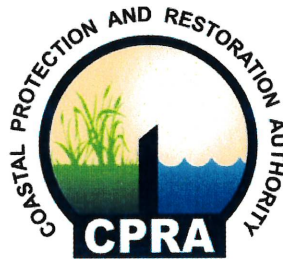


**BID DOCUMENTS
FOR**

**BAYOU CANE MARSH CREATION PROJECT
(PO-0181)**

ST. TAMMANY PARISH, LOUISIANA



**STATE OF LOUISIANA
COASTAL PROTECTION AND RESTORATION AUTHORITY**

JUNE 2025



Table of Contents

<u>GENERAL REQUIREMENTS</u>		Pages Included
	Project Title Page	1
	Table of Contents	3
	List of Drawing Sheets	1
Procurement Requirements		
	Advertisement for Bids	1
Instruction for Procurement		
	Instructions to Bidders	7
Procurement Forms and Supplements		
	Louisiana Uniform Public Work Bid Form	5
	Bid Bond	1
	Attestations Affidavit	2
Contracting Requirements		
	Contract Between Owner and Contractor and Performance and Payment Bond, Affidavit	5

SECTION	TITLE	PAGE NO.
PART I	GENERAL PROVISIONS.....	1
GP-1	DEFINITION OF TERMS	1
GP-2	BID REQUIREMENTS	4
GP-3	AVAILABILITY OF PLANS AND SPECIFICATIONS	5
GP-4	LAWS, REGULATIONS, STANDARDS, SPECIFICATIONS, AND CODES	5
GP-5	PRE-BID CONFERENCE AND SITE VISIT	6
GP-6	NOTICE OF AWARD	6
GP-7	NOTICE TO PROCEED AND CONTRACT TIME	6
GP-8	WORK PLAN	7
GP-9	PROGRESS SCHEDULE	8
GP-10	DAILY PROGRESS REPORTS	8
GP-11	HURRICANE AND SEVERE STORM PLAN	9
GP-12	HEALTH AND SAFETY PLAN AND INSPECTIONS	10
GP-13	PROGRESS MEETINGS AND REPORTS	10
GP-14	PRE-CONSTRUCTION CONFERENCE	11
GP-15	CONTRACT INTENT	11
GP-16	ENGINEER AND AUTHORITY OF ENGINEER	11
GP-17	CONFORMITY WITH PLANS AND SPECIFICATIONS	11
GP-18	CLARIFICATIONS AND AMENDMENTS TO CONTRACT DOCUMENTS	12
GP-19	SUBCONTRACTS	12
GP-20	WORKERS, METHODS, AND EQUIPMENT	12
GP-21	ACCIDENT PREVENTION, INVESTIGATIONS, AND REPORTING	13
GP-22	PRESERVATION AND RESTORATION OF PROPERTY, MONUMENTS, ETC.	14
GP-23	PROTECTION OF THE WORK, MATERIALS, AND EQUIPMENT	14
GP-24	LAND RIGHTS	14

GP-25	UTILITIES	14
GP-26	PERMITS	15
GP-27	PROJECT SITE CLEAN-UP	15
GP-28	OWNER INSPECTION	15
GP-29	DUTIES OF RESIDENT PROJECT REPRESENTATIVE	16
GP-30	CONSTRUCTION STAKES, LINES, AND GRADES	16
GP-31	CONTRACTOR'S RESPONSIBILITY FOR WORK.....	16
GP-32	ENVIRONMENTAL PROTECTION.....	16
GP-33	SANITARY PROVISION	17
GP-34	PAYMENT OF TAXES.....	17
GP-35	RADIO AND TELEPHONES	17
GP-36	NAVIGATION.....	17
GP-37	OBSTRUCTION TO NAVIGATION	18
GP-38	MARINE VESSELS AND MARINE ACTIVITIES	18
GP-39	RECORD KEEPING.....	18
GP-40	CERTIFICATES OF COMPLIANCE	19
GP-41	SUBMITTALS.....	19
GP-42	CLAIMS FOR EXTRA COST.....	19
GP-43	ALTERATION OF THE CONTRACT AND COMPENSATION.....	20
GP-44	EXTENSION OF CONTRACT TIME	20
GP-45	OWNER'S RIGHT TO TERMINATE CONTRACT FOR CAUSE OR CONVENIENCE	21
GP-46	TEMPORARY SUSPENSION OF WORK	22
GP-47	NON-CONFORMING AND UNAUTHORIZED WORK	22
GP-48	CONTRACTOR'S RIGHT TO TERMINATE CONTRACT.....	22
GP-49	BREACH OF CONTRACT	22
GP-50	NO WAIVER OF LEGAL RIGHTS.....	23
GP-51	LIABILITY FOR DAMAGES AND INJURIES	23
GP-52	LIABILITY FOR LOSSES BY ACTS OF THE GOVERNMENT	23
GP-53	FINAL INSPECTION AND ACCEPTANCE	24
GP-54	AS-BUILT DRAWINGS	24
GP-55	COMPLETION OF CONTRACT.....	24
GP-56	CONTRACTOR'S GUARANTEE.....	24
GP-57	DISPUTE RESOLUTION	25
GP-58	PAYMENT	25
GP-59	PAYMENTS WITHHELD	26
GP-60	LIENS	27
GP-61	EQUAL EMPLOYMENT OPPORTUNITY	27
GP-62	ANTI-KICKBACK CLAUSE.....	28
GP-63	SUSPENSION/DEBARMENT	28
GP-64	LOUISIANA FIRST HIRING ACT	28
GP-65	PROHIBITION OF DISCRIMINATORY BOYCOTTS OF ISRAEL	29
GP-66	PROHIBITION OF DISCRIMINATION OF FIREARM ENTITY AND/OR FIREARM TRADE ASSOCIATION	29
GP-67	DBE, MINORITY OWNED, AND WOMEN'S BUSINESS ENTERPRISES	29

