Processing software</td>
<td>Viewer for MS Word 2013, MS Excel 2013 or newer</td>
</tr>
<tr>
<td>E-mail</td>
<td>MAPI compatible (REQUIRED)</td>
</tr>
<tr>
<td>Virus protection software</td>
<td>Regularly upgraded with all issued Manufacturer's updates and is able to detect most zero day viruses (REQUIRED)</td>
</tr>
</tbody>
</table>

1.6 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.

1.7 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:

1.7.1 Administration

1.7.1.1 Contractor Information

Enter all current Contractor administrative data and information into RMS within seven 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.

1.7.1.2 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.

1.7.1.3 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".
1.7.1.4 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.

1.7.1.5 Reports

Track the status of the project utilizing the reports available in RMS. The value of these reports is reflective of the quality of the data input. These reports include the Progress Payment Request worksheet, Quality Control (QC) comments, Submittal Register Status, and Three-Phase Control worksheets.

1.7.1.6 Request For Information (RFI)

Create and track all Requests For Information (RFI) in the RMS Administration Module for Government review and response.

1.7.2 Finances

1.7.2.1 Pay Activity Data

Develop and enter a list of pay activities in conjunction with the 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.

1.7.2.2 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. Unless waived by the Contracting Officer, a signed paper copy of the approved payment certification and request is also required and will govern in the event of discrepancy with the electronic version.

1.7.3 Quality Control (QC)

Enter and track implementation of the three-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. Insure that RMS reflects all quality control methods, tests and actions contained within the Contractor Quality Control (CQC) Plan and Government review comments of same within seven calendar days of Government acceptance of the CQC Plan.

1.7.3.1 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. Provide the Government a printed signed copy of the QC Daily Report, unless waived by the Contracting Officer.

1.7.3.2 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.

1.7.3.3 Three-Phase Control Meetings

Maintain scheduled and actual dates and times of preparatory and initial control meetings in RMS. Worksheets for the three-phase control meetings are generated within RMS.

1.7.3.4 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.

1.7.3.5 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.

1.7.3.6 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.

1.7.3.7 Activity Hazard Analysis

Import activity hazard analysis electronic document files into the RMS QC Module utilizing the document package manager.

1.7.4 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 information shown on the submittal register following the specification Section 01 33 00 SUBMITTAL PROCEDURES will already be entered into the RMS database when access is granted. 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. Submit hard copies of all submittals unless waived by the
1.7.5 Schedule

Develop a construction schedule consisting of pay activities, in accordance with Section 01 10 00 GENERAL PROVISIONS. Input and maintain in the RMS database the schedule by using the Standard Data Exchange Format (SDEF). Include an updated schedule with each pay request. Provide electronic transmittals.

1.7.6 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.

1.8 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.

1.9 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)

-- End of Section --
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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 57 20.01 03

ENVIRONMENTAL PROTECTION FOR ILLINOIS

06/2015

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-- End of Section Table of Contents --
PART 1   GENERAL

1.1  REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)


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

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

33 CFR 328  Definitions of Waters of the United States

40 CFR 261  Identification and Listing of Hazardous Waste

40 CFR 262  Standards Applicable to Generators of Hazardous Waste

40 CFR 279  Standards for the Management of Used Oil

40 CFR 302  Designation, Reportable Quantities, and Notification

40 CFR 355  Emergency Planning and Notification

40 CFR 68  Chemical Accident Prevention Provisions

49 CFR 171 - 178  Hazardous Materials Regulations

ASSOCIATION OF ILLINOIS SOIL AND WATER CONSERVATION DISTRICTS (AISWCD)


ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA)

35 IAC 900-901  Title 35 of Illinois Administrative Code, Subtitle H: Noise, Chapter I: Pollution Control Board
1.2 DEFINITIONS

1.2.1 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 and/or historically.

1.2.2 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.

1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means 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 and toluene), waste thinners, excess paints, excess solvents, waste solvents, excess pesticides, and contaminated pesticide equipment rinse water.

1.2.4 Clean Construction and Demolition Debris (CCDD)

As defined by the Illinois Environmental Protection Agency, CCDD is uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, or reclaimed asphalt pavement generated from construction or demolition activities. When uncontaminated soil is mixed with any of these materials, the uncontaminated soil is considered CCDD.

1.2.5 Hazardous Waste

Wastes designated by the U.S. Environmental Protection Agency as hazardous, as defined in 40 CFR 261.

1.2.6 Land Application for Discharge Water

The term "Land Application" for discharge water implies that the Contractor must discharge water at a rate which 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" shall occur. Land application must be in compliance with all applicable Federal, State, and local laws and regulations.

1.2.7 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm
sewers, creeks, and/or "waters of the United States" and would require a permit to discharge water from the governing agency. All projects with land disturbances greater than or equal to one acre in total area must have a National Pollution Discharge Elimination System (NPDES) Construction Site Activity Storm Water Permit to discharge surface water from a construction site, issued by the Illinois Environmental Protection Agency. All projects with discharge of dredged or fill material to waters of the United States must have a Section 401 Water Quality Permit issued by the Illinois Environmental Protection Agency.

1.2.8 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

1.2.9 Wetlands

Wetlands means those areas that are inundated or saturated by surface or ground water 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. Wetlands generally include swamps, marshes, and bogs. Official determination of whether or not an area is classified as a wetland must be done in accordance with WETLAND MANUAL.

1.3 GENERAL REQUIREMENTS

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

1.4 SUBCONTRACTORS

Ensure compliance with this section by subcontractors.

1.5 PAYMENT

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

1.6 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. The following must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals
1.7 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction site activities or delivery of materials to the site, submit an Environmental Protection Plan (EPP) for review and approval by the Contracting Officer. The purpose of the EPP is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern must be defined within the EPP as outlined in this section. Address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, must be identified and discussed after those items formally identified in this section. Prior to submittal of the EPP, meet with the Contracting Officer for the purpose of discussing the implementation of the initial EPP; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's EPP. The EPP must be current and maintained onsite by the Contractor. Approval of the Contractor's EPP will not relieve the Contractor of his responsibility for adequate and continuing control of pollutants and other environmental protection measures.

Provide a complete copy of the submittal, including all graphis, attachments, and figures, electronically in pdf format.

1.7.1 Environmental Compliance

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 shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the EPP.

1.7.2 Environmental Protection Plan Contents

The EPP must include, but not limited to, the following:

a. Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the EPP.

b. Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.

c. Name(s) and qualifications of person(s) responsible for training the Contractor's environmental protection personnel.

d. Description of the Contractor's environmental protection personnel training program, including training for subcontractors.

e. Drawing showing the sites and work limits, and including the work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. The plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas. On the drawing, indicate details such as locations of proposed parking areas, pipeline placement, staging areas, structures, sanitary facilities, and material and equipment storage areas including identifying type and location of methods to control runoff and to
contain materials on the site. The erosion controls contained in the plan must be as protective as the requirements in the Illinois Urban Manual, IUM.

f. The Spill Control Plan must 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. This plan must include as a minimum:

(1) The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual must immediately notify the Contracting Officer and the local fire department or emergency response agency in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity is released to the environment. The plan must contain a list of the required reporting channels and telephone numbers.

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

(3) Training requirements for Contractor's personnel and any subcontractors, and methods of accomplishing the training.

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

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

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

g. A recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources. The plan must 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.

h. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become airborne and travel off the project site. The air pollution control plan must include a dust control plan.

i. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. In accordance with EM 385-1-1, a copy of the Safety Data Sheets (SDS) and the maximum quantity of each
hazardous material to be on site at any given time must be included in the contaminant prevention plan. As new hazardous materials are brought on site or removed from the site, the plan must be updated.

j. A 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. The plan must include methods to assure the protection of known or discovered resources and must identify lines of communication between Contractor personnel and the Contracting Officer.

k. The Contractor must comply with the U.S. Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) Vessel General Permit for Discharges Incidental to the Normal Operation of a Vessel (VGP) for all regulated vessels to be used on the project. For each vessel that meets the requirements in the permit, include in the Environmental Protection Plan a copy of the Notice of Intent (NOI) and associated documentation or verification from the U.S. Environmental Protection Agency that the vessel is in compliance with the permit. The Contractor is responsible for permit compliance.

1.7.3 Appendix

Copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents must be attached, as an appendix, to the EPP.

1.8 PROTECTION FEATURES

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to the start of any onsite construction activities, the Contractor and the Contracting Officer must make a joint condition survey. Immediately following the survey, prepare a brief report including 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. This survey report must be signed by both the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. Protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the Contractor's work under the contract.

1.9 SPECIAL ENVIRONMENTAL REQUIREMENTS

The Contractor shall comply with the special environmental requirements listed in IL EPA Log No. C-0280-14 and included at the end of this section.

1.10 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

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

1.11 NOTIFICATION

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. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

This paragraph supplements the Contractor's responsibility under the contract clause "PERMITS AND RESPONSIBILITIES" to the extent that the Government has obtained the Section 401 Water Quality Certification. The Contractor shall comply with the terms and conditions of the 401 Water Quality Certification included at the end of this section.

NO OUTER HARBOR OR ON BEACH PLACEMENT WORK SHALL BE COMPLETED UNLESS AN UPDATED SECTION 401 WATER QUALITY CERTIFICATION IS RECEIVED.

3.2 LAND RESOURCES

Confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, do not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. Provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, soil, or other materials displaced into uncleared areas must be removed by the Contractor.

3.2.1 Work Area Limits

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

3.2.2 Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the drawings to be preserved must be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques. Restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

3.2.3 Erosion and Sediment Controls

Provide 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 must 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. 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. The Contractor's best management practices must also be in accordance with the State of Illinois National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention requirements. Any temporary measures must be removed after the area has been stabilized.

3.2.4 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings must be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities must be made only when approved. Erosion and sediment controls must be provided for on-site borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas must be controlled to protect adjacent areas.

3.3 WATER RESOURCES

Monitor construction activities to prevent pollution of surface and ground waters. Toxic or hazardous chemicals must not be applied to soil or vegetation unless otherwise indicated. All water areas affected by construction activities must be monitored by the Contractor. For construction activities immediately adjacent to impaired surface waters, the Contractor must be capable of quantifying sediment or pollutant loading to that surface water when required by a Clean Water Act permit.

