

**HARBOUR WATERWAY SPECIAL DISTRICT
JACKSONVILLE, FLORIDA**

**MAINTENANCE DREDGE PROJECT
BID PACKAGE**

**Sealed price and a Description of Means and Method
for project shall be submitted by:**

June 14, 2019

Work to begin on or before:

JANUARY 2, 2020

May 15, 2019

ATTENTION BIDDERS

In preparing your bid -----

1. Have you signed the bid? Are all blank spaces filled in?
2. Have you checked your bid for possible errors? Arithmetically?
3. Have you furnished all information required by the invitation for bids or the specifications?
4. Are you submitting your bid on time? If mailed, will it reach the place of bid opening before the designated hour?
5. Have you attached the Bid Schedule Form?

HARBOUR WATERWAY SPECIAL DISTRICT
JANUARY, 2020 MAINTENANCE DREDGING PROJECT

PHONE AND INFORMATION INQUIRES

REGARDING THIS SOLICITATION SHOULD

BE MADE TO THE FOLLOWING:

HARBOUR WATERWAY SPECIAL DISTRICT
STANLEY H PIPES

DISTRICT MANAGER

11554 STARBOARD DRIVE

JACKSONVILLE, FLORIDA 32225-1015

s.pipes.hwsd@att.net

(904) 642-0097

(904) 705-5431(c)

COLLECT CALLS NOT ACCEPTED

HARBOUR WATERWAY SPECIAL DISTRICT
JANUARY, 2020 MAINTENANCE DREDGING PROJECT

Table of Contents

SECTION 01- INTRODUCTION

1.1	SCOPE OF PROJECT	7
1.2	GENERAL INSTRUCTIONS.....	7

SECTION 02 – GENERAL QUALIFICATION CRITERIA

2.1	GENERAL	10
2.2	GENERAL DREDGING EXPERIENCE	10
2.3	PARTICULAR DREDGING EXPERIENCE	10
2.4	FINANCIAL CAPABILITIES	10
2.5	PERSONNEL CAPABILITES	11
2.6	EQUIPMENT CAPABILITIES	11
2.7	PUBLIC ENTITY CRIMES	11
2.8	LITIGATION HISTORY	11
2.9	RIGHT TO WAIVE	11
2.10	MAINTENANCE DREDGING: THRESHOLD CRITERIA.....	11
2.11	RESPONSIBILITY OF CONTRACTOR	12

SECTION 03 – GENERAL PROVISIONS

3.1	INDEMNIFICATION	13
3.2	INSURANCE REQUIREMENTS.....	13
3.3	PERFORMANCE AND PAYMENT	14
3.4	DAMAGE TO WORK	14
3.5	SAFETY PROVISIONS	15
3.6	SIGNAL LIGHTS	17
3.7	CONTINUITY OF WORK	17
3.8	INSPECTION	17
3.9	SHOALING	18
3.10	SEAWORTHINESS CERTIFICATION	18
3.11	ENVIRONMENTAL LITIGATION	18
3.12	RIGHTS OF WAY	18
3.13	CONTRACTOR RESPONSIBILITY.....	19
3.14	MOBILIZATION OF ATTENDANT PLANT.....	19
3.15	SUPERVISION	20
3.16	WORK IN THE VICINITY OF OTHER CONTRACTORS	20
3.17	REGULATIONS AND LAWS	20

SECTION 04 – ENVIRONMENTAL PROTECTION DURING DREDGING

4.1	SCOPE	21
4.2	APPLICABLE REGULATIONS	21
4.3	MEASUREMENT AND PAYMENT	21
4.4	QUALITY CONTROL	21

HARBOUR WATERWAY SPECIAL DISTRICT
JANUARY, 2020 MAINTENANCE DREDGING PROJECT

4.5	NOTIFICAITON	21
4.6	SUBCONTRACTORS	22
4.7	IMPLEMENTATION	22
4.8	REFERENCES	22
4.9	ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS	22
4.10	PROTECTION OF LAND RESOURCES	22
4.11	PROTECITON OF WATER RESOURCES	23
4.12	PROTECTION OF FISH AND WILDLIFE	23
4.13	RESTROOM FACILITIES	23
4.14	REPORTING OF POLLUTION SPILLS	24

SECTION 05 – MARINE SURVEYS

5.1	SCOPE	25
5.2	MEASUREMENT AND PAYMENT	25
5.3	PROFESSIONAL CERTIFICATION	25
5.4	PRELIMINARY FIELD SURVEYS	25
5.5	BEFORE AND AFTER DREDGING CROSS SECTIONS	25
5.6	AFTER DREDGING PROFILES	26

SECTION 06 – DREDGING

6.1	SCOPE	27
6.2	MEASUREMENT	27
6.3	PAYMENT	28
6.4	QUALITY CONTROL	28
6.5	RADIO AND TELEPHONE COMMUNICATIONS	29
6.6	PLANT	29
6.7	DREDGING	29
6.8	WORKING IN THE VINCINITY OF STRUCTURES	30
6.9	DISPOSAL OF DREDGED MATERIAL	31

HARBOUR WATERWAY SPECIAL DISTRICT
JANUARY, 2020 MAINTENANCE DREDGING PROJECT

APPENDIX

A	BID SCHEDULE FORM	32
B	ESTIMATED MATERIAL TO BE DREDGED.	33
C	MARINE SURVEYS	
C.1	COVER	34
C.2	CHANNEL 1A ,1B, 2A, & 2B	35
C.3	CHANNEL 2C, 2D, 3A, & 3B	36
C.4	DREDGE PROFILES	37
C.5	SPOIL SITE SOUNDINGS	38
D	HWSD SPOIL SITE	39
E	US ARMY CORPS OF ENGINEERS PERMIT	40

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

DREDGING MAINTENANCE SERVICES

1. SECTION 01 - INTRODUCTION

1.1. SCOPE OF PROJECT

- 1.1.1. The Harbour Waterway Special District (HWSD) is seeking qualified companies interested in performing maintenance dredging services on the HWSD Canal System and approach Channel in Jacksonville, Florida. The planned maintenance dredge will remove up to 60,000 cubic yards of material and deposit the dredged material in the HWSD spoil site on Reed Island 10,500 feet from the furthest point in the canal system and 35+ feet above MLW. The anticipated start date is on or before **January 2, 2020** with an end date no later than **May 31, 2020**. Dredging hours of operations may be conducted between 7:00 am and 7:00 pm depending on visibility, or as approved by the Contracting Officer.
- 1.1.2. Bids must be received on or before 12:00 pm, **June 14, 2019** at the offices of Lewis, Longman, and Walker, Attention Wayne Flowers, 245 Riverside Avenue, Suite 150, Jacksonville, FL. 32202. All Bids become the property of the HWSD and will not be returned to the Bidder.
- 1.1.3. Applicants / Bidder shall include the Bid Schedule Form in their bid along with supporting documentation as required.
- 1.1.4. If you should have any questions regarding this process, please contact the Contracting Officer, Stanley Pipes, at 904.642.0097 send an email to s.pipes.hwsd@att.net.