END OF PART I - GENERAL PROVISIONS.....30

PART II SPECIAL PROVISIONS31

SP-1	LOCATION OF WORK	31
SP-2	WORK TO BE DONE	31
SP-3	CONTRACT MILESTONES.....	34
SP-4	DELIVERABLES	35
SP-5	CONTACT INFORMATION	38
SP-6	INSURANCE AND BONDS	38

SP-7	WORK PLAN SUPPLEMENTAL	43
SP-8	FAILURE TO COMPLETE ON TIME	45
SP-9	TRANSPORTATION AND FACILITIES	45
SP-10	LANDOWNER, PIPELINE OWNER/OPERATOR, AND UTILITY, AND EXISTING INFRASTRUCTURE REQUIREMENTS	47
SP-11	OYSTER LEASE AND SEED GROUND RESTRICTIONS	53
SP-12	THREATENED AND ENDANGERED SPECIES	53
SP-13	NOTIFICATION OF DISCOVERY OF HISTORICAL OR CULTURAL SITES	53
SP-14	SPECIAL USE PERMIT	54
SP-15	NAVIGATION.....	54
SP-16	VESSEL-SHORE TRANSFERS	54
SP-17	NOTICE TO MARINERS	54
SP-18	WORK AREA.....	55
SP-19	ADJUSTMENT OF QUANTITIES AND UNIT PRICE.....	55
SP-20	FINAL CLEAN-UP	55
SP-21	AERIAL PHOTOGRAPHY.....	56
SP-22	COMPLIANCE WITH STATE AND FEDERAL LAW	56
SP-23	PROTECTION OF WORK.....	56
SP-24	MISPLACED MATERIAL AND EQUIPMENT	56
SP-25	SEQUENCE OF WORK.....	57
SP-26	HOLD POINT INSPECTIONS.....	57
END OF PART II - SPECIAL PROVISIONS.....		58
PART III TECHNICAL SPECIFICATIONS		59
TS-100	MOBILIZATION AND DEMOBILIZATION	59
TS-150	AIDS TO NAVIGATION	64
TS-200	SURVEYS.....	66
TS-201	DAILY BIRD ABATEMENT	80
TS-250	GRADE STAKES	82
TS-270	SETTLEMENT PLATES.....	85
TS-300	EARTHEN CONTAINMENT DIKES	87
TS-305	EARTHEN CONTAINMENT DIKE DEGRADATION.....	91
TS-400	HYDRAULIC DREDGING AND MARSH CREATION	93
TS-510	WEIRS	102
END OF PART III – TECHNICAL SPECIFICATIONS		
APPENDIX A: REQUEST FOR INFORMATION FORM		
APPENDIX B: CHANGE ORDER FORM		
APPENDIX C: RECOMMENDATION OF ACCEPTANCE FORM		
APPENDIX D: LANDRIGHTS MEMORANDUM		
APPENDIX E: PERMITS OBTAINED BY OWNER		
APPENDIX F: SURVEY MONUMENT DATA		
APPENDIX G: DESIGN SURVEY REPORT		
APPENDIX H: GEOTECHNICAL REPORTS		
APPENDIX I: HYDRAULIC DREDGE DATA SHEET		
APPENDIX J: EQUIPMENT DATA SHEET		
APPENDIX K: DAILY PROGRESS REPORT FORM		
APPENDIX L: DREDGING PLAN TEMPLATE		