3.3.1 Wetlands

Do not enter, disturb, destroy, or allow discharge of contaminants into any wetlands. Protect wetlands shown on the drawings in accordance with paragraph ENVIRONMENTAL PERMITS AND COMMITMENTS. Authorization to enter specific wetlands identified shall not relieve the Contractor from any obligation to protect other wetlands within, adjacent to, or in the vicinity of the approved work area.
vicinity of the construction site and associated boundaries.

3.3.2 Control of Aquatic Nuisance Species

Conduct operating practices to prevent the spread of Aquatic Nuisance Species (ANS). Such practices must include, but not be limited to, cleaning equipment to prevent the spread of seeds, eggs, larvae, or other dispersal vectors; and discharging or exchanging ballast water, or other water, from a vessel of any type to prevent transfer of water from one water body into another. Contractor remove all plants, sediment, and organisms from the vessel and must thoroughly clean all equipment before being used on the project site.

3.4 AIR RESOURCES

Equipment operation, activities, or processes performed must be in accordance with all Federal, State, and local air emission and performance laws and standards.

3.4.1 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 which would cause the Federal, State, and local air pollution standards to be exceeded or which 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 at all times. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control must be performed as the work proceeds and whenever a particulate nuisance or hazard occurs. Comply with all State and local visibility regulations.

3.4.2 Odors

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

3.4.3 Sound Intrusions

Keep construction activities under surveillance and control to minimize environment damage by noise. Comply with the provisions of the State of Illinois rules given in 35 IAC 900-901.

3.4.4 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 must be subject to approval.
3.5 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of wastes must be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

3.5.1 Solid Wastes (Excluding CCDD)

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

3.5.2 Chemicals and Chemical Wastes

Chemicals must be dispensed ensuring no spillage to the ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action must be performed and documented. This documentation will be periodically reviewed by the Government. Chemical waste must be collected in corrosion resistant, compatible containers. Collection drums must be monitored and removed to a staging or storage area when contents are within six inches of the top. Wastes must be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

3.5.3 Contractor Generated Hazardous Wastes/Excess Hazardous Materials

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations. Hazardous materials are defined in 49 CFR 171 - 178. Manage and store hazardous waste in compliance with 40 CFR 262. Take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. Segregate hazardous waste from other materials and wastes, must protect it from the weather by placing it in a safe covered location, and must take precautionary measures such as berming or other appropriate measures against accidental spillage. The Contractor shall be responsible for storage, describing, packaging, labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations. Transport Contractor generated hazardous waste off Government property within 60 days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. Dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials must be immediately reported to the Contracting Officer. Cleanup and cleanup costs due to spills must be the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility.

3.5.4 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles must be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants and oil must be managed and stored in
accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded must be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. Storage of fuel on the project site must be accordance with all Federal, State, and local laws and regulations, and must have the approval of the Contracting Officer.

3.5.5 Waste Water

Waste water from construction activities other than sediment placement operations shall not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants. The Contractor shall dispose of the construction related waste water off Government property in accordance with all Federal, State, Regional, and Local laws and regulations.

3.6 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Any identified existing historical, archaeological, and cultural resources within the Contractor's 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, all activities that may damage or alter such resources must be temporarily 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.

3.7 BIOLOGICAL RESOURCES

Minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. Protect threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

3.8 PREVIOUSLY USED EQUIPMENT

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

3.9 MAINTENANCE OF POLLUTION FACILITIES

Maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.
3.10 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel and subcontractor personnel must be trained in all phases of environmental protection and pollution control. Conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings must be conducted for new personnel and when site conditions change. The training and meeting agenda must include: 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, wetlands, and endangered species and their habitat that are known to be in the area.

3.11 POST CONSTRUCTION CLEANUP

Clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". Obliterate all signs 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. The disturbed area must be graded, filled and the entire area seeded unless otherwise indicated.

-- End of Section --
U.S. Army Corps of Engineers, Chicago District
ATTN: Regulatory Branch
231 South LaSalle, Suite 1500
Chicago, IL 60604

Re: Chicago District, U.S. Army Corps of Engineers - Waukegan Harbor Approach Channel and Advanced Maintenance Area
Log No. C-0280-14

Sir or Madam:

This Agency has reviewed the information provided concerning the proposed renewal of an authorization to conduct annual mechanical dredging of up to 125,000 cubic yards from Waukegan Approach Channel and Advanced Maintenance Area and conduct dredged material disposal using hopper or split hull barges in the open waters of Lake Michigan. We offer the following comments.

Based on the information included in this submittal, it is our engineering judgment that the proposed project may be completed without causing water pollution as defined in the Illinois Environmental Protection Act, provided the project is carefully planned and supervised.

These comments are directed at the effect on water quality of the construction procedures involved in the above described project and are not an approval of any discharge resulting from the completed facility, nor an approval of the design of the facility. These comments do not supplant any permit responsibilities of the applicant toward the Agency.

This Agency hereby issues certification under Section 401 of the Clean Water Act (PL 95-217), subject to the applicant's compliance with the following conditions:

1. The applicant shall not cause:
   a. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulations;
   b. water pollution defined and prohibited by the Illinois Environmental Protection Act;
   c. interference with water use practices near public recreation areas or water supply intakes; or
   d. violation of applicable provisions of the Illinois Environmental Protection Act.

2. The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.

3. For open water disposal, the dredge material shall be placed in the water in a manner to minimize resuspension of sediment material and contaminants by utilizing techniques including careful
placement methods, use of a bottom dump or split hull scow, disposal during favorable weather conditions that minimize turbulence and transport of suspended contaminants, and other methods necessary to minimize resuspension of sediment material.

4. The applicant shall not place or discharge dredge material into Lake Michigan or into waters of the State for beach nourishment or other purposes without written approval from the Illinois EPA for the particular dredge cut location. The dredge cut location approved under this certification is the “Waukegan Harbor Approach Channel” and the adjacent “Advance Maintenance Area.” as depicted on Figure 1 “Waukegan Harbor Approach Channel and Advance Maintenance Areas” of the May 2014 Clean Water Act Section 404(b)(1) Contaminant Determination. For any new proposed dredge area not previously approved by the Illinois EPA, the applicant shall coordinate with the Illinois EPA regarding the data and requirements for application for a separate Water Quality Certification for the new dredge area.

5. During the first dredging event under this certification, water quality monitoring shall be conducted in the following manner and monitoring the parameters herein specified:

   a. A set of background samples will be taken at the proposed disposal location, water surface and mid-depth of the water column, for each of five days within the week before dredging starts, to establish background conditions;

   b. Twice a week during sediment disposal activities, and approximately one (1) hour after sediment disposal as follows;

   i) Sample at distances 400’ and 800’ downstream from the disposal location and 400’ and 1000’ upstream from the disposal location;

   ii) Sample at water surface and mid-depth of the water column;

   c. Analyze each sample for the following parameters in accordance with 40 CFR 136 and with the maximum reporting limits listed below:

   i) Ammonia, 0.01 mg/L as N;

   ii) Total Phosphorus, 0.001 mg/L as P;

   iii) Sulfate, 10 mg/L;

   iv) Chloride, 1 mg/L;

   v) Total suspended solids (TSS), 1 mg/L;

   vi) Total dissolved solids (TDS), 10 mg/L;

   vii) Hardness, 1 mg/L;

   viii) pH;

   ix) Temperature (field and laboratory)

   d. The populations of sample results (downstream versus upstream) shall be compared using the Kruskal-Wallis analysis of variance test, with a 95% confidence interval. The minimum number of sample results in the upstream group and downstream group shall be a minimum of 12 in each group for the comparison. If the downstream results are statistically higher than the upstream results for any parameter, then that parameter shall be monitored during subsequent disposal activities until it can be demonstrated during subsequent dredging activities that the downstream results are not statistically higher than the upstream results. If the downstream results are not statistically higher than the upstream results, no further water quality monitoring is needed for that parameter for the remaining life of this certification except as required under Condition 6.
6. Sediment sampling for particle size analysis shall be conducted at a minimum twice during a 10 year period. One sampling event shall occur at the approximate mid-point of this authorization and the second sampling event must be within 2 years before the expiration of this authorization. The sediment characterization shall include at least 5 discrete samples analyzed separately for particle size. The sieve analysis shall include a No. 230 U.S. sieve. If the average sediment fines passing a No. 230 U.S. sieve is 20% or greater, supernatant testing shall be conducted as follows:

a. One supernatant analysis prepared using a composite sediment sample and local water, with the following analytes analyzed at a four (4) hour settling time in accordance with 40 CFR 136 and with the maximum reporting limits listed below:
   i) Ammonia, 0.01 mg/L as N;
   ii) Total Phosphorus, 0.001 mg/L as P;
   iii) Sulfate, 10 mg/L;
   iv) Chloride, 1 mg/L;
   v) Total suspended solids (TSS), 1 mg/L;
   vi) Total dissolved solids (TDS), 10 mg/L;
   vii) Hardness, 1 mg/L;
   viii) pH;
   ix) Temperature (field and laboratory).

b. The supernatant results will be compared to the historical maximum concentrations in the 4 hour supernatant results for the years 2009 through 2014 measured for Waukegan Approach Channel/Advance Maintenance Area supernatant testing:
   i) Ammonia historical maximum = 3.13 mg/L as N;
   ii) Total Phosphorus historical maximum = 0.36 mg/L as P;
   iii) Chloride historical maximum = 28.7 mg/L;
   iv) Sulfate historical maximum = 34.2 mg/L;
   v) TSS historical maximum = 2160 mg/L;
   vi) TDS historical maximum = 280 mg/L.

c. If the supernatant results are above the historical maximum concentrations measured in previous supernatant tests, then water quality monitoring for the parameter(s) above the maximum concentration will be conducted in accordance with Condition 5.

7. An annual report shall be submitted for every calendar year during which dredging occurs and shall be submitted by March 31st of the following year; a letter reporting the lack of dredging shall be provided for years with no dredging. The report shall include the following information as a minimum:

   a. Maps showing the before and after dredging bathymetry, and the areas dredged;
   b. A map showing the disposal location(s);
   c. The quantity of material dredged in cubic yards;
   d. Sampling and analysis results for those years that require sediment, elutriate, or water quality sampling and monitoring pursuant to Conditions 5 and 6, along with applicable data analysis, statistical comparison, and discussion of how the monitoring location takes into account the direction of current at the disposal location including any Lake Michigan water current data taken on the day of downstream surface water monitoring. The time, date, location and source of data used shall be included in the report.
8. The Illinois EPA may reopen and revise this certification based on new information or findings that indicate the presence of PCBs or asbestos in the Waukegan Approach Channel or Advanced Maintenance Area sediment, or to conform to new state or federal regulations, Illinois Pollution Control Board orders or judicial orders.