1.2. GENERAL INSTRUCTIONS

- 1.2.1. In this document an "**Applicant**" or "**Bidder**" is a Prime Contractor interested in providing Dredging Maintenance Services for the HWSD.
- 1.2.2. In this document, HWSD is the Harbour Waterway Special District.
- 1.2.3. In order to bid on the HWSD January, 2020 Maintenance Dredging Project, the Applicant must demonstrate that the management/technical experience and ability to perform Dredging Maintenance Services along with other requirements set out herein are met.
- 1.2.4. All costs and expenses or losses which Applicants and/or their subcontractors may incur in connection with bidding shall be borne solely by them.
- 1.2.5. Evaluation of the Bids will be done on the basis of the information presented by Applicants in the bid and in any attachments or supplements specifically required herein and on the basis of further information obtained by the HWSD at their sole discretion from third parties (for example, Bankers, Contractors, References, Owners or Consulting Engineers in connection with work performed by applicants).
- 1.2.6. Applicants shall specifically authorize the HWSD to obtain information from references whose names are listed in the Bid.
- 1.2.7. The HWSD may, at its sole discretion, between the time of the Bid submission and the time of the award of a contract, examine, clarify, verify and/or evaluate all matters relating to the activities of the Applicant. Further, the HWSD retains the right to re-examine, seek clarifications of, verify and/or re-evaluate the contents of all materials and/or information presented or acquired by it to determine the eligibility of the bidder. Thus, each Applicant should ensure that the documentation furnished contains the information which is requested (or which will be

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

requested) as fully and as accurately as is possible.

- 1.2.8. In case discrepancies are found in the information submitted, the Bid will be considered unsatisfactory and the Applicant not eligible to bid, until such discrepancies have been satisfactorily explained or resolved. In this respect, the HWSD may enter into discussions with Applicants when necessary to seek clarification.
- 1.2.9. Failure to provide information which is essential to evaluate the Applicant's qualifications or to provide timely clarification or substantiation of the information supplied may result in disqualification of the Applicant.
- 1.2.10. The criteria and evaluation factors include, but are not limited to: the credibility of the Applicant; their experience; general expertise; qualifications and areas of specific expertise; recommendations from prior customers on previous projects by the Applicant or as a Subcontractor; and their management, structure, resources, the extent to which resources will be used, financial capability and other work in hand.
- 1.2.11. The HWSD will award a contract to the law, responsive and responsible Bidder, price and other factors considered. The HWSD will award one contract for this project. The Board of the HWSD, in their sole discretion, reserves the right to reject any and all bids and to waive informality concerning bid proposals whenever such rejection or waiver is in the best interest of the HWSD. Nothing contained shall place a duty upon the HWSD to reject bids or award a contract based upon anything other than their sole discretion as described herein.
- 1.2.12. Bidders / Applicant must meet all of the following minimum pass-fail criteria for Dredging Maintenance Services.
- 1.2.13. It is anticipated that substantial performance/payment bonds and insurances will be required prior to award of maintenance dredge contract.
- 1.2.14. Knowledge of Conditions - At the time of the proposal, each Bidder will be presumed to have read and to be thoroughly familiar with the specifications of this RFP. The Bidder shall satisfy himself as to the nature of the work and general and local conditions. He or she shall gain full knowledge of working conditions and other facilities in the area, which will have a bearing on the performance of his or her work. Any failure by the Bidder to acquaint himself/herself with all of the available information shall not relieve the Bidder from any responsibility for performing all work properly. No additional compensation shall be allowed for conditions increasing the Bidder's cost, which were not known, or should have been known, or anticipated by, that Bidder when submitting their Cost Proposal.
- 1.2.15. Description of Means and Methods of Project Completion. The HWSD may consider non-responsive any proposal not prepared and submitted in accordance with the provisions hereof. Bidders shall understand that the HWSD will not be responsible for any errors or omissions by the Bidder in the presentation of the response.
- 1.2.16. Protest Regarding Specifications - Any prospective Bidder shall have 5 business days after receipt or publication of these bid specification or 48 hours after the posted date and time of a pre-bid conference, whichever is earlier, or 48 hours after the posting of an addendum, in which to file a written notice of protest in order to timely challenge the requirements, terms and/or conditions contained in the bid documents, including, without limitation any provision governing or establishing: (i) the basis for making the award in question; (ii) evaluation criteria; (iii) equipment, product or material specifications; (iv) proposed project schedules; or (v) other general solicitation or project requirements.
- 1.2.17. Protest Regarding Bid Award - Any Bidder shall have 48 hours following either the posting or written notification of a decision or intended decision, whichever is earlier, in which to file a written notice of protest in order to timely challenge or seek relief from a decision or recommended decision of the HWSD regarding award of a contract under this bid solicitation, including without limitation: (i) a recommendation to reject a bid; (ii) a contract award; or (iii) the

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

short listing of Bidders. Failure to timely file a protest according to this section shall constitute a waiver of any Bidder's right to protest the decision in question

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

2. SECTION 02 - GENERAL QUALIFICATION CRITERIA

2.1. GENERAL

2.1.1. Qualification will be based on Applicants meeting all the following minimum pass-fail criteria detailed in the Bid:

- 2.1.1.1. General Dredging Experience (Section 2.2)
- 2.1.1.2. Particular Dredging Experience (Section 2.3)
- 2.1.1.3. Financial Capabilities (Section 2.4)
- 2.1.1.4. Personnel Capabilities (Section 2.5)
- 2.1.1.5. Equipment Capabilities (Section 2.6)
- 2.1.1.6. Litigation History (Section 2.7)
- 2.1.1.7. Public Entity Crimes (Section 2.8)

2.1.2. Company must have been doing business under the same name for at least three (3) years or provide documentation in writing that a change of name had no effect on the structure of the organization, financial status, management or ability of the applicant to perform satisfactorily.

2.2. GENERAL DREDGING EXPERIENCE

2.2.1. The Applicant shall provide evidence: that it has been actively engaged in the Maintenance Dredging Services business for at least the period stated in the Bid (Section 2.10) immediately prior to the date of submission of Bid, in the role of Prime Contractor, Management Contractor, or Subcontractor, and that the Applicant has performed average dredging volumes during the period equal to or greater than the amount stated in the Bid (Section 2.10).

2.3. PARTICULAR DREDGING EXPERIENCE

2.3.1. The Applicant shall provide evidence that it has successfully or substantially completed at least the number of contracts stated in the Bid (Section 2.10), of a nature, complexity, and requiring dredging experience similar to the proposed work. The work may have been executed by the Applicant as a Prime Contractor, Management Contractor, or Subcontractor, with references being submitted to confirm satisfactory performance.

2.3.2. Experience information provided with the Bid may be verified by contact with the firm(s) or person(s) for whom the Contractor has performed similar work.

2.4. FINANCIAL CAPABILITIES

2.4.1. The Applicant shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements for the subject contract(s) in the event of stoppage, start-up, or other delays in payment, of the minimum estimated amount \$250,000, net of the Applicant's commitments for other contracts.

2.4.2. In the relevant forms, the Applicant shall also demonstrate, to the satisfaction of the HWSD, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

2.4.3. The Audited Financial Statements required by the HWSD for the two (2) most recent annual fiscal years shall be submitted and must demonstrate the current soundness of the Applicant's financial position and indicate its prospective long-term profitability. If deemed necessary, the HWSD shall have the authority to make inquiries with the Applicant's bankers and/or others with information concerning the financial standing of the Applicant.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

2.5. PERSONNEL CAPABILITIES

- 2.5.1. The Applicant shall supply general information on the management structure of the firm.
- 2.5.2. Applicants must submit the resume(s) of the Principal Supervisory or Project Manager proposed for the HWSD Maintenance Dredging Project with a minimum of five (5) years experience in that capacity. In addition, if the Applicant satisfied this requirement through a sub-contract, please list this information in the work history section of the Bid.

2.6. EQUIPMENT CAPABILITIES

- 2.6.1. The Applicant shall own, or have assured access (through hire, lease, purchase agreement, other commercial means, or approved subcontracting) to key items of equipment, in full working order, as a condition precedent to the signing of a contract with the HWSD. That is, it must at that time demonstrate that, based on known commitments, the equipment will be available for timely use in the proposed contract.