APPENDIX M: DAVIS BACON ACT

APPENDIX N: SUBCONTRACTOR REPORT

APPENDIX O: UNANTICIPATED ARCHAEOLOGICAL DISCOVERIES PLAN

LIST OF DRAWING SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1.	TITLE SHEET
2.	GENERAL NOTES, NOTIFICATIONS, & DESIGN NOTES
3.	SUMMARY OF ESTIMATED QUANTITIES
4.	PROJECT LAYOUT
5.	MARSH CREATION BORROW AREA PLAN VIEW & DREDGE PIPELINE/EQUIPMENT ACCESS CORRIDOR LAYOUT
6.	MARSH CREATION AREA 1, 2, & 3 PLAN VIEW
7.	MARSH CREATION AREA 4, 5, 6, & 7 PLAN VIEW
8-9.	DREDGE PIPELINE & EQUIPMENT ACCESS CROSSING DRAWINGS
10.	MARSH CREATION BORROW AREA TYPICAL SECTIONS
11-14.	MARSH CREATION AREA TYPICAL SECTIONS
15.	EARTHEN CONTAINMENT DIKE DETAILS
16.	DREDGE PIPELINE CORRIDOR & EQUIPMENT ACCESS CORRIDOR TYPICAL SECTIONS
17.	MARSH CREATION BORROW AREA GEOTECHNICAL INVESTIGATION & DESIGN SURVEY LAYOUT
18-19.	MARSH CREATION AREA GEOTECHNICAL INVESTIGATION & DESIGN SURVEY LAYOUT
20-21.	MARSH CREATION BORROW AREA, EQUIPMENT ACCESS & DREDGE PIPELINE CORRIDOR CONSTRUCTION SURVEY LAYOUT
22-23.	EARTHEN CONTAINMENT DIKE CONSTRUCTION SURVEY LAYOUT
24-25.	MARSH CREATION AREA CONSTRUCTION SURVEY LAYOUT
26.	SETTLEMENT PLATE AND GRADE STAKE DETAILS
27-28.	MARSH CREATION BORROW AREA CROSS SECTIONS
29-34.	MARSH CREATION AREA CROSS SECTIONS
35.	COORDINATE TABLES
36.	UNIDENTIFIED MAGNETIC ANOMALY DATA

ADVERTISEMENT FOR BIDS

Sealed bids will be received for the State of Louisiana by the Coastal Protection and Restoration Authority, 150 Terrace Avenue, 4th Floor Conference Center, Baton Rouge, Louisiana 70802 until 2:00 P.M., **Tuesday, July 29, 2025.**

ANY PERSON REQUIRING SPECIAL ACCOMMODATIONS SHALL NOTIFY THE COASTAL PROTECTION AND RESTORATION AUTHORITY OF THE TYPE(S) OF ACCOMMODATION REQUIRED NOT LESS THAN SEVEN (7) DAYS BEFORE THE BID OPENING.

FOR: **Bayou Cane Marsh Creation Project
St. Tammany Parish, Louisiana**

PROJECT NUMBER: **PO-0181**

Complete Bid Documents for this project are available in electronic form. They may be obtained without charge and without deposit from <http://coastal.la.gov/resources/rfps-rsiqs-contracts/bids/>. Printed copies can also be obtained from:

COASTAL PROTECTION AND RESTORATION AUTHORITY (CPRA)
150 Terrace Avenue
Baton Rouge, LA 70802
Attn: Sharissa Felder
E-mail: cpra.bidding@la.gov Phone: (225) 342-0811 Fax: (225) 800-5599

All bids shall be accompanied by bid security in an amount of five percent (5.0%) of the sum of the base bid and all alternates. The form of this security shall be as stated in the Instructions to Bidders included in the Bid Documents for this project.

The successful Bidder shall be required to furnish a Performance and Payment Bond written as described in the Instructions to Bidders included in the Bid Documents for this project.

**A NON-MANDATORY PRE-BID CONFERENCE WILL BE HELD at
2:00 PM on Tuesday, July 15, 2025 at 150 Terrace Ave. Baton Rouge, LA 70802**

You may join via Microsoft Teams Webinar by registering at: <https://events.gcc.teams.microsoft.com/event/8256ed7d-4d64-4542-b66d-7d95be0288c6@89b0b16b-677c-4e6f-a254-61311d5b4a86>.