9. This certification expires on March 31, 2025. This certification replaces the certification (Log No. 2830-04) issued February 1, 2005.

This certification does not grant immunity from any enforcement action found necessary by this Agency to meet its responsibilities in prevention, abatement, and control of water pollution.

Sincerely,

[Signature]
Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

cc: IEPA, Records Unit
    IEPA, DWPC, FOS, DesPlaines
    IDNR, OWR, Chicago
    USEPA, Region 5
    DRG
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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 58 00

PROJECT IDENTIFICATION

10/19

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01 58 00_Sign Graphics

-- End of Section Table of Contents --
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)


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-02 Shop Drawings

Sign Legend Orders; G, CN

1.3 CONSTRUCTION PROJECT SIGNS (USACE)

1.3.1 Construction Project Signs

Construction project signs must be coordinated with the Contracting Officer. The signs include one Project Identification Sign and one Safety Performance Sign.

The construction project sign panels will each be electronically printed as a single decal and mounted on single sided vinyl faced White Board as described in Paragraph "MATERIALS" below.

The layout of all signs must be in accordance with the standards specified in the USACE graphics and sign standards manuals referenced above. Relevant portions of the manuals will be provided to the Contractor upon request. Examples of generic signs are shown on Plates 01 58 00.00 03-1 and 01 58 00.00 03-2 included at the end of this specification section.

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.

PART 2 PRODUCTS

2.1 PROJECT IDENTIFICATION LABEL

The two plates at the end of the section are generic because the project identification is not included. For this particular project, the project identification label must be identified as the following on both signs:

FOR LINE 1, WAUKEGAN HARBOR APPROACH CHANNEL DREDGING
FOR LINE 2, WAUKEGAN, ILLINOIS

2.2 PLACEMENT OF SPONSOR AND ARMY LOGO DECALS

2.2.1 Sponsor and Army Decal Placement

Placement of an Army logo decal is shown on Plate 01 58-00-1. If a Sponsor logo decal is to be used, it is to be affixed to the sign in lieu of the Army logo decal.

2.2.2 Placement of Decal

A 10-1/2 inch by 7.875 inch Army decal shall be provided by the Contracting Officer's Representative.

Align the decal with the same left margin as the Corps Signature (three inches from edge of sign).

Vertically center the decal between the last text and the bottom of the sign (so that the space above and below the decal are the same).

2.2.3 Application Instructions

Clean the surface of the sign.

Place the decal in the desired location using masking tape.

With scissors, cut half the backing.

Rub from the decal’s center outward, a little bit at a time, being careful not to trap bubbles.

When the first half has completely adhered to the sign face, remove the remaining backing and finish applying.

When you are sure that the decal is firmly placed onto the sign, slowly remove the white cloudy transfer paper on the decal’s face.

Check for bubbles and gently work them out to the outer edges.

2.3 MATERIALS

The following are requirements for all of the construction project signs.

a. The sign faces must be electronically printed on white non-reflective vinyl decals four mil thick.
b. The sign face decals must be mounted on panels of 1/2-inch thick White Board with single-sided vinyl facing. The entire circumference of the sign panels will be sealed and protected with white vinyl trim cap.

c. Apply protective overlamine film over the sign face decals capable of minimizing the deteriorating effects of ultraviolet radiation and providing additional protection against weathering and application of graffiti.

d. Provide two inch by four inch struts between the four inch by four inch support posts to reinforce the top and bottom edges of the sign panels.

e. Wood material for the posts must be preservative treated, structural grade Douglas Fir or No. 1 Southern Pine, or better. All other wood members must be of well seasoned, kiln dried, clear redwood, bald cypress, red cedar, Douglas fir, spruce, tulip poplar, or white pine. The lumber materials must be free of splits, wane, and loose knots or pitch pockets. Fasten all members of the sign with screws or bolts of type, size, number, and spacing to provide rigid construction and neat appearance. If the vertical supports system does not rigidly support the sign due to local soil conditions or wind loading, provide additional bracing of the sign supports. Additional bracing must be composed of two inch by four inch bracing bolted to the inside face of each four inch by four inch support post and firmly anchored to the ground behind the sign. Additional bracing is not required to be preservative treated lumber.

f. All bolts must be 0.375-inch diameter and four-inch long Allen head bolts, threaded to match T-nuts.

PART 3 EXECUTION

3.1 INSTALLATION

Affix the panels to the posts with the allen head bolts prior to erection of the signs, including drilling counter-sunk 0.375-inch diameter holes in the posts to match the T-nut locations. Take all precautions necessary to protect the faces of the signs from damage during assembly and construction. Install signs upon commencement of the work under this contract. Each sign location must be clear and level to facilitate the installation, and provide easy visual contact. Install and position the sign plate and posts as indicated on 01 58 00_Sign Graphics, attached at the end of this section. Install signs plumb and level.

3.2 MAINTENANCE

Maintain the signs and sites in good condition throughout the construction period.

-- End of Section --
Design and Construction
Supervised by:

U.S. Army Corps
of Engineers
CHICAGO DISTRICT
(312) 846-5330
WWW.LRC.USACE.ARMY.MIL

Contractor:
Information

LINE 1
LINE 2
LINE 3
REFER TO
SECTION 01 50 00
FOR PROJECT
IDENTIFICATION LABEL

NOTE:
FOR SIDE VIEW, SEE PLATE 01 58 00-2

GENERIC PROJECT IDENTIFICATION SIGN
NOT TO SCALE
This project started
Total lost time injuries
Date since last
lost time accident
Total lost time injuries

Safety is a Job Requirement

CONTRACTOR: [INFORMATION]

This project started
Date since last
lost time accident
Total lost time injuries

14'-0" LONG 2X4 BRACE FOR EACH POST
2X4 STAKES
2X4 BRACE BETWEEN POSTS
2X4 BRACE BETWEEN POSTS

---

GENERIC SAFETY PERFORMANCE SIGN
NOT TO SCALE

PLATE 01 58 00-2

---

INFORMATION
PLATE 01 58 00-2

---

Refer to Section 01 58 00 for Project Identification Label

---

2X4 BRACE BETWEEN POSTS
3/8" PLYWOOD

---

4'-0" 1 4'-0" L O N G   2 X 4 B R A C E  F O R  E A C H  P O S T

---

NOT TO SCALE
PART 1 GENERAL

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-- End of Section Table of Contents --
1.1 SCOPE

The work covered under this section includes furnishing all plant, labor, and equipment, required for dredging. This section also covers transportation and placement of all dredged materials from Waukegan Harbor Approach Channel, Outer Harbor and Advance Maintenance Area to the proposed depths, elevations, and side slopes shown on the drawings. The dredged material shall be transported and deposited in the specified areas shown on the drawings. The Government has obtained the Illinois Environmental Protection Agency (IEPA) Water Pollution Control Permit except for the Outer Harbor. See Section 01 57 20.01 03 ENVIRONMENTAL PROTECTION FOR ILLINOIS for permit and Stormwater Pollution Prevention Plan requirements.

1.2 DEFINITIONS

1.2.1 Hard Material

Hard material is defined as material requiring the use of special equipment for economical removal, and includes boulders or fragments too large to be removed in one piece by the dredge.

1.2.2 Dredging Limits

The dredging limits are shown on the drawings. As required, these limits will be adjusted when the pre-dredge soundings are conducted.

1.2.3 Required Dredging Prism Depth

Synonymous with dredging depth.

1.2.4 Required Dredging Prism Line

Synonymous with dredging depth with side and end slopes of 1 vertical on 2 horizontal.

1.2.5 Required Dredging Prism

All materials lying within the dredging limits and between the existing bottom surface and the required dredging prism line.

1.2.6 Allowable Dredging Prism Line

1 foot below the required dredging prism line with 1 vertical on 2 horizontal side and end slopes.

1.2.7 Allowable Dredging Prism Depth

Synonymous with allowable dredging prism line.
1.2.8 Allowable Dredging Prism

Allowable dredging prism is defined as the volume of material between the required dredging prism and the allowable dredging prism line. Areas with no required dredging do not have an allowable dredging prism.

1.3 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)


1.4 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 Preconstruction Submittals

Sounding Equipment Description and Calibration Data
Other Equipment
Utility Plan; G, CN
Dredging, Conveyance and Placement Plan; G, CN, DH
Dredging Placement Safety Plan; G, CN
Notice Of Start Of Dredging; G, CN

SD-03 Product Data

Dredging Equipment; G, CN

SD-06 Test Reports

Daily Report of Dredging Operations; G, CN
Soundings; G, CN

SD-11 Closeout Submittals

Material Placement Records

1.5 MATERIAL TO BE REMOVED

The material to be removed is silt, fine sands and mud.
1.5.1 Hard Material

The removal of hard material is not included. Should the Government direct in writing that hard material be removed, the work shall be performed and an adjustment in the contract price or time for completion, or both, will be made in accordance with FAR 52.236-2 Differing Site Conditions. If hard material is to be removed, blasting will not be permitted.

1.6 SOUNDING EQUIPMENT DESCRIPTION AND CALIBRATION DATA

Verification that the Contractor's sounding equipment has been calibrated to correspond with the Government's Hydrographic Surveying Manual EM 1110-2-1003, sounding equipment shall be submitted prior to commencing work. Submit the description of the Contractor's sounding equipment and transducer frequency prior to commencing work.

1.7 UTILITY PLAN

General locations of applicable existing utilities based upon latest information available to the Government are shown on the drawings. However, it is the Contractor's obligation to establish the exact horizontal and vertical location and size of all existing utility lines which are located within the required work area. The Contractor shall submit a utility locating plan for locating exiting utilities and a copy of its utility location findings prior to commencing work on the site. Any utility lines which are not found by the Contractor, but which are known to exist at the project site, shall be reported to the Contracting Officer immediately. The Contracting Officer will have the option of directing commencement of work at the site or requiring the Contractor to submit further plans for locating the utility lines. If the Contractor damages any existing utility line, a report thereof shall be made immediately to the Contracting Officer. In any event, existing utility lines, shall be protected from damage, and if damaged, shall be repaired by the Contractor at its own expense.