2.7. LITIGATION HISTORY

- 2.7.1. The Applicant shall provide accurate information on the Bid about any litigation or arbitration resulting from contracts completed or on-going under its execution over the last five years. A consistent history of litigation awards against the Applicant may result in rejection of the Bid.

2.8. PUBLIC ENTITY CRIMES

Any person submitting a bid or proposal in response to this invitation certifies that they are aware of, and in compliance with, all requirements under Section 287.133, Florida Statutes, On Public Entity Crimes. Prior to award, the recommended bidder may be required to submit a sworn statement attesting to compliance with said statute.

- 2.8.1. A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for CATEGORY TWO for a period of 24 months following the date of being placed on the convicted vendor list.

2.9. RIGHT TO WAIVE

- 2.9.1. The HWSD reserves, in the exercise of its discretion, the right to waive minor deviations in the qualification criteria, if they do not materially affect the capability of an Applicant to perform the work.

2.10. MAINTENANCE DREDGING: THRESHOLD CRITERIA

- 2.10.1. The demonstrated "Experience" of the Applicant and personnel MUST have been obtained in having carried out a minimum of three (3) dredging projects exceeding 15,000 cubic yards per dredging contract during the last five (5) years, which MUST include at least one (1) completed contract exceeding 50,000 cubic yards per dredging contract in the last seven (7) years; and MUST be of such a nature as to assure the successful completion of subsequent contract, in accordance with the specifications and in accordance with the timetable required.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

2.10.2. The proposed Contractor must also demonstrate experience in pumping hydraulically dredged material up to 10,500 feet onto a land based disposal site 35+ feet above MLW, including maintenance of dikes, berms, settlement cells, weirs, and other devices to ensure compliance with strict water quality requirements of local authorities.

2.10.3. As one of the threshold requirements, the proposed Contractor shall declare, on the Bid that he/she owns and/or will be able to provide all the required equipment for carrying out the dredge work.

2.11. RESPONSIBILITY OF THE CONTRACTOR FOR THE SUPPLY OF ALL DOCUMENTATION

2.11.1. It is hereby emphasized again that the Applicant Contractor shall be responsible for supplying to the HWSD and for the HWSD'S verification and examination of, all documentation called for in the bid documents including the documentation concerning major subcontractor(s) of the Contractor.

HARBOUR WATERWAY SPECIAL DISTRICT
JANUARY, 2020 MAINTENANCE DREDGING PROJECT

3. SECTION 03 – GENERAL PROVISIONS

3.1. INDEMNIFICATION

3.1.1. The firm shall, in addition to any other obligation, indemnify the HWSD and to the fullest extent permitted by Florida law, protect, defend, indemnify and hold harmless the HWSD, their agents, and officials from and against all claims, actions, liabilities, loses, costs arising out of any actual or alleged bodily injury, sickness, disease or death, or injury to or destruction of tangible property including the loss of use resulting there from, or any other damage or loss arising out of or resulting from or claims to have resulted in whole or in part from any actual or alleged act or omission of the consultant, any subcontractor, anyone directly or indirectly employed by any of them, of anyone for whose acts any of them may be liable in the performance of the work; or violation of law, statute, ordinance, governmental administration order, rule, regulation or infringement of patent rights by the firm in the performance of the work; or liens, claims or actions made by the firm or any subcontractor or other party performing the work.

3.2. INSURANCE REQUIREMENTS

3.2.1. The selected Contractor, shall maintain, at all times, the following minimum levels of insurance and; shall, without in any way altering their liability, obtain, pay for and maintain insurance for the coverage's and amounts of coverage not less than those set forth below including insurance requirements. Provide to the HWSD original Certificates of Insurance satisfactory to the District to evidence such coverage before any work commences. The HWSD must be named as an additional insured with respect to liability arising from the work from this RFP for Automobile and General Liability policies of insurance, excluding workers' compensation and professional liability. The selected contractor must also provide a waiver of subrogation with regards to liability arising from the work from this RFP for Automobile, General Liability, and Employers Liability policies of insurance. All insurance coverage shall be written with a company having an A.M. Best Rating of at least the "A" category and size category of VIII. The contractor's self-insured retention or deductible per line of coverage shall not exceed \$25,000 without the permission of the HWSD. The Certificates must clearly state that HWSD is an additional named insured with respect to liability arising from the work described in this RFP. Such certificates of insurance provide that there shall be no termination, non-renewal modification or expiration of such coverage without thirty (30) calendar day's prior written notice to the HWSD. In the event of any failure by the contractor to comply with the provisions; the HWSD may, at its option, on notice to the contractor suspend the project for cause until there is full compliance. Alternatively, the HWSD may purchase such insurance at the contractor's expense, provided that the HWSD shall have no obligation to do so and if the District shall do so, the contractor shall not be relieved of or excused from the obligation to obtain and maintain such insurance amounts and coverage.

3.2.1.1. Minimum Requirements

3.2.1.1.1. Commercial General Liability- Occurrence Form

3.2.1.1.1.1.	1,000,000	each occurrence
3.2.1.1.1.2.	2,000,000	general aggregate
3.2.1.1.1.3.	2,000,000	products and completed aggregate.
3.2.1.1.1.4.	500,000	Fire Legal Liability
3.2.1.1.1.5.	1,000,000	advertising injury

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

- 3.2.1.1.2. Commercial Auto
 - 3.2.1.1.2.1. 1,000,000 Combined Single Limit
 - 3.2.1.1.2.2. Statutory PIP 10/20/10

- 3.2.1.1.3. Workers' Compensation and Employer's Liability
(including appropriate Federal Acts)
 - 3.2.1.1.3.1. 1M/1M/1M

- 3.2.1.1.4. Site Specific Pollution Liability
 - 3.2.1.1.4.1. 1,000,000 minimum
 - 3.2.1.1.4.2. 2,000,000 aggregate

- 3.2.1.1.5. Umbrella or Excess Liability
 - 3.2.1.1.5.1. 1,000,000 (Umbrella must go over GL, Auto, & WC)

- 3.2.1.1.6. Longshoremen's Insurance
 - 3.2.1.1.6.1. 1,000,000 minimum

- 3.2.1.1.7. Marine Protection and Indemnity Insurance
 - 3.2.1.1.7.1. 1,000,000 each occurrence
 - 3.2.1.1.7.2. 2,000,000 aggregate

- 3.2.1.2. Compliance with these insurance requirements shall not relieve or limit the contractor's liabilities and obligations under this contract. Failure of the HWSD to demand such certificate or other evidence of full compliance with these insurance requirements or failure of the HWSD to identify a deficiency from evidence provided will not be construed as a waiver of the contractor's obligation to maintain such insurance.

3.3. PERFORMANCE and PAYMENT BOND

- 3.3.1. The successful contractor shall furnish to the HWSD, and keep current, a performance and payment bond for the faithful performance of the contract and all obligations arising hereunder in the amount of One Hundred Percent (100%) of the Project Cost in a form acceptable to the HWSD. The Performance and Payment Bond shall be executed by a surety company licensed to do business in the State of Florida; having an "A" or better rating by A.M. Best or Standard and Poor's and included on the list of surety companies approved by the Treasurer of the United States.