1.8 DREDGING DEPTH

The dredging depth is minus 22 foot Low Water Datum (LWD) in the Waukegan Approach Channel with one foot overdredge depth, minus 18 foot LWD in the Waukegan Outer Harbor with one foot overdredge depth, and minus 22 LWD in the Advance Maintenance Area with two foot overdredge depth. All locations for this contract are located at the Waukegan Harbor. Refer to drawings for exact locations. The Contractor is not expected to dredge to depth any areas of hard clay or rock encountered above the dredging depth, but should notify the Corps of the locations of these areas.

1.9 DREDGING, CONVEYANCE AND PLACEMENT PLAN

Prior to bringing equipment to the project site, submit a Dredging, Conveyance and Placement Plan (DCPP) no later than 30 calendar days prior to the start of dredging. The DCPP must include but not be limited to the equipment to be used for dredging and the methods of loading the barge or scow. The DCPP must include Best Management Practices (BMPs) for minimizing the resuspension of sediment. The DCPP shall include the conveyance and placement operations. The DCPP shall specifically address how spillage of dredged materials will be prevented including methods of containing and capturing any spillage during transport, rehandling, and placement.
1.10 **DAILY REPORT OF DREDGING OPERATIONS**

Report of Operations forms (ENG FORM 4267 or ENG FORM 27A), as appropriate to the type of work being performed, are in Quality Control System/Resident Management System (QCS/RMS) and shall be completed and furnished daily. Each report shall contain in the "REMARKS" space attesting that no overflow or discharge occurred from the dredging vessel(s) while dredging and while in transit from the dredging area to the unloading area. In the event an overflow or discharge occurs while dredging or while in transit, an oral notification shall not be made, and complete written report on the incident shall be made to the Contracting Officer in shortest possible time. When appropriate and approved, quality control compliance inspections may be reported under the "REMARKS" item on the form in RMS.

1.11 **PLACEMENT AREA CONDITIONS**

The limits of the placement area are specified in the drawings. Dredged materials placed outside of the limits of the placement area shall be removed at no additional cost to the Government and deposited within the area approved for placement of dredged materials.

1.11.1 **Littoral Zone Placement**

For littoral zone placement, the dredged materials must be placed in water less than 18 feet deep. Any material placed outside of the limits shall be removed at no additional cost to the Government and deposited within the area approved for placement of dredged materials. All placement in the littoral zone must be by bottom dump (split hull) barge; placement must be within the northern and southern limits given on the plans.

1.11.2 **On-Beach Placement**

Beach placement shall occur within the limits specified in the contract drawings. The Contractor shall coordinate with local communities and governing authorities to close portions of the beach during placement activities. The Contractor shall also provide security measures (fencing) around beach placement area to minimize public access, in order to maintain public safety during beach placement construction activities, including mobilization and demobilization. If no access is shown, the Government is not providing any land base access routes for beach grading equipment.

1.12 **DELIVERY OF PLANT AND ORDER OF WORK**

Prior to bringing equipment to the project site, the contractor shall submit a DCPP describing in detail how it plans to accomplish the work within the required period of performance.

1.13 **ARTIFICIAL OBSTRUCTIONS**

The Government has no knowledge of existing wrecks, wreckage, or other material of such size or character as to require the use of explosives or special or additional plant for its economical removal. Prior to dredging, the Contractor shall rake the dredge areas and shall remove debris encountered. Debris removed from the dredged area shall be removed from the water. Disposal shall be the responsibility of the Contractor and disposal shall be outside the limits of government property. In case the
actual conditions differ from those stated or shown, or both, an
adjustment in contract price or time of completion, or both, will be made
in accordance with FAR 52.236-2 Differing Site Conditions. Disposal
should be in accordance with the requirements of the section ENVIRONMENTAL
PROTECTION FOR ILLINOIS 01 57 20.01 03.

1.14 SHOAL REMOVAL

If, before the work is completed, shoaling occurs in any section
previously accepted by the Government, including shoaling in the finished
channel, because of the natural lowering of the side slopes or other
natural causes, redredging at the Contract unit price, within the limit of
available funds, may be performed if agreed upon by both the Contractor
and the Contracting Officer.

1.15 SOUNDINGS

The drawings represent the conditions existing at the time of survey.
Determination of quantities removed will be made from prior and after
dredging soundings taken by the government and the calculations made there
from to determine quantities by in-place measurement. After the
government has made a determination of the quantities to be paid, it will
not reopen except on evidence of collusion, fraud, or obvious error.

1.16 VOLUME CALCULATIONS

All plots of soundings provided to the Contractor during administration of
this contract shall be a graphical representation only and shall NOT be
used for volume calculations. All survey data used for volume
computations shall be available to the Contractor upon request.

Surveys shall extend a minimum of 150 feet or three cross sections
upstream and downstream of the defined project area where allowable. The
extended survey outside the project area will be used to calculate the
possible amount of infill material or shoaling that could occur from areas
outside of the contract area. Infill and/or Shoaling is specified in the
Paragraph entitled "SHOAL REMOVAL".

1.17 MONTHLY PARTIAL PAYMENTS

Monthly partial payments will be based on quantities determined by daily
soundings taken by the Contractor or other means acceptable to the
Contracting Officer. (See CLAUSE 52.236-16 entitled, "QUANTITY SURVEYS").
Sounding surveys for partial payment shall be conducted in the same manner
specified in the Paragraph entitled "PRIOR, AFTER AND CHECK SURVEYS",
unless otherwise authorized or directed.

1.18 CONTINUITY OF WORK

Monthly partial payments will be made for work performed prior to final
examination and acceptance. However, as final dredging is being performed
for final examination and acceptance, no payment will be made for such
final dredging work performed in any area until the depth required under
the contract is secured in the whole of such area, unless prevented by
ledge rock, original material, or other obstructions, which cannot be
removed by the plant specified in the accepted bid, or the equivalent of
such plant, without blasting or special apparatus. No payment will be
made for final 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. If a nonadjacent area is excavated to full depth during the day to day operations carried on under the contract, payment for all work therein may be deferred until the required depth has been secured in the area intervening.

1.19 ALLOWABLE PAY OVERDEPTH AND SIDESLOPES

The total estimated dredging quantity shown on the Price Schedule includes only the required depth material, not the allowable overdepth material and allowable sideslope material. The allowable pay overdepth quantity is computed for the allowable overdepth prism immediately below the material required to be dredged.

1.19.1 Overdepth Dredging

To cover inaccuracies of the dredging process, materials actually removed from within the channel lines to a depth of not more than one foot below the required dredging prism line will be measured and paid for at the contract unit price. However, the maximum quantity of overdepth materials to be paid for will be equivalent to that quantity present within the one foot overdepth prism immediately below the required materials to be removed as determined from the prior to dredging soundings. Any dredging below the allowed one foot will be considered as excessive dredging.

1.19.2 Sideslopes

Materials actually removed, within limits shown on the drawings, to provide for final side slopes not flatter than one vertical on two horizontal, perpendicular to the channel line or dredge limit line, whichever is applicable, but not in excess of the amount originally lying below the side slope allowable dredging prism line will be calculated and paid for. The provisions of this Subparagraph also apply to end slopes at the upstream and downstream dredging limits of the channel.

1.19.3 Excessive Dredging

Any material removed below the overdepth allowance will be considered excessive dredging and will not be paid for. Materials taken from beyond the limits specified in Subparagraphs "Allowable Pay Overdepth" and "Side Slopes", will be excluded from the computed total amount dredged as excessive channel dredging or excessive side slope dredging and for which payment will not be made. The final determination of the amounts of excessive dredging will be based wholly on the surveys made for final examination and acceptance. See Paragraph entitled "FINAL EXAMINATION AND ACCEPTANCE".

1.20 PERMITS

The Contractor shall comply with conditions and requirements of the Corps of Engineers Permits and real estate instruments, and other State or Federal permitting requirements (see section ENVIRONMENTAL PROTECTION FOR ILLINOIS 01 57 20.01 03 for Government acquired permits). Permits and real estate instruments for dredging and placement of material are attached as indicated. The Contractor is responsible for obtaining any additional permits as necessary to perform the work.

1.21 ENVIRONMENTAL PROTECTION REQUIREMENTS

Refer to the section ENVIRONMENTAL PROTECTION FOR ILLINOIS 01 57 20.01 03
for requirements.

1.22 BASIS FOR BIDS

Base bids on the quantity of dredging indicated. Should the total quantity of dredging vary from that specified as the basis for bidding, the contract price will be adjusted in accordance with FAR 52.243-4 Changes. The 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 the conditions recognized in the dredging business as usual in dredging activities such as those required under this contract.

PART 2 PRODUCTS

2.1 MECHANICAL DREDGING EQUIPMENT

Dredging shall be accomplished by utilizing mechanical dredge equipment. The contractor shall use mechanical dredge equipment. Equipment(s) used for dredging, transport and deposition of material shall be provided by the Contractor. Hydrosurvey capability using electronic positioning and sounding equipment must be used while meeting the requirements, Paragraph "Prior, After, and Quantity Survey" of Section 01 10 00 and in accordance to EM 1110-2-1003.

2.2 OTHER EQUIPMENT

Provide all other equipment, operators, labor, materials, fuel and incidentals necessary to complete all mobilization, mechanical dredging, and demobilization to complete this project.

Submit all other equipment specifications and operating parameters for review and approval by the Contracting Officer prior to Mobilization. No additional compensation shall be considered if alternative equipment is allowed.

A bottom dump scow must be used for littoral placement.

PART 3 EXECUTION

3.1 DREDGING

Thirty calendar days prior to any dredging work being performed the contractor shall provide written notice of start of dredging to the Contracting Officer so that the Government can schedule and perform prior soundings. The Contractor shall perform all dredging work to remove material to the required depths within the limits shown on the drawings as specified. Any materials in the allowable overdepth prism and allowable side slopes are not required to be removed. Rocks, cobbles (three inches to 12 inches) and boulders (over 12 inch) may be encountered near breakwaters, revetments and pier heads and shall not be removed if they are part of the harbor structures nor shall toe stones be undermined. Indicated required dredging areas within required downstream and upstream dredging limits will be revised by the Government, after obtaining the before (prior to) dredging soundings. 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.
3.2 OBSTRUCTIONS

Should original material, ledge rock, boulders, cobbles, rock fragments, wrecks, scrap materials, snags, stumps, piles, debris or other material be encountered which cannot be removed by the plant specified in the accepted bid, or equivalent plant, without blasting or special apparatus, the Contractor shall remove therefrom all overlying material within the required dredging prism which in the judgment of the Contracting Officer can be removed by the use of the plant specified in the accepted bid or equivalent plant.

3.3 INSPECTION

Inspect the work, keep records of work performed, and ensure that gages, targets, ranges, and other markers are in place and usable for the intended purpose. Furnish, at the request of the 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.

3.4 CONDUCT OF DREDGING WORK

3.4.1 Order of Work

The Contracting Officer will direct the Contractor on the order of work. The Government reserves the right to change the order of work at any time.

3.4.2 Dredging Sites

The dredging sites are shown within the Waukegan Harbor Approach Channel, Outer Harbor and Advance Maintenance Area. The Contractor must dredge the areas shown in the drawings. No dredging may occur where permits have not been acquired. Remove material from the sites until the contract line items quantities are obtained. The Government reserves the right to change the order of work at any time.

3.4.3 Lights

Each night, between sunset and sunrise and during periods of restricted visibility, provide lights for floating plants, pipelines, ranges, and markers. 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 shall conform to United States Coast Guard requirements for visibility and color.

3.4.4 Ranges, Gages, and Lines

Furnish, 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.
3.4.5 Plant

Maintain the plant, scows, coamings, barges, pipelines, and associated equipment to meet the requirements of the work. Promptly repair leaks or breaks along pipelines. Remove dredged material placed due to leaks and breaks.

3.4.6 Placement of Dredged Material

3.4.6.1 General

All nautical vessels, pipelines and land based transport and conveyance systems shall be operated, loaded and unloaded in such manner as to prevent overflow, spills, leaks, waste, or other loss of dredged materials between point of pick-up and point of deposition within the placement area. Hauling vessels shall have sufficient sidewall height and integrity to prevent drainage over or through the sides and bottom during hauling. Overflowing the barge or allowing drainage through the sides or bottom during dredging or hauling is strictly prohibited.

3.4.6.2 Government Furnished Placement Areas

The dredged material from the Waukegan Harbor shall be transported and placed in the Government-furnished area(s) which are specified on the drawings. The base work only includes placement in the littoral zone, the options must be awarded to place material in the alternative placement locations. The dredged materials shall be distributed in the placement site(s) along the shoreline or on the beach within the area(s) shown on the drawings, the quantity to be placed in any site will be synonymous with the quantity awarded in the bid schedule. The deposit of dredged materials in unauthorized places is forbidden. Before placement operations commence, the Contractor shall survey the placement area to delineate and mark its limits. Comply with rules and regulations of local port and harbor governing authorities and conform to all requirements given in Section 01 57 20.01 03 ENVIRONMENTAL PROTECTION FOR ILLINOIS.

3.4.6.3 Method of Placement

The method employed by the Contractor in conveying dredged materials to the placement area shall be as approved by the Contracting Officer at all times. Temporary dumping or placement of materials outside of the placement area for subsequent rehandling into the placement area is prohibited unless otherwise approved by the Contracting Officer. Deposit dredged material by bottom-dump scow. The Contractor shall place dredge material at water depth of 18 feet or less.

Submit Material placement Records to COR.

3.4.6.4 Placement in Indicated Placement Areas

Prior to placement of dredge material, the Contractor will submit a Dredging Placement Safety Plan, describing in detail the means and methods to be utilized to provide for the public safety at the placement area, all in accordance with the Accident Prevention Plan. The dredged materials shall be deposited within the placement area shown on the drawings. Placement of the dredged materials within the placement area shall be as specified and shown except as otherwise directed by the Contracting Officer. Except as otherwise authorized by the Contracting Officer in writing, no placement shall be performed unless a representative of the
Contractor for Quality Control is present at the time. The method employed by the Contractor in depositing dredged materials in the placement area shall be as approved by the Contracting Officer at all times.

3.4.6.5 Misplaced Material

Any material that is deposited elsewhere than in the places designated or approved by the Contracting Officer will not be paid for. The Contractor shall be required to remove at its own expense and deposit it in the place designated on drawings or as approved by the Contracting Officer.

3.4.7 Littoral Zone Placement

The following requirements pertain to projects utilizing a Government-furnished littoral zone placement area.

a. Procedure. The Contractor shall discharge dredged material within the placement area as indicated on the contract drawing(s) and in accordance with any site-specific requirements. Materials shall only be discharged, within the placement area, five feet below the surface of the water to minimize disruption of water quality. Prior to opening its doors, the transporting vessel shall be as stationary as is safely possible over the placement area to minimize turbidity and sediment dispersal. Washout shall be performed only as necessary and while as stationary as is safely possible over the placement area.

b. Material placement Records. The Contractor shall maintain a log or record listing the date, quantity, and location of each load of dredged material placed in the open-lake placement area, and shall maintain a track plot showing vessel displacement versus location encompassing areas in and adjacent to the placement area, along with the name of the individual having responsibility for assuring the accuracy of the information. This information shall be submitted to the Contracting Officer on a daily basis, attached to each day's Quality Control report, and also submitted at closeout, in accordance with Section 01 45 00.10 20, "QUALITY CONTROL FOR MINOR CONSTRUCTION".

3.4.8 On-Beach Placement

The contractor shall use dredged sediment to build out the beach at the indicated on-beach placement areas. If no beach exists the contractor shall place material as close to shore as possible in water less than 5 feet deep and begin building up elevation no higher than plus 8 feet LWD. The sediment being placed should form a continuous body from the existing shoreline. The final grade shall have no valleys or mounds with a greater elevation differential of 18 inches.

Method of Placement. The contractor may utilize any method to place dredged sediment on the beach. The method must be submitted and approved in accordance with Dredging Placement Safety Plan in the paragraph titled "Placement in Indicated Placement Areas".

Placement Requirements. The final placement condition should be a continuous body of sand beginning from the shoreline to furthest point of placed sand in the lake. The sand must be placed starting at one end of the beach (staring point may be directed by COR) moving toward the other end within the placement area, the beach must be built out to the same distance and tapered back to shore. The COR may direct
more specific on beach placement requirements. No islands, ponds of water, or berms are permitted to be left in place.

3.4.9 Condition of Scows and Hoppers

All scows and hoppers used for transporting the dredged material shall be kept in good condition with coamings in repair. Doors of dump vessels shall be maintained in good repair and sealed in a proper manner to prevent the loss of dredged material. Decks of vessels shall be cleaned of dredged material before leaving the dredging area.

3.4.10 Navigation Warnings

Furnish and maintain navigation warning signs along the pipeline.

3.4.11 Salvaged Material

Anchors, chains, firearms, and other articles of value, which are brought to the surface during dredging operations, must become the property of the Contractor. Contractor may keep said items or dispose of them in accordance with State of Illinois regulations.

3.4.12 Safety of Structures

The prosecution of work shall 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, 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.

3.4.13 Plant Removal

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

3.5 CONTRACTOR QUALITY CONTROL

The Contractor shall establish and maintain a quality control system for dredging and placement operations to assure compliance with the Contract requirements and provide a Daily Report of Dredging Operations by completing the appropriate form and completing all inspections of items under this system, including, but not limited to, the following:

a. Layout of work, and placement areas;

b. Proper dredging depths and placement heights;

c. Conveyance and placement operations;

d. Removal of misplaced material; and

e. Safety requirements.

3.6 GOVERNMENT INSPECTION

3.6.1 Gauge Maintenance

The Contractor shall maintain its gauges, ranges, location marks and limit
marks in proper order and position. The presence of a Government
inspector shall not relieve the Contractor of its responsibility for the
proper execution of the work in accordance with the specifications and
drawings.

3.6.2 Facilities

The Contractor shall furnish, on the request of the Contracting Officer or
any inspector, the use of such boats, boat operators, laborers and
material forming a part of the ordinary and usual equipment and crew of
the dredging plant as may be reasonably necessary in inspecting the work.
However, the Contractor will not be required to furnish such facilities
for the surveys prescribed in the Paragraph "FINAL EXAMINATION AND
ACCEPTANCE".

3.6.3 Transportation

The Contractor shall furnish, on the request of the Contracting Officer or
any inspector, suitable transportation from designated points on shore to
and from the various pieces of off-shore plant and off-shore placement
areas.

3.6.4 Compliance

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

3.7 MEASUREMENT

The material removed will be measured by cubic yard in place, by means of
soundings taken before and after dredging. Prior, after and check surveys
will be made by sonic sounding methods. The Government will make prior
and after surveys and may make check surveys. The Contractor shall make
check surveys. Additional soundings will be taken as the Contracting
Officer may deem necessary. Only one prior survey will be made for work
required under each contract, by the Government. If additional prior
surveys are required, due to the Contractor's operations, the cost of such
surveys shall be paid by the Contractor. The cost of such surveys shall
be the same as specified in the Paragraph entitled, "FINAL EXAMINATION AND
ACCEPTANCE". Submit soundings survey data used for cost to Contracting
Officer.

3.7.1 Method of Measurement

Hydrographic Surveys will be conducted to meet USACE Performance Standards
as defined in the Hydrographic Surveying Manual EM 1110-2-1003. Surveys
will be performed by multi-beam sweep type surveys and by single beam
sounding equipment. The multi-beam sonar and the single beam sonar will
be calibrated following procedures outlined in the aforementioned
Engineering Manual. The same equipment shall be used for priors and after
surveys, using the same work platform.

3.7.2 Government Utilization of Multi-beam and Single Beam Sounders for
Quantity and Clearance Surveys

The Government may elect to use either Multi-beam or Single beam sounding
surveys. The same type of survey used for a prior survey shall be used
for the after surveys and dredge material removed shall be based off Government Prior and After Surveys.

3.8 FINAL EXAMINATION AND ACCEPTANCE

3.8.1 Examination

As soon as practicable after the completion of the entire work or any section thereof (if the work is divided into sections) as in the opinion of the Contracting Officer will not be subject to damage by further operations 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. Should any shoals, lumps or other lack of contract depth be disclosed by this examination, the Contractor is required to remove same by dragging the bottom or by dredging at the contract rate for dredging, 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 at the discretion of the Contracting Officer. The Contractor or its authorized representative will be notified when soundings and/or sweepings are to be made, and will be permitted to accompany the survey party. When the area is found to be in a satisfactory condition, it will be accepted finally. Should more than two sounding 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, the cost of such third and any subsequent sounding or sweeping operations will be charged against the Contractor at the rate of $3,500 per calendar day in which the Government plant is engaged in sounding or sweeping and/or is enroute to or from the site or held at or near the said site for such operations.