3.4. DAMAGE TO WORK

The sole responsibility for damage to any part the breakwater, bulkheads, docks, submerged or buried pipelines, or other structures shall be repaired at the Contractor's expense. Except as herein provided; damage to all utilities, materials, equipment and plant shall be repaired to the satisfaction of the Contracting Officer at the Contractor's expense, regardless of the cause of such damage.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

3.5 SAFETY PROVISIONS

The safety provisions as specified herein refer to the latest edition of EM 385-1-1. The latest edition can be located on the following website:

https://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_385-1-1_2008_Consolidated.pdf?ver=2013-09-04-161030-210

3.5.1 Accident Investigations and Reporting. Refer to EM 385- 1-1, Section 01.D.

Accidents shall be investigated and reports completed by the immediate supervisor of the employee(s) involved and reported to the Contracting Officer or his/her representative within one (1) working day after the accident occurs. All data reported must be complete, timely and accurate.

3.5.2 Accident Prevention Program. Within seven (7) days after receipt of Notice of Award of the contract, and at least seven (7) days prior to the pre-work conference, two (2) copies of the Accident Prevention Program shall be submitted to the Contracting Officer for review and acceptance. The program shall be prepared in the following format.

3.5.2.1 Executed MVN Form 385-43 (Latest Edition), Accident Prevention Program Administrative Plan (available upon request).

3.5.2.2 Executed MVN 385-43/1 (Latest Edition), Accident Prevention Plan Checklist and MVN Form 385-43/2 (Latest Edition), Activity Hazard Analysis (available upon request), see Figure 1-1 of EM 385-1-1.

3.5.2.3 A copy of company policy statement regarding accident prevention.

3.5.2.4 Executed MVN 385-45 (Latest Edition), Floating Plant Inspection Checklist

3.5.3.5 When marine plant and equipment are in use, the method of fuel oil transfer shall be included on MVN Form 385-10 (Latest Edition), Fuel Oil Transfer, (available upon request). The Contractor shall not commence physical work at the site until the program has been accepted by the Contracting Officer, or his/her authorized representative. The Contractor may submit its Activity Hazard Analysis only for the first phase of construction provided that it is accompanied by an outline of the remaining phases of construction. All remaining phases shall be submitted and accepted prior to the beginning of work in each phase. Also refer to Section 1 of EM 385-1-1.

3.5.3 Comprehensive Hazard Communication Program. The Contractor shall develop, implement, and maintain at the workplace a written, Comprehensive Hazard Communication Program (see Section 06.B.01 of EM 385-1-1) that includes identification of potential hazards as prescribed in 29 CFR Part 1910.1200 and/or 1926.59, effects of exposure and control measures to be used for chemical products and physical agents that may be encountered during the performance of work on this contract, provisions for container labeling, Material Safety Data Sheets, and employee training program, and other criteria in accordance with 29 CFR Part 1910.1200 and/or 1926.59. Training shall include communication methods and systems to be used (i.e., voice, hand signals, radios or other means), and training in the use and understanding of material safety data sheets and chemical product hazard warning labels. Prior to bringing hazardous substances, as defined in 29 CFR 1910.1200 and/or 1926.59, onto the job site, a copy of the Hazard Communication Program and the Material Safety Data Sheets of each substance shall be submitted to the Contracting Officer and made available to the Contractor's employees as part of its Accident Prevention Program.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

3.5.4 Daily Inspections. The Contractor shall perform daily safety inspections and record them on the forms approved by the Contracting Officer. Reports of daily inspections shall be maintained at the jobsite in accordance with Section 01 45 04.00 10, "CONTRACTOR QUALITY CONTROL". The reports shall be records of the daily inspections and resulting actions. Each report shall include, as a minimum, the following:

3.5.4.1 Phase(s) of construction underway during the inspection.

3.5.4.2 Locations of areas where inspections were made.

3.5.4.3 Results of inspections, including nature of deficiencies observed and corrective actions taken, or to be taken, date, and signature of the person responsible for its contents.

3.5.5 Safety Sign. The Contractor shall furnish, erect, and maintain a safety sign at the site where indicated by the Contracting Officer. The lettering shall be black, the safety circle and cross green, and the background white. When placed on a floating plant, the sign may be half size. The sign shall be erected as soon as practicable, but not later than 15 calendar days after the date established for Commencement of work. The data required shall be current.

3.5.6 Ground Fault Protection. Electrical equipment used on this contract shall be equipped with ground fault circuit interrupters in accordance with EM 385-1-1, Section 11.D.05(a).

3.5.7 Means of Escape for Personnel Quartered, or Working on Floating Plant.

Two (2) means of escape shall be provided for assembly, sleeping, and messing areas on floating plants. For areas involving 10 or more persons, both means of egress shall be through standard size doors opening to different exit routes. Where nine (9) or fewer persons are involved, one (1) of the means of escape may be a window (minimum dimensions 24 inches by 36 inches) which leads to a different exit route. Refer to Section 19 of EM 385-1-1.

3.5.8 Emergency Alarms and Signals.

3.5.8.1 Alarms. Emergency alarms shall be installed and maintained on all floating plant requiring a crew where it is possible for either a passenger or crewman to be out of sight or hearing from any other person. The alarm system shall be operated from the primary electrical system with standby batteries on trickle charge that will automatically furnish the required energy during an electrical-system failure. A sufficient number of signaling devices shall be placed on each deck so that the sound can be heard distinctly at any point above the usual background noise. All signaling devices shall be so interconnected that actuation can occur from at least one strategic point on each deck.

3.5.8.2 Signals.

3.5.8.2.1 Fire Alarm Signals. The general fire alarm signal shall be in accordance with paragraph 46 CFR Ch. I; Subpart E.109.503 of the Coast Guard Rules and Regulations for Cargo and Miscellaneous Vessels, Sub-Chapter I & Ia.

3.5.8.2.2 Abandon Ship Signals. The signal for abandon ship shall be in accordance with paragraph 109.503(b) of the reference cited in paragraph (a) above.

3.5.8.2.3 Man-Overboard Signal. Hail and pass the word to the bridge. All personnel and vessels capable of rendering assistance shall respond.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

3.5.9 Equipment Operator Authorization. The Contractor shall submit a list of designated personnel qualified and authorized to operate machinery and mechanized equipment in accordance with Section 16 of EM 385-1-1.

3.5.10 Dredging Safety Management Program. If the Contractor is a currently accepted participant in the Dredging Contractors of America (DCA)/United States Army Corps of Engineers (USACE) Dredging Safety Management Program (DSMP), as determined by the DCA/USACE Joint Committee, and holds a current valid Certificate of Compliance for both the Contractor Program and the Dredge(s) to be used to perform the work required under this contract, the Contractor may, in lieu of the submission of an Accident Prevention Plan (APP):

3.5.10.1 make available for review, upon request, the Contractor's current Safety Management System (SMS) documentation,

3.5.10.2 submit to the Contracting Officer the current valid Company Certificate of Compliance for its SMS,

3.5.10.3 submit the current dredge(s) Certificate of Compliance based on third party audit, and

3.5.10.4 submit for review and acceptance, site-specific addenda to the SMS as specified in the solicitation.

3.6. SIGNAL LIGHTS

The Contractor shall display signal lights and conduct his/her operations in accordance with U. S. Coast Guard regulations governing lights and day signals to be displayed, as set forth in Commandant, U. S. Coast Guard Instruction M16672.2C, Navigation Rules, International - Inland (COMDTINST M16672); 33 CFR 81, Appendix A (International); and 33 CFR 84 through 33 CFR 90 (Inland) as applicable.

3.7. CONTINUITY OF WORK

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

3.8. INSPECTION

3.8.1. The presence of the Inspector shall not relieve the Contractor of the responsibility for the proper execution of the work in accordance with the specifications. The Contractor shall furnish on the request of the Contracting Officer or any inspector:

3.8.1.1. The use of such boats, boatmen, 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 and supervising the work.

3.8.1.2. Suitable transportation from all points on shore designated by the Contracting Officer to and from the various pieces of plant, and to and from the disposal areas.

3.8.2. When the Contractor elects not to work on weekends, holidays or nights, notice shall be given to the Contracting Officer at least 24 hours in advance thereof. Adequate lighting for thorough

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

inspection of night operations shall be provided by the Contractor at his/her expense.

- 3.8.3. 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 to the Contractor.

3.9. SHOALING

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

3.10. SEAWORTHINESS CERTIFICATION

EM 385-1-1, Section 19.A.01.b. All dredges and quarter boats not subject to USCG inspection and certification or not having a current American Bureau of Shipping (ABS) classification shall be inspected in the working mode annually by a marine surveyor or qualified person accredited by the National Association of Marine Surveyors (NAMS) or Society of Accredited Marine Surveyors (SAMS) and having at least five (5) years experience in commercial marine plant and equipment. All other plant shall be inspected annually by a qualified person. The inspection shall be documented, and a copy of the most recent inspection report shall be posted in a public area on board the vessel and a copy shall be furnished to the designated authority upon request. The inspection shall be appropriate for the intended use of the plant and shall, as a minimum, evaluate structural integrity and compliance with NFPA 302, Fire Protection Standard for Pleasure and Commercial Motor Craft.

3.11. ENVIRONMENTAL LITIGATION

3.11.1. If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor or a Subcontractor at any tier and required by the terms of this contract. If the order is not due in any part to acts or omissions of the Contractor (or a Subcontractor at any tier) other than as required by this contract, such suspension, delay, or interruption shall be as if ordered by the Contracting Officer. The period of such suspension, delay or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

3.11.2. The term "environmental litigation", as used herein, means a lawsuit alleging that the work has an adverse effect on the environment or that the HWSD has not duly considered, either substantively or procedurally, the effect of the work on the environment.

3.12. RIGHTS-OF-WAY

3.12.1. The rights of entry required for the work to be constructed under this contract, within the rights-of-way limits indicated on the drawings, have been obtained by the HWSD and are provided without cost to the Contractor. The Contractor shall make its own investigations to determine the conditions, restrictions, and difficulties which may be encountered in the transportation of equipment and material to and from the work site. The proposed work, including rights-of-way, as defined by these specifications and as shown on the drawings, is in compliance with all applicable Federal and state environmental laws and regulations. Upon completion of the Contractor's work, rights-of-way furnished by the HWSD shall be returned to its original condition prior to construction unless otherwise noted.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

- 3.12.2. If the Contractor proposes a deviation from the HWSD furnished rights of- way for his convenience, the Contractor shall notify the Contracting Officer or its representative in writing. Contractor shall not provide any permanent rights-of-way for the project. The Contractor is cautioned that any deviation to the HWSD furnished rights-of-way is subject to all applicable Federal and state environmental laws and regulations. Compliance with these environmental laws and regulations may require additional National Environmental Policy Act (NEPA) documents, cultural resources surveys, coordination with the Louisiana State Historical Preservation Officer, water quality certification, modification of the Federal consistency determination, etc. The HWSD is ultimately responsible for environmental compliance; therefore, the HWSD will determine the additional environmental coordination and documentation necessary for a proposed deviation to the HWSD furnished rights-of-way.
- 3.12.3. For any environmental investigations the HWSD is to perform on areas outside of HWSD furnished rights-of-way, the Contractor shall provide sufficient rights of entry to the HWSD. The Contracting Officer will advise the Contractor of the additional environmental coordination and documentation that must be completed. The HWSD shall be responsible for any additional environmental compliance; however, the Contractor may conduct specific tasks identified by the HWSD. The HWSD will offer advice and assistance to the Contractor in conducting these tasks. Depending on the environmental impact of the proposed deviation, obtaining the coordination and documentation may not be approved or could take as much as 90 calendar days for approval by the HWSD. The HWSD must review, approve and ensure distribution of all environmental compliance documentation and ensure all comments on the same have been resolved before any utilization of any areas outside of the HWSD furnished rights-of-way. The Contractor shall reimburse the HWSD for actual expenses incurred for assistance in completing or attempting to complete additional environmental coordination and documentation, which expenses will not exceed one hundred thousand (\$100,000.) dollars. There is no guarantee that environmental compliance will be obtained; therefore, the Contractor shall assume all risks and liabilities associated with pursuing a deviation. Any delays resulting from the deviation and/or the environmental coordination and documentation shall not be made the basis of any Contractor claim for increase in the contract cost and/or increase in contract time. Deviations will be at Contractor's sole risk and liability, including, but not limited to, such liabilities associated with items such as hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601 et. seq.), and at no cost to the HWSD. HWSD assistance in obtaining additional environmental clearances does not relieve the Contractor of responsibility for complying with other Federal, state or local licenses and permits.

3.13. CONTRACTOR'S RESPONSIBILITY

The Contractor shall be responsible for ensuring that all its employees strictly comply with all laws and permit requirements that may apply to operations under this contract. The Contractor assumes full responsibility for the safety of its employees, plant, and materials and for any damage or injury done by or to them from any source or cause, except damage caused by acts of the HWSD, its officers, agents or employees. Such damages will be the responsibility of the HWSD in accordance with applicable Federal laws. The terms "officer", "agent", and "employee" of the HWSD do not include persons in the employment of the Contractor and whose services have been furnished to the HWSD.

3.14. MOBILIZATION OF ATTENDANT PLANT

Mobilization of attendant plant, if required, shall be concurrent with dredge mobilization. Failure to timely mobilize such auxiliary/attendant plant may result in one or more of the following actions by the Contracting Officer: reasonable suspension (without HWSD cost) of work until required plant is provided; formulation of credit to offset deficient plant; imposition of liquidated damages for late overall completion of the contract after excusable delays, if any. The HWSD's rights under any other Contract Clause are preserved.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

3.15. SUPERVISION

At all times during performance of this contract and until the work is completed and accepted by the HWSD, the Contractor shall have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor. Inspectors appointed by the Contracting Officer will enforce strict compliance with the terms of the contract. The inspectors will keep a record of the work done, but neither the presence nor absence of inspectors shall relieve the Contractor of responsibility for the proper execution of the work in accordance with the contract and directives issued by the Contracting Officer.

3.16. WORK IN THE VICINITY OF OTHER CONTRACTORS

The Contractor shall coordinate his/her operations, through the Contracting Officer with any other Contractors who may be working in the vicinity (i.e. dredging, surveys, spoil site contractors, structure operation, etc.). The Contractor shall coordinate his staging operations, access routes, etc with any Contractor currently performing work in the general vicinity.

3.17. REGULATIONS AND LAWS

The Contractor and his/her subcontractors shall comply with all applicable Federal, State, and Local laws, and regulations concerning dredging operations including but not limited to the obligations set forth in Appendix E, U.S. Army Corp of Engineers Dredging Permit..

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

4. SECTION 04 – ENVIRONMENTAL PROTECTION DURING DREDGING

4.1. SCOPE

The work covered by this section consists of furnishing all labor, materials and equipment, and performing all work required for the prevention of environmental pollution during and as the result of construction operations under this contract except for those measures set forth in other provisions of these specifications. For the purpose of this specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to man; or degrade the utility of the environment for esthetic and recreational purposes. The control of environmental pollution requires consideration of air, water, and land, and involves noise, solid waste-management and management of radiant energy and radioactive materials, as well as other pollutants.

4.2. APPLICABLE REGULATIONS

In order to prevent, and to provide for abatement and control of any environmental pollution arising from construction activities in the performance of this contract, the Contractor and his/her subcontractors shall comply with all applicable Federal, State, and Local laws, and regulations concerning environmental pollution control and abatement.