3.8.2 Acceptance

Final acceptance of the whole or part of the 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 a completed section shall not change the time of payment of the retained percentages of the whole or any part of the work.

-- End of Section --
**QUALITY CONTROL REPORT - BUCKET/PIPELINE DREDGE**

**CHARACTER OF WORK**
- [ ] MAINTENANCE
- [ ] NEW WORK
- [ ] ENVIRONMENTAL

<table>
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<tr>
<th>DREDGE</th>
<th>NAME</th>
<th>SIZE</th>
<th>PIPELINE</th>
<th>SUCTION PIPE</th>
<th>SUCTION PIPE JET</th>
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**LOCATION/CHANNEL OF WORK**

<table>
<thead>
<tr>
<th>LOCATION OF WORK</th>
<th>DREDGED STATION TO STATION</th>
<th>DISPOSAL AREA USED</th>
<th>QTY DEPOSITED GROSS (CY)</th>
<th>CUMULATIVE AND QTY DEPOSIT FOR DA (CY)</th>
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**CHARACTER OF MATERIAL (%)**
- GRAVEL____
- SAND____
- CLAY____
- MUD____
- SILT____
- HARDPAN____
- STONE____
- SHELL____
- OTHER____

**CHANNEL CONDITION**
- AVERAGE DEPTH BEFORE DREDGING_______________________________
- AVERAGE DEPTH AFTER DREDGING_______________________________

**RIVER/TIDE STAGE**
- MIN TIME MAX TIME GAGE LOCATION
- MIN TIME MAX TIME GAGE DATUM

**WEATHER CONDITION**
- WEATHER TEMP VISIBILITY WIND

**WORK PERFORMED**

**DISTRIBUTION OF WORK**

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**EFFECTIVE WORKING TIME** (CHARGEABLE TO COST OF WORK)

<table>
<thead>
<tr>
<th>PUMPING OR DREDGING</th>
<th>NON-EFFECTIVE WORKING TIME</th>
<th>HANDLING PIPE LINES</th>
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<tbody>
<tr>
<td>HR. MIN.</td>
<td>HR. MIN.</td>
<td>HR. MIN.</td>
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<tr>
<td>%</td>
<td>%</td>
<td>%</td>
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- PCT OF EFFECTIVE TIME
- BOOSTER (IN LINE)
- HANDLING ANCHOR LINES
- CLEARING PUMP AND PIPE LINES
- CLEARING CUTTER OR 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

**OPERATING SUPPLIES**

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<tr>
<td>ITEM</td>
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<td>QUANTITY</td>
</tr>
<tr>
<td>FUEL</td>
<td>BBL</td>
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<tr>
<td>ELECTRICITY</td>
<td>KW</td>
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<tr>
<td>LUBRICANTS</td>
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**TOTAL NON-EFFECTIVE TIME**

<table>
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<tr>
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<th>QUANTITY</th>
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**TOTAL EFFECTIVE AND NON-EFFECTIVE TIME** (CHARGEABLE TO COST OF WORK)

<table>
<thead>
<tr>
<th>HR. MIN.</th>
<th>HR. MIN.</th>
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<tbody>
<tr>
<td>%</td>
<td>%</td>
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</table>

**MOB DATE:______ DREDGE START:______ DEMOB DATE:______**

Waukegan Harbor Approach Channel Dredging, FY20

RMS FORM 4267
## QUALITY CONTROL REPORT - PIPELINE DREDGE

<table>
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<th>CONTRACTOR</th>
<th>DATE</th>
<th>REPORT NO.</th>
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### ATTENDANT PLANT

<table>
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<th>NAME OR NUMBER</th>
<th>H.P.</th>
<th>HOURS</th>
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### LOST TIME

(Not chargeable to cost of work)

| MAJOR REPAIRS AND ALTERATIONS |
| CESSATION |
| COLLISIONS |
| MISCELLANEOUS |
| TOTAL LOST TIME |
| PERCENTAGE OF TOTAL TIME | % |
| TOTAL TIME IN PERIOD |

### NARRATIVES

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SECTION 35 21 23.13

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1.2 SUBMITTALS
1.3 PAYMENT
1.4 NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM CERTIFICATION
1.5 DREDGE PLANT INSTRUMENTATION PLAN (DPIP)

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--End of Section Table of Contents--
PART 1   GENERAL

1.1   DESCRIPTION

The work under this contract requires use of the National Dredging Quality Management Program (DQM) to monitor the scow's status at all times during the contract and to manage data history.

This performance-based specification section identifies the minimum required output and the precision and instrumentation requirements. The requirements may be satisfied using equipment and technical procedures selected by the Contractor.

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 responsible for review of the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals
    Dredge Plant Instrumentation Plan Revisions or Addendum; G, CN
SD-06 Test Reports
    Data Appropriately Archived Email; G, CN
SD-07 Certificates
    Letter of National Dredging Quality Management Program Certification; G, CN

1.3   PAYMENT

No separate payment shall be made for installation, operation, and maintenance of the DQM-certified system as specified herein for the duration of the dredging operations; all costs in connection therewith will be considered a subsidiary obligation of the Contractor and covered under the contract unit price for dredging in the bidding schedule.

1.4   NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM CERTIFICATION

The Contractor is required to have a current certification from DQM for the scow instrumentation system to be used under this contract. The Contractor shall submit their Letter of National Dredging Quality Management Program Certification 15 calendar days after receipt of their Notice to Proceed. Criteria for certification shall be based on the most
recent specification posted on the DQM website (http://dqm.usace.army.mil/Specifications/Index.aspx). Compliance with these criteria shall be verified by onsite quality assurance (QA) checks conducted by the DQM Support Center Data Acquisition and Analysis Team and by periodic review of the transmitted data. If a system is installed specifically for this contract, the QA checks should take place either prior to any material being loaded into the scow to ensure that it is capable of transmitting quality data to the DQM database or with prior approval of the local USACE District, during the first load for each scow, and during subsequent loads as is necessary to verify compliance. DQM certification is valid for one year from the date of certification and is contingent upon the system's ability to meet the performance requirements as outlined in the below Paragraph titled "Performance Requirements", and the below Paragraph titled "Contractor Quality Control". If issues with data quality are not corrected within 48 hours, the system certification shall be revoked and additional QA checks by the Data Acquisition and Analysis Team may be necessary.

Annual DQM certification shall be based on the following:

a. A series of QA checks as described in the below Paragraph titled "Compliance Quality Assurance Checks",

b. Verification of data acquisition and transfer as described in the below Paragraph titled "Performance Requirements", and

c. Review of the Dredge Plant Instrumentation Plan (DPIP) as described in the next Paragraph titled "Dredge Plant Instrumentation Plan (DPIP)".

The Dredging Contractor shall have personnel who are familiar with the system instrumentation and who have the ability to recalibrate the sensors on site during the QA process. The Dredging Contractor shall coordinate pickup times and locations and provide transportation to and from any platform with a DQM system to team personnel in a timely manner. The Dredging Contractor shall also have on site for the QA checks a tug capable of towing the scow. As a general rule, DQM Data Acquisition and Analysis Team personnel will come with personal protective equipment (PPE) consisting of hardhats, steel toe boots, and life jackets. If additional safety equipment is needed - such as eye protection, safety harnesses, work gloves or personal location beacons - these items shall be provided to the team while on site. The Contractor shall submit a test data package to the DQM database from the system on each scow and have it accepted by the DQM Support Center prior to scow compliance checks. The Contractor shall also submit data collected during the QA checks from the scow monitoring system to the DQM database and the Data Acquisition and Analysis Team personnel while on site. It is the Dredging Contractor's obligation to inform the QA team if the location designated for the QA checks has any site-specific safety concerns prior to their arrival on site.

The owner or operator of the scow shall contact DQM at DQM-AnnualQA@rpsgroup.com on an annual basis, or at least three weeks prior to the proposed beginning of dredging, to schedule QA checks. This notification is meant to make the Data Acquisition and Analysis Team aware of a target date and the contract on which the plant will be used. At least one week prior to the target date, the Dredging Contractor shall contact the Data Acquisition and Analysis Team and verbally coordinate a specific date and location. The Contractor shall then follow up this
conversation with a written email confirmation. The owner/operator shall coordinate the QA checks with all local authorities including, but not limited to, the local USACE Contracting Officer's Representative (COR).

Recertification is required for any yard work which produces modification to displacement (e.g., a change in scow lines, or repositioning or repainting hull marks), modification to bin volume (change in bin dimensions or addition or subtraction of structure), or changes in sensor type or location; these changes shall be reported in the sensor log section of the DPIP. A system does not have to be transmitting data between jobs; however, in order to retain certification during this period, the system sensors or hardware should not be disconnected or removed from the scow. If the system is powered down, calibration coefficients shall be retained.

1.5 DREDGE PLANT INSTRUMENTATION PLAN (DPIP)

The Contractor shall have a digital copy of the DPIP on file with the DQM Support Center. While working on site, the Contractor shall also maintain on the dredge a copy of the DPIP which is easily accessible to Government personnel at all times. This document shall describe the sensors used, configuration of the system, how sensor data will be collected, how quality control on the data will be performed, and how sensors/data reporting equipment will be calibrated and repaired if they fail. A description of computed scow-specific data and how the sensor data will be transmitted to the DQM database shall also be included. The Contractor shall submit to the DQM Support Center any Dredge Plant Instrumentation Plan revisions or addendum made to the plan, subsequent to its original submission, prior to the start of work.