4.3. MEASUREMENT AND PAYMENT

4.3.1. Environmental Protection

No separate measurement or payment will be made for environmental protection including protection of fish and wildlife. Payment for the work covered under this section shall be distributed throughout the existing bid items.

4.4. QUALITY CONTROL

4.4.1. General

The Contractor shall establish and maintain quality control for environmental protection to assure compliance with contract specifications and maintain records of his quality control for all construction operations including but not limited to the following:

- 4.4.1.1. Submit plan of Environment Pollution Control/Environmental Protection Plan. For Contractor on-site activities that pose a risk of an oil spill, include in the plan a Spill Reporting and Response plan.
- 4.4.1.2. Procure applicable Federal, State, and Local regulations on pollution control.
- 4.4.1.3. Air Pollution - Checks made on dust, smoke, noise.
- 4.4.1.4. Water Pollution - Checks made on disposal of water, oil, etc.
- 4.4.1.5. Land Pollution - Checks made on disposal of debris and materials, restoration of temporary construction sites, etc.
- 4.4.1.6. Training course for employees.

4.4.2. Reporting

The original and two copies of these records, as well as the records of corrective action taken, shall be furnished the HWSD daily.

4.5. NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any non-compliance with the foregoing provisions and the action to be taken. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or his/her authorized

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

representative at the site of the work, shall be deemed sufficient for the purpose. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess cost of damages by the Contractor.

4.6. SUBCONTRACTORS

Compliance with the provisions of this section by subcontractors will be the responsibility of the Contractor.

4.7. IMPLEMENTATION

Within 10 days after receipt of Notice of Award, the Contractor shall:

- 4.7.1. Submit, in writing, proposals for environmental pollution control, disposal of debris, and an Environmental Protection plan. The Contractor shall provide one (1) copy each to the Contracting Officer.
- 4.7.2. Upon review and approval of requirements above, the Contractor shall meet with representatives of the Contracting Officer to develop mutual understandings relative to compliance with these provisions and administration of the environmental pollution control program and Environmental Protection Plan.

4.8. REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only. U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA) 33 CFR 153.203 Procedure for the Notice of Discharge

4.9. ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

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

4.10. PROTECTION OF LAND RESOURCES

4.10.1. General

The land resources within the project boundaries and outside the limits of permanent work performed under this contract shall be preserved in their present condition or be restored to a condition after completion of construction that will appear to be natural and not detract from the appearance of the project. The Contractor shall confine his/her construction activities to areas defined by the plans and/or specifications.

4.10.2. Prevention Of Landscape Defacement

Except in areas to be cleared and as provided in paragraph "Temporary Excavation and Embankments," the Contractor shall not deface, injure, or destroy trees or shrub, nor remove or cut them without the approval of the Contracting Officer. Felling of trees shall be performed in such a manner as to avoid damage to trees to be left standing. Where trees may possibly be defaced, bruised, injured, or otherwise damaged by the Contractor's

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

operations or equipment; he shall protect adequately such trees.

4.10.3. Temporary Excavation And Embankments

If the Contractor proposes to construct temporary roads or embankments and excavation for plant and/or work areas, he shall obtain approval of the Contracting Officer prior to start of such temporary work.

4.10.4. Post-Construction Cleanup Or Obliteration

The Contractor shall obliterate all signs of temporary construction facilities such as work areas, structures, foundations of temporary structures, and stockpiles of excess or waste materials upon completion of construction. The Contractor will be required to restore the construction area to near natural conditions which will permit the growth of vegetation.

4.10.5. Recording And Preserving Historical And Archeological Finds

All items having any apparent historical or archeological interests which are discovered in the course of any construction activities shall be carefully preserved. The Contractor shall leave the archeological find undisturbed and shall immediately report the find to the Contracting Officer so that the proper authorities may be notified.

4.11. PROTECTION OF WATER RESOURCES

4.11.1. Contamination Of Water

The Contractor shall not pollute lakes, ditches, rivers, bayous, canals, groundwater, waterways, or reservoirs with fuels, oils, bitumen, calcium chloride, insecticides, herbicides, or other similar materials harmful to fish, shellfish, or wildlife, or materials which may be a detriment to outdoor recreation.

4.11.2. Disposal Of Materials

The methods and locations of disposal of materials, wastes, effluent, trash, garbage, oil, grease, chemicals, etc., within the right-of-way limits shall be such that harmful debris will not enter lakes, ditches, rivers, bayous, canals, groundwater, waterways, or reservoirs by erosion, and thus prevent the use of the area for recreation or present a hazard to wildlife.

4.12. PROTECTION OF FISH AND WILDLIFE

The Contractor shall at all times perform all work and take such steps required to prevent any interference of disturbance to fish and wildlife. The Contractor will not be permitted to alter water flows or otherwise disturb native habitat adjacent to the project area that are critical to fish and wildlife.

4.12.1. Manatee

Manatees are known to exist in the project vicinity. To minimize potential impacts of dredging and disposal operations on Manatee, the Contractor shall:

4.12.1.1. Maintain a watch for manatee within the immediate vicinity of the dredge and shut down operations immediately if manatees are within 150 feet of the cutterhead.

4.12.1.2. Ensure the cutterhead remains completely buried in the channel bottom during dredging operations.

4.13. RESTROOM SERVICES

The Contractor shall furnish toilet facilities for Contractor employees and perform any required maintenance of the facilities and grounds during the life of the contract. Toilet facilities shall be kept clean and sanitary at all times. The Contractor shall also provide daily trash collection and cleanup of Contractor utilized areas and adjacent outside areas, and shall dispose of all discarded debris in a manner approved by the Contracting Officer.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

4.14. REPORTING OF POLLUTION SPILLS

In the event that an oil spill or chemical release occurs during the performance of this contract, the Contractor is required to contact the National Response Center, telephone number 1-800-424-8802 as soon as possible, or if telephone communication is not immediately possible, the nearest U.S. Coast Guard office may be contacted by radio to report the spill, (33 CFR 153.203). The Contractor shall comply with any instructions from the responding agency concerning containment and/or cleanup of the spill.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

5. SECTION 05 – MARINE SURVEYS

5.1. SCOPE

HWSD or their designated Marine Surveyor shall provide for herein all plant, labor, equipment, and materials, and performing all operations necessary for conducting the Before and After Marine Surveys as specified herein and as indicated on the contract drawings. All other survey work including the Preliminary Field Survey shall be provided by the Contractor herein consists of furnishing all plant, labor, equipment, and materials, and performing all operations necessary for surveying as specified herein and as indicated on the contract drawings.

5.2. MEASUREMENT AND PAYMENT

No separate measurement and payment will be made to the Contractor for the Preliminary Field Surveys. The cost of the Preliminary Field Surveys required by this section shall be included in the applicable contract unit price per cubic yard.

5.3. PROFESSIONAL CERTIFICATION

All surveys shall be performed under the direction of and certified by a Professional Marine Surveyor currently licensed by a state of the United States. In addition, the surveyor shall document at least three years of experience in hydrographic surveying of navigable channels.

5.4. PRELIMINARY FIELD SURVEYS

The Contractor shall run a controlled preliminary field survey locating all potential obstructions (towers, piles, signs, buoys, channel markers, breakwater structures, pipelines, bulkheads, sewer lines, etc.) within the limits of the work in addition to all structures adjacent to the limits of channel dredging which may impact dredging operations. The data from these field surveys shall be added to the Marine Surveys and submitted to the Contracting Officer for determination of the final channel alignment. The Contractor shall not proceed with any dredging work until the Contracting Officer determines the final channel alignment and furnishes this information to the Contractor.

5.5. BEFORE AND AFTER DREDGING CROSS SECTIONS

5.5.1. Before and after dredging cross sections of the channel shall be taken at approximately 50-foot intervals.

5.5.2. A layout of the before dredging cross sections shall be prepared on the survey tracking chart and approved by the Contracting Officer. This layout shall also be used in performing the required after dredging surveys.

5.5.3. After dredging cross sections shall be taken at the same locations as the before dredging surveys. The actual location of each sounding taken on each before and after dredging cross section range shall be provided. This information shall be in the form of printout tabulation giving the actual distance of the soundings from the baseline on an azimuth normal to the centerline of the cut. Soundings shall be to the nearest 0.25-foot referred to the water surface. This information shall also be plotted on a printout sheet, along with a section showing the required dredging dimensions. In addition, a plan view shall also be plotted on a printout sheet showing the actual location of each sounding taken on each "before" dredging cross section range.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

5.6. AFTER DREDGING PROFILES

Upon completion of dredging in an acceptance reach, as specified in Section 16.11.4 "After Dredging Profiles" profiles shall be taken over the same acceptance reach. The depth sounding instrument used to make the before and after dredging cross sections shall be used to make the after dredging profiles. Distances between soundings on each profile shall not exceed 50-feet. Controlled profiles of the channel shall be made along the channel centerline and one at each outside bottom edge of the cut.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

6. SECTION 06 – DREDGING

6.1. SCOPE

The work provided for herein consists of furnishing all plant, labor, materials, and equipment and performing all operations necessary for the removal of all materials within the HWSD Channel(s) System to the required dimensions as shown on the contract drawings, satisfactory disposal thereof within the Reed Island spoil site, and all operations incidental thereto.

6.2. MEASUREMENT

6.2.1. Quantity Surveys

A survey of the sites for dredging shall be made in accordance with the provisions of Section 05 MARINE SURVEYS and all measurements to determine dredging quantities will be based on the "before and after dredging" cross sections and the theoretical design template. The soundings and contours shown on the contract drawings are representative of conditions that existed July, 2018 and do not necessarily represent existing conditions. For bid purposes, the Before Marine Survey shall be based on the July, 2018 marine survey in Appendix C. Under no circumstance shall the maximum amount of dredged material exceed 60,000 cubic yards.

6.2.2. After Dredging Cross Sections and Profiles

Should the after dredging cross sections and/or profiles and/or soundings described in Section 05 MARINE SURVEYS, paragraphs "Before and After Dredging Cross Sections" and/or "After Dredging Profiles," disclose any lack of the required dimensions, the Contractor shall redredge the area at no additional expense to the HWSD. After redredging, the required dimensions shall be verified by rerunning the after dredging cross sections and after dredging profiles. Redredging shall be performed until the acceptance cross sections and profiles and/or soundings show that the required dimensions have been obtained.

6.2.3. Quantity Computations

The quantity of dredged material removed and to be paid for will be measured by the cubic yard by computing the volume along the centerline between the "before-dredging" cross sections and the required dimensions as shown on the contract drawings using the average end area method. **NO ALLOWANCE WILL BE MADE FOR EXCESSIVE DREDGING EXCEPT AS PROVIDED IN PARAGRAPH "EXCESSIVE DREDGING."**

6.2.4. Acceptance Reach

For the purpose of acceptance, the completed work will be accepted in three (3) acceptance reaches defined as Channel 1A and 1B, Channel 2A, 2B, 2C, and 2D, and Channel 3A and 3B, as specified and shown on the contract drawings. The Marine Surveyor shall take after-dredging cross sections as soon as possible after the entire acceptance reach has been completed behind the dredge. After dredging cross section data for that acceptance reach has been compiled, the Marine Surveyor shall compute the quantity removed by comparing the July, 2018 Before Dredge Survey to the After Dredge Survey.

6.2.5. Timely Performance Of Quantity Surveys

After dredging cross sections and profiles shall be made within 500-feet behind the dredge, but not more than three (3) weeks after completion of work in any acceptance reach. After dredging quantity surveys and after dredging profiles shall be taken in conjunction of each other. Deviations from this limiting time element may be necessary because of unusual job conditions or adverse weather, but shall be subject to approval by the Contracting Officer. Before and after dredging surveys shall be plotted and submitted to the HWSD within seven (7) calendar days after the surveys are taken.

6.2.6. Progress Payments

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

Progress payments will be made based on quantities determined using "Before Dredging Surveys" taken in accordance with Section 05 titled "Marine Surveys" and "After Dredging Surveys" after the Contractor has met the required dimensions and acceptance reach length, and the Contracting Officer has approved the acceptance reach.

6.2.7. Radio And Telephone Communication Equipment

No separate measurement and payment will be made for furnishing and maintaining radio and telephone communication equipment.

6.3. PAYMENT

6.3.1. Mobilization And Demobilization

An item to cover the cost of initial mobilization and final demobilization of the Contractor's plant and equipment under this contract will be paid as follows: the initial mobilization fee shall be paid to the Contractor within 10 business days after day 1 of dredging operations has begun; and the demobilization fee shall be paid within 30 days after all materials, pipe, equipment, and vessels have been removed from the HWSD Canal System and the Reed Island Spoil Site, subject to inspection and acceptance by the Contracting Officer. Under no circumstance shall greater than 50% of the sum of the initial mobilization fee and the demobilization fee be paid to the Contractor as the initial mobilization fee. Initial mobilization fees in excess of the limit shall be added to the demobilization fee.

6.3.2. Dredging

Payment for dredging will be made at the applicable contract unit price for dredging. Price and payment shall constitute full compensation for furnishing all plant, labor and materials and performing all work, including any excavation, disposal of materials as specified herein, pollution control, furnishing and maintaining radio and telephone communications equipment, and all operations incidental thereto. Payments shall be distributed to Contractor within 10 business days after the marine surveyor has computed the quantity of material removed from each acceptance reach and the Contracting Officer has approved the acceptance reach.

6.4. QUALITY CONTROL

The Contractor shall establish and maintain quality control for dredging operations to assure compliance with contract requirements and maintain records of his/her quality control for all dredging operations including but not limited to the following:

6.4.1. Dredging. Visual classification of material; limits of dredging as to bottom grades and widths; side slopes; alignment of channel.

6.4.2. Dredged Material Disposal. Surveillance and location of the dredge discharge outlet.

6.4.3. Discharge Effluent. Any shoaling or leak in pipeline.

6.4.4. Reporting

6.4.4.1. Quality Control Reports

The original and one (1) copy of these reports, as well as the records of corrective action taken, shall be furnished to the HWSD weekly.

6.4.4.2. Report Of Operations

6.4.4.2.1. The Contractor shall prepare and submit a Report of Operations and the original signed Leverman Log at the end of each 24 hour shift, for each dredge working. This report shall be submitted on a weekly basis and not in groups, e.g. several daily reports packaged together at one time.

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

- 6.4.4.2.2. The Contractor shall prepare a Daily Dredge Location Report. Information in this report will be outlined by the Contracting Officer's Representative at the CQC Coordination meeting held prior to the start of construction.
- 6.4.4.2.3. The Contractor shall also prepare a report of operations for each month or partial month's work on MVN Form 322 (Work Sheet for Preparing Consolidated Form 4267) or ENG Form 27A. The monthly report shall be submitted on or before the 7th of each month, consolidating the previous month's work. MVN Form 322 can be computer generated and shall be approved by the Contracting Officer's Representative on site. A sample of MVN Form 322 is attached at the end of this section.
- 6.4.4.2.4. The Contractor shall distribute one (1) copy of each report to each of the following: Contracting Officer.
- 6.4.4.2.5. All required reports shall be made available in electronic format and one (1) copy of each Report of Operations shall be maintained by the Contractor.
- 6.4.4.2.6. Upon completion of construction, a complete set of all aforementioned electronic reports shall be compiled and furnished on compact disc or flash drive to the Contracting Officer.