The DPIP must have a Table of Contents in the following order and shall include the following at a minimum:

Dredging Company
Scow Point of Contact
Telephone Number
Email Address
Scow Monitoring System Provider
Scow Monitoring System Point of Contact
Telephone Number
Email Address
Scow Name/ID
Sensor Repair, Replacement, Installation, Modification, or Calibration Methods
Data-Reporting Equipment
Procedure for Providing Sensor Data/Computed Data to the DQM Database via Email
System Power Supply

System Battery Charge Method

Documentation on how the Contract Number will be Changed if the System is Left on Past the End of the Contract

System Telemetry

Dimensioned Drawings of the Scow

A Typical Plan and Profile View of the Scow Showing the Following:

a. Bin Cross Sections
b. Locations of the Required Sensors Referenced to the Following:
c. Fore and Aft Perpendicular
d. Bin Length, Depth, Width, Zero Reference
e. External Hull Draft Markings (Latitudinal, Longitudinal, Keel)
f. Each Other
g. Overall Scow Dimensions

Criteria and Method Used to Increment the Trip Number

Description of how the UTC Time Stamp is Collected

Positioning System

Brand Name and Specifications

Sampling Rates for Data Acquisition (Standard versus placement)

Instrument Used to Calculate the course-over-ground (COG)

Any Calculation Done External to the Instrumentation

Certificates of Calibration and/or Manufacturer Certificates of Compliance

Description of how Scow Speed is Determined

Hull Status

Instrumentation Brand Name and Specifications

Certificates of Calibration and/or Manufacturer Certificates of Compliance

Any Calculation Done External to the Instrumentation

Criteria Used to Determine Hull Open/Closed

Heading
Instrumentation Brand name and Specifications

Certificates of Calibration and/or Manufacturer Certificates of Compliance

Any Calculation Done External to the Instrumentation

Criteria Used to Determine Heading

Drafts

Instrumentation Brand Name and Specifications

Certificates of Calibration and/or Manufacturer Certificates of Compliance

Any Calculation Done External to the Instrumentation

Criteria Used to Determine Draft

Displacement

Method Used to Calculate Displacement Based on Fore and Aft Draft

Tables Listing (Fresh and Salt Water) Displacement as a Function of Draft Provided by a Licensed Marine Surveyor/Naval Architect Independent of the Contractor. NOTE: The scaling between each interval in the table is determined by the designer of the table (which is determined by the shape of the scow); however, units shall be reported, at a minimum, in feet and tenths of a foot for draft and long tons for displacement.

These methods and tables must be an accurate reflection of the current configuration and displacement.

Contractor Data

Backup Frequency

Backup Method

Post Processing

Archive Capability

Documentation of Verification that the Reported Values are Applicable for the Sensor and Application

Quality Control Plan as per the Paragraph titled "Contractor Quality Control"

Name of the Quality Control Systems Manager

Procedures for Checking Collected Data Against Known Values

Procedures for Verifying that Telemetry is Functioning

Log of Sensor Performance and Modifications
Log of Contractor Data Backup as per the Paragraph titled "Contractor Data Backup"

Any changes to the computation methods shall be approved by the DQM Support Center prior to their implementation.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 REQUIREMENTS FOR REPORTED DATA

The Contractor shall provide, operate, and maintain all hardware and software to meet these specifications. The Contractor shall be responsible for the replacement, repair, and calibration of sensors and other necessary data acquisition equipment needed to supply the required data.

Repairs shall be completed within 48 hours of any sensor failure. Upon completion of a repair, replacement, installation, modification or calibration the Contractor shall notify the COR. The COR may request recalibration of sensors or other hardware components at any time during the contract as deemed necessary.

The Contractor shall keep a log of sensor repair, replacement, installation, modification and calibration in the onsite copy of the DPIP. The log shall contain a three-year history of sensor maintenance including the time of sensor failures (and subsequent repairs), the time and results of sensor calibrations, the time of sensor replacements, and the time that backup sensor systems were initiated to provide the required data. It shall also contain the name of the person responsible for the sensor work.

Sensors installed shall be capable of collecting parameters within specified accuracies and resolutions indicated in the following subparagraphs.

With the exception of position and any value calculated, reported sensor values should represent a weighted average with the highest and lowest values not included in the calculated average for the given interval. The averaging routine used should be consistent across all event triggers. This information should be documented in the DPIP sections that say "Calculations done external to the instrumentation".

These data-reporting requirements cover the collection of electronic data on a scow through the entire dredging cycle. Placement events can consist of both open-water placement and offloading. Open water-placement is the placement of material via bottom doors or split hull. Offloading is the placement of material via either hydraulic or mechanical means.

3.1.1 Scow Name

Each scow shall be assigned a unique name that will remain constant from one dredging operation to the next.

3.1.2 Contract Number

The USACE-assigned contract number for the project will be reported.
3.1.3 Trip Number

A DQM trip number shall document the end of a placement event for a given scow.

3.1.3.1 Open-Water placement

The trip number will be incremented at the completion of each placement/removal of material from the scow. Each scow shall maintain a separate trip numbering sequence (i.e., each scow will start with a trip number of 1); this number will be incremented by 1 each time the scow completes a placement. The trip number must be calculated and repeatable based on a given logic; it may not necessarily correspond to the trip number logged aboard the dredge or tug. Efforts shall be made to include logic that avoids false trip number increments while also not allowing the routine to miss any placement events.

3.1.3.2 Offloading

The trip number will be incremented at the completion of each placement/removal of material from the scow. Each scow shall maintain a separate trip numbering sequence (i.e., each scow will start with a trip number of 1); this number will be incremented by 1 each time that scow completes a placement. The trip number must be calculated and repeatable based on a given logic; it may not necessarily correspond to the trip number logged aboard the dredge or tug. Efforts shall be made to include logic that avoids false trip number increments while also not allowing the routine to miss any placement events.

3.1.4 Horizontal Positioning

Horizontal positioning shall be recorded as the geographic coordinates of the vessel as indicated by the location of the Global Positioning System (GPS) antenna. All locations shall be obtained using a positioning system operating with a minimum accuracy level of one meter to three meters horizontal Circular Error Probable (CEP). Positions shall be reported as Latitude/Longitude WGS 84 in decimal degrees. West Longitude and South Latitude values are reported as negative.

3.1.5 Date and Time

The date and time shall be reported to the nearest second and referenced to Universal Time Coordinated (UTC) based on a 24-hour format; yyyy-mm-dd hh:mm:ss.

3.1.6 Hull Status

Hull status is meant to reflect a condition when material could be removed or released from the scow. NOTE: For this contract, hull status shall register closed prior to leaving the placement area.

3.1.6.1 Open-Water placement

An open split hull or open bottom door of a scow shall be indicated by reporting an "OPEN" value. A closed split hull or closed bottom door of a scow shall be indicated by reporting a "CLOSED" value. An open status shall be indicated as the bin starts to open, and a closed status shall be indicated only once the bin is fully closed. For pocket scows, the
open/closed status shall correspond to the compartment which is first to open and last to close.

3.1.6.2 Offloading

For non-dumping scows, an "OPEN" value shall indicate that the bin is in the process of being unloaded, either by pumping or mechanical means.

3.1.7 Course

Scow COG shall be provided using industry-standard equipment. The Contractor shall provide scow course-over-ground (to the nearest whole degree) with values from 000 (true north) to 359 degrees referenced to a clockwise positive direction convention.

3.1.8 Speed

Scow speed-over-ground shall be provided in knots using industry-standard equipment with a minimum accuracy of one knot and resolution to the nearest 0.1 knot.

3.1.9 Heading

Scow heading shall be provided using industry standard equipment. The scow heading shall be accurate to within five degrees and reported to the nearest whole degree, with values from 000 (true north) to 359 degrees referenced to a clockwise positive direction convention.

3.1.10 Draft

All reported draft measurements shall be in feet, tenths, and hundredths with an accuracy of plus/minus 0.1 foot relative to observed physical draft readings. The measurements shall be reported at a resolution of two decimal places (hundredths of a foot). The reported forward draft value shall be equal to the sum of the visual forward port and starboard draft mark readings divided by two. The reported aft draft value shall be equal to the sum of the visual aft port and starboard draft mark readings divided by two. Forward draft, aft draft, and average draft will be reported. Sensors shall be placed at an optimum location on the scow to be reflective of observed physical draft mark readings at any trim or list. Minimum accuracies are conditional to relatively calm water. The sensor value reported shall be an average of at least ten samples per event, with at least one maximum value and one minimum value removed, and the minimum eight remaining values averaged. When the average draft is calculated for the purpose of determining displacement, significant digits for average draft shall be maintained such that if forward draft were 0.15 foot and aft draft were 0.1 foot, then the average draft would be 0.125 foot.

3.1.11 Displacement

Scow displacement shall be reported in long tons, based on the most accurate method available for the scow. The minimum standard of accuracy for displacement is interpolation from the displacement table, based on the average draft. For this contract the density of water used to calculate displacement shall be 1000 kg/cubic meter and shall be used for an additional interpolation between the fresh and salt water tables.
3.2 NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM SYSTEM REQUIREMENTS

The Contractor's DQM system shall be capable of collecting, displaying, and transmitting information to the DQM database. The parameters which shall be reported to the DQM database include trip number, date and time, hull status, scow course, scow speed, scow heading, draft, and displacement. An easily accessible, permanent visual display on the scow shall show in real time the parameters collected by the system in the same units as are used for data submitted to the DQM database. In the event a reported parameter is calculated based on multiple sensors, the sensor values as used in the equation shall be able to be viewed in addition to the required parameter. If a hardware problem occurs, or if a part of the system is physically damaged, then the Contractor shall be responsible for repairing it within 48 hours of determination of the condition.

3.2.1 Telemetry

The Contractor may select any commercial satellite, cellular phone, or other data communications systems available as long as it is capable of transmitting real-time data as well as enough additional bandwidth to clear historically queued data when a connection is reobtained. The telemetry system shall be always available and have connectivity in the contract area. If connectivity is lost, unsent data shall be queued and transmitted upon restoration of connectivity. The data transition process from the scow to the DQM database must be automated. The data may be sent from the scow directly to the DQM database or to a shore-based system. Data transmitted to the DQM database should be raw data; any processing of the data conducted shoreside shall be done using repeatable automated software or programming routine. A description of this process shall be included in the DPIP.

3.2.2 Data Reporting Frequency

placement activities shall be logged with high temporal and spatial resolution. Data shall be logged as a series of events. Each set of measurements (time, position, etc.) will be considered an event. Any required information in the Paragraph titled "Requirements for Reported Data", that is not an averaged variable (i.e., draft and ullage) shall be collected within one second of the reported time. Data shall be measured with sufficient frequency by the scow system to resolve the events to the accuracy specified in the following table. Any averaged variable must be collected and computed within this sampling interval. Event types "Sailing", "Loading/Stationary", "Offloading", and "Open Water placement" are triggered by a time criterion; the criterion should be consistent across the "Sailing" and "Open Water placement" event types and should not change for the data collected on a given scow. This criterion should be documented by the Contractor in the DPIP.

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Event Trigger Descriptions</th>
<th>Event Time Resolution</th>
<th>Event Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loading/Stationary</td>
<td>No change in position with hull status closed</td>
<td>1 minute</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>An elapsed time of 1 hour since the last event.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No change in position with hull status open</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>----------------------NONCLOSURE----------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In the event a scow has completed an open water placement and transited back to a holding</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
station without closing the hull, the sampling shall be changed to once per hour.