6.5. RADIO AND TELEPHONE COMMUNICATIONS

6.5.1. Maritime Radio Transceiver

The Contractor shall furnish and maintain throughout the contract, one (1) FM ship's radio transceiver with power not in excess of 25 watts, and at least 15 watts output on the maritime frequencies of 156.800 (Channel 16) and 156.375 (Channel 67) MHz 16F3 emission, with a tolerance of plus or minus 5 kHz deviation at 100 percent modulation for communication concerning navigation in the vicinity of the dredge. The radio shall be operated in accordance with FCC rules and regulations.

6.5.2. Cellular Telephone

The Contractor shall provide at least one (1) cellular telephone aboard the dredge. Final approval of the plant will not be made until this equipment is installed and in good working order.

6.6. PLANT

6.6.1. General Requirements

The Contractor shall keep on the job the necessary dredge equipment and attendant plant or repeater pumps to meet the requirements of the work. The dredge equipment and attendant plant shall be in satisfactory operating condition and capable of safely and efficiently performing the work as set forth in specifications and shall be subject to inspection by the Contracting Officer's representative at all times. The Contractor shall submit to the HWSD within 48 hours showing any changes made to the equipment, along with the date(s) the changes were made.

6.6.2. Capacity

No reduction in the capacity of the dredge equipment and attendant plant employed to execute the work shall be made except by written permission of the Contracting Officer. The measure of the "Capacity of the Dredge and Attendant Plant" shall be its actual performance on the work to which these specifications apply.

6.7. DREDGING

6.7.1. General

Dredging shall consist of the removal and satisfactory disposal of all material encountered to achieve the design section shown on the contract drawings and as specified herein.

6.7.2. Hydraulic Dredging

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

Hydraulic dredging operations shall be performed between Channel 1A Station -10+00 to 24+00; Channel 1B Station 24+00 to 33+20; Channel 2 A Station 0+00 to 8+32.71; Channel 2B Station 8+32.71 to 12+98.49; Channel 2C Station 12+98.49 to 16+00 including (Basin); Channel 2D Station 16+00 to 25+11.78; Channel 3A Station 0+00 to 7+50; and Channel 3B Station 7+50 to 17+83. All work shall be performed as specified herein and as shown on the contract drawings. To minimize potential of channel wall failures, the required dredging shall be performed in steps, with each face of dredging not to exceed a 5 foot thickness or exceed a three (3) to one (1) side slope along the channel wall.

6.7.3. Channel Dimensions

The channel shall be dredged to the required dimensions shown on the contract drawings. A cut will be permitted with a three (3) to one (1) side slope along the channel wall. The extent of required dredging and control of the cut is illustrated in the Cut detail shown at the end of this section, and shall be controlled as shown on the Detail provided in the contract drawings. Sloped cuts shall be applied to each subsequent dredge cut.

6.7.4. Tolerance

The side slope shall be dredged/shaved as nearly as practicable to the required dimensions as specified herein and as shown on the contract drawings. To cover the inaccuracies of the dredging process, a working tolerance of one (1) foot below the required side slope, will be permitted. Dredging inside of this allowable tolerance shall be paid for at the applicable dredging unit price.

6.7.5. Excessive Dredging

Excessive dredging is defined to be any dredging which is in excess of the required dimensions, as shown on the contract drawings and listed in Exhibit A, **Acceptance Reach and Dredge Dimension. ANY MATERIAL REMOVED IN EXCESS OF ONE (1.0) FOOT BELOW THE REQUIRED BOTTOM DEPTH WILL NOT BE MEASURED FOR PAYMENT.** The side slope allowances are described in the previous paragraph. The Contractor shall be responsible for damages caused by excessive dredging.

6.7.6. Slides

In the event sliding occurs in any part of any excavation after its completion but prior to its acceptance, the Contractor shall remove such portions of the slide as the Contracting Officer may direct. In the event, the slide is caused through the fault of the Contractor as determined by the Contracting Officer, the slide shall be removed by the Contractor at no additional expense to the HWSD. In the event the slide is not due to the fault of the Contractor, payment for removal will be made at the applicable contract unit price.

6.7.7. Character Of Materials

The material to be removed within the required dimensions specified consists of shoaling that has occurred since initial construction of the inflow channels. Sand, silt, shell, logs, stumps, snags, debris, and other obstructions may be encountered. Bidders are expected to examine the site of the work and, after investigation, decide for themselves the character of the materials.

6.8. WORKING IN THE VICINITY OF STRUCTURES, DOCKS, AND UTILITY CROSSINGS

6.8.1. General

The Contractor shall exercise caution when working in the vicinity of structures, docks, breakwaters adjacent to the channel, and any signs, lights or channel markers. Repair of any damage resulting from excessive or improper excavation in the bottom or on the side slopes of the channel shall be the responsibility of the Contractor. Where dredging to obtain the required dimensions might endanger any structure, the Contracting Officer, upon request, may reduce the required excavation in the vicinity of such structure.

6.8.2. Existing Pipelines, Structures Or Utilities

HARBOUR WATERWAY SPECIAL DISTRICT

JANUARY, 2020 MAINTENANCE DREDGING PROJECT

No pipelines, structures, or utilities are known to exist within the work area other than specified on the contract drawings.

6.8.3. Unidentified Pipelines, Structures, Or Utilities

Any unidentified pipelines, structures, or utilities that may be found within the limits of the work, during the course of dredging shall not be disturbed nor shall excavation be performed at this location unless approved by the Contracting Officer.

6.9. DISPOSAL OF DREDGED MATERIAL

6.9.1. General

The dredged material will be deposited in the HWSD spoil site on Reed Island as specified in the contract drawings. HWSD shall determine placement of discharge pipelines and discharge outlets at the spoil site. The Contractor shall comply with all requirements set forth by the HWSD regarding the spoil site. The discharge location within spoil site shall be monitored continuously to assure uniform distribution of dredged material within the spoil site as directed by HWSD.

6.9.2. Excess Deposit of Dredged Material

Under no circumstances shall the Contractor deposit in excess of 60,000 cubic yards of material in the spoil site without written authorization from the Contracting Officer. In the event greater than 60,000 cubic yards is deposited in the spoil site, the Contractor shall at its sole expense remove and dispose of the excess material at the direction of the HWSD.

6.9.3. Prevention Of Damage

The dredged material shall be transported and deposited in such a manner as to insure that no damage will occur to dikes, levees, river markers, lights, structures, or other improvements, and that impacts to passing navigation are minimized.

6.9.4. Deposition In Non-Approved Areas

Any dredged material that is deposited elsewhere than in disposal areas shown on the contract drawings may be required to be removed and deposited in approved areas at no additional expense to the HWSD. Should the Contractor refuse, or delay compliance with the above requirement, such material may be removed by the Contracting Officer, and the cost of such removal may be deducted from any money due or to become due to the Contractor.

6.9.5. Protection Of HWSD Monuments, Markers, Or Breakwater

At no time shall dredging plant be anchored, moored, or attached to any HWSD pilings or breakwater along the route of work.

6.9.6. Work In The Vicinity Of Other HWSD Contractors

The Contractor shall coordinate his/her operations through the Contracting Officer, with any other HWSD Contractors who may be working in the vicinity (i.e. marine surveyor, etc.).