Sailing  
**Change in position with hull status closed**
Time from the last sample equals 1 minute.

Open  
**Hull status open**
A position must be recorded within 1 second of placement of the hull status going from closed to open and again within 1 second of the hull status going from open to closed. The position shall be reported at any equal interval from 6 to 12 seconds. This interval shall always remain consistent for the dredge plant.

Offloading  
**Offloading material, hull status reported as open**
A position must be recorded within 1 minute arrival at the offload location and within one second of the material starting to be removed from scow. The time from the last sample equals 1 minute.

--------STANDBY OFFLOADING------
In the event a scow is not being actively offloaded at the offload location for a time equal to one hour, the sampling interval shall be equal to once an hour.

Example: The scow is stationary for 1 hour and 15 minutes, and then it sails to the placement area. You should have a "Loading/Stationary" event at time 0 time 1 hour, and time 1 hour and 15 minutes. Then, for "Sailing," within 1 second of an elapsed time of 1 minute from the 1 hour and 15 minutes event, another event occurs.

3.2.3 Data Transmission to the Web Service

A Simple Object Access Protocol (SOAP) web service shall be used to report sensor data to the DQM database. Data shall be transmitted as it is collected in real time and pushed to the DQM web service. If the web service is not available or returns an error message, the data shall be stored in a queue and transmitted upon re-establishment of the connection, starting with the oldest data in the queue and continuing until real-time transmission is restored. Delays in pushing real-time data to the DQM database should not exceed four hours. Exceptions to these requirements may be granted by the DQM Support Center on a case-by-case basis with consideration for contract-specific requirements, site-specific conditions, and extreme weather events.

Contact dqm-support@usace.army.mil to obtain the web service URL and the appropriate key credentials and communication protocol.

The data transmission method call takes two arguments: a string containing the plant identifier assigned by the DQM Support Center and a second string containing the JSON-formatted sensor data. The method returns the string "OK" if the data is received. If the data is not received, either the web service or the client application throws an error.
3.2.4 XML-Formatted Sensor Data String

Each scow event shall be passed as a string on one continuous line of data.

The example below is broken up by variable for ease of reading:

```xml
<?xml version="1.0"?>
<SCOW_DREDGING_DATA version="2.5">
  <SCOW_NAME>AU1994</SCOW_NAME>
  <CONTRACT>W123BA-09-D-0087_RL01</CONTRACT>
  <TRIP_NUMBER>34</TRIP_NUMBER>
  <X_POSITION>-81.670632</X_POSITION>
  <Y_POSITION>41.528987</Y_POSITION>
  <DATE_TIME>2010-08-14 10:50:15</DATE_TIME>
  <SCOW_SPEED>0.0</SCOW_SPEED>
  <SCOW_COURSE>0.0</SCOW_COURSE>
  <HULL_STATUS>OPEN</HULL_STATUS>
  <SCOW_HEADING></SCOW_HEADING>
  <SCOW_FWD_DRAFT></SCOW_FWD_DRAFT>
  <SCOW_AFT_DRAFT></SCOW_AFT_DRAFT>
  <SCOW_AVG_DRAFT></SCOW_AVG_DRAFT>
  <ULLAGE_FWD></ULLAGE_FWD>
  <ULLAGE_AFT></ULLAGE_AFT>
  <ULLAGE_AVG></ULLAGE_AVG>
  <SCOW_BIN_VOLUME></SCOW_BIN_VOLUME>
  <SCOW_DISPLACEMENT></SCOW_DISPLACEMENT>
  <SCOW_LIGHTSHIP></SCOW_LIGHTSHIP>
  <SCOW_TDS></SCOW_TDS>
  <ADDITIONAL_DATA>Some more scow info, if needed</ADDITIONAL_DATA>
</SCOW_DREDGING_DATA>
```

DATE_TIME values shall be formatted as YYYY-MM-DD HH:MM:SS, as shown above. If, for any reason, a field has no value, the enclosing XML tags should be sent with nothing between them (e.g., <DRAFT_AFT></DRAFT_AFT>). The web service cannot handle a "null" value or any other indicators of no value collected.

3.2.5 Contractor Data Backup

The Contractor shall maintain an archive of all data sent to the DQM database during the dredging contract. The COR may require, at no increase in the contract price, that the Contractor provide a copy of these data covering specified time periods. The data shall be provided in the HTML format which would have been transmitted to the DQM database. Data submission shall be via storage medium acceptable to the COR.

At the end of the dredging contract, the Contractor shall contact the DQM Support Center prior to discarding the data to ensure that it has been appropriately archived. The Contractor shall record in a separate section at the end of the scow's onsite copy of the DPIP the following information:

a. Person who made the call,

b. Date of the call, and

c. DQM representative who gave permission to discard.

The same day of the phone call and prior to discarding the data, the
Contractor shall submit a Data Appropriately Archived email to the local USACE District's COR with the above information and cc: the DQM Support Center representative providing permission. In addition to the above information, the following shall also be included in the email:

a. Project name and contract number,

b. Scow start and end dates, and

c. Name of the scow.

3.3 PERFORMANCE REQUIREMENTS

The Contractor's DQM system shall be fully operational at the start of dredging operations and fully certified prior to moving dredge material on the contract (see Paragraph titled "National Dredging Quality Management Program Certification"). To meet contract requirements for operability, in addition to certification, the Contractor's system shall provide, at a minimum, a data string with values for all parameters while operating, as described within the specifications. Additionally, all hardware shall be compliant with DPIP requirements Paragraph titled "Dredge Plant Instrumentation Plan (DPIP)". Quality data strings are considered to be those providing values for all parameters reported when operating according to the specification. Repairs necessary to restore data return compliance shall be made within 48 hours. Failure by the Contractor to report the required data within the specified time window for scow measurements (see Paragraphs titled "Data Reporting Frequency" and "Data Transmission to the Web Service") and failure to receive DQM certification prior to dredging may result in withholding of up to 10 percent of the contract progress payment per clause 52.232-5.

3.4 COMPLIANCE QUALITY ASSURANCE CHECKS

Quality assurance checks are required prior to the commencement of dredging, and at the discretion of a COR periodically throughout the duration of the contract. As part of the testing requirements, the Dredging Contractor shall provide the above personnel an easily accessible visual display of measurements from the scow monitoring system in the same units that are submitted to the DQM database. These measurements shall be provided in real time on the scow or near real time on location. The Dredging Contractor shall also submit data collected during the QA checks from the scow monitoring system to the DQM database at completion of the checks. Detailed instructions for performing these checks and a spreadsheet for recording the results are available at http://dqm.usace.army.mil/Certifications/Index.aspx. Incoming data shall be periodically reviewed to ensure compliance with the performance requirements outlined in Paragraph titled "Performance Requirements".

For annual instrumentation checks and compliance monitoring, DQM Data Acquisition and Analysis Team personnel attempt to be as flexible as possible in performing their checks so as not to delay work; however, in order to expedite matters as much as possible, it is necessary that they receive the support and cooperation of the local USACE District and the Dredging Contractor. The Dredging Contractor shall coordinate pickup times and locations and provide transportation to and from any platform with a DQM-certified system in a timely manner. Calibrations to the sensors should already have been performed before DQM personnel arrive on site.
3.4.1 Position Check

During the QA checks, both the static position of the scow and a dynamic tracking of movement though each of the event triggers Paragraph titled "Data Reporting Frequency" will be monitored by an independent GPS unit. The inspector GPS data shall be compared to the data that is collected by the DQM-certified system for the same period. The data should be provided to the DQM Data Acquisition and Analysis Team by the system provider while on site. The DQM Data Acquisition and Analysis Team will confirm the position of the scow, verify that data collection intervals change as each of the scow event triggers change, and check all data reporting requirements. A Contractor-furnished tug will be required to transport the scow during this check. Throughout the contract, the COR will periodically verify reported positions by independently measuring with other equipment to verify locations.

3.4.2 Hull Status Check

The COR will document the angle at which the hull status sensor registers "OPEN" and "CLOSED".

3.4.3 Draft and Displacement Check

The COR shall periodically verify the accuracy of the fore and aft system-reported draft values by comparing the vessel hull draft marks to the corresponding sensor readings indicated on the DQM screen. The vessel's hull draft reading shall be viewed from a Contractor-supplied auxiliary vessel circling the dredge. The COR shall review the difference between averaged drafts recorded by the instruments and those estimated from the draft marks to ensure that the system is operating within the acceptable accuracy of approximately plus/minus 0.1 foot in calm seas conditions. Reported draft values will be verified light, loaded, and at other intervals at the discretion of the COR. If sensors responsible for collecting draft values are not located on the centerline, verification may be required under different trim and list conditions. If values are outside the acceptable range, the Contractor shall recalibrate or repair system components as necessary. This check may be performed separately or as a part of the Water Load Test. For each system-provided fore and after draft, an average draft value will be calculated during the draft check, and the corresponding displacement will be verified longhand using the supplied draft/displacement tables.

3.5 CONTRACTOR QUALITY CONTROL

The Dredging Contractor shall designate a Quality Control Systems Manager (QCSM), who shall develop and maintain daily procedures to ensure the Contractor's Quality Control (CQC) of the DQM system. These methods shall include a procedure by which data being collected is checked against known values and telemetry is verified to be functioning. The Contractor Quality Control Plan (see Section 01 45 00 10 20 QUALITY CONTROL FOR MINOR CONSTRUCTION), which describes these methods and procedures, shall be included in the DPIP as per Paragraph titled "Dredge Plant Instrumentation Plan (DPIP)". This is the only section which shall be submitted to the local USACE District and is a required submittal prior to the start of the contract. CQC Reports may be required at the discretion of the Quality Assurance Representative (QAR) daily. Annotations shall be made in the CQC Report, documenting all actions taken on each day of work including all deficiencies found and corrective actions taken.
3.6 LIST OF ITEMS TO BE PROVIDED BY THE CONTRACTOR

DPIP
Paragraph "Dredge Plant Instrumentation Plan (DPIP)"

DQM SYSTEM
Sensor Instrumentation Paragraph "Requirements for Reported Data"

SCOW DATA
Event documentation Paragraph "Data Reporting Frequency"
Data reports Paragraph "Data Transmission to the Web Service"

QA EQUIPMENT ON THE DREDGE
Clear and accurate draft marks

-- End of Section --