Meeting audio may be accessed through your computer/device. If your computer/device does not have audio, meeting audio can be accessed via phone, the information will be provided by clicking the registration link above.

**A HIGHLY ENCOURAGED JOBSITE VISIT WILL BE HELD at
9:00 AM on Tuesday, July 24, 2025 at Lake Road Boat Launch, Big Branch National Wildlife Refuge, Lacombe, LA 70445**

The jobsite visit is not mandatory, but it is highly encouraged for those submitting a bid. The jobsite visit is being conducted by CPRA and Big Branch National Wildlife Refuge to facilitate airboat access to project features that are located on the Refuge. Contractors shall be responsible for providing their own boat and any rental and boat launching fees. Refuge staff will provide airboat access to interior marsh areas.

Contact April Newman at (225) 342-6412 with any questions or issues related to the non-mandatory pre-bid conference or directions to the non-mandatory jobsite visit.

It is the responsibility of all potential bidders to visit the job site to assess the location, logistics, and site conditions prior to bidding.

Bids shall be accepted from Contractors who are licensed under LA. R.S. 37:2150-2192 for the classification of **Heavy Construction or Dredging**. In accordance with LA. R.S. 37:2165(C), anyone objecting to the classification must send a certified letter to both the Louisiana State Licensing Board for Contractors and the CPRA at the address listed above. The letter must be received no later than ten (10) working days prior to the day on which bids are to be opened.

Bidder is required to comply with provisions and requirements of LA R.S.38:2212(B)(5). No bid may be withdrawn for a period of forty-five (45) calendar days after receipt of bids, except under the provisions of LA. R.S. 38:2214.

The Owner reserves the right to reject any and all bids for just cause. In accordance with La. R.S. 38:2212(B)(1), the provisions and requirements of this Section; and those stated in the bidding documents shall not be waived by any entity.

When this project is financed either partially or entirely with State Bonds or financed in whole or in part by federal or other funds which are not readily available at the time bids are received, the award of this Contract is contingent upon the granting of lines of credit, or the sale of bonds by the Bond Commission or the availability of federal or other funds. The State shall incur no obligation to the Contractor until the Contract between Owner and Contractor is fully executed.

Coastal Protection and Restoration Authority is a participant in the Small Entrepreneurship (SE) Program (the Hudson Initiative) and the Veteran-Owned and Service-Connected Disabled Veteran-Owned (LaVet) Small Entrepreneurships Program. Bidders are encouraged to consider participation. Information is available from Coastal Protection and Restoration Authority or on its website at <http://www.coastal.la.gov/>.

STATE OF LOUISIANA, COASTAL PROTECTION AND RESTORATION AUTHORITY
J. CLAY PARKER, DEPUTY EXECUTIVE DIRECTOR

INSTRUCTIONS TO BIDDERS

COMPLETION TIME:

The Bidder shall agree to fully complete the contract within **Four Hundred Sixty (460)** consecutive calendar days for the Base Bid, an additional **Thirty (30)** consecutive calendar days for Alternate No. 1, and an additional **Thirty (30)** consecutive calendar days for Alternate No. 2, subject to such extensions as may be granted under Section GP-44 of the General Provisions and acknowledges that this construction time will start on or before the date specified in the written "Notice to Proceed" from the Owner.

LIQUIDATED DAMAGES:

The Bidder shall agree to pay as Liquidated Damages the amount of Five Thousand Dollars (\$5,000.00) for each consecutive calendar day for which the work is not complete, beginning with the first day beyond the contract completion date stated on the "Notice to Proceed" or as amended by change order.

ARTICLE 1

DEFINITIONS

1.1 The Bid Documents include the following:

Advertisement for Bids
Instructions to Bidders
Bid Form
Bid Bond
General Provisions
Special Provisions
Technical Specifications
Construction Drawings
Contract Between Owner and Contractor
and Performance and Payment Bond
Affidavit
User Agency Documents (if applicable)
Change Order Form
Recommendation of Acceptance
Other Documents (if applicable)
Addenda issued during the bid period and
acknowledged in the Bid Form

1.2 All definitions set forth in the General Provisions and the Special Provisions are applicable to the Bid Documents, unless otherwise specifically stated or written.

1.3 Addenda are written and/or graphic instruments issued by the Engineer prior to the opening of bids which modify or interpret the Bid Documents by additions, deletions, clarifications, corrections and prior approvals.

1.4 A bid is a complete and properly signed proposal to do the work or designated portion thereof for the sums stipulated therein supported by data called for by the Bid Documents.

1.5 Base bid is the sum stated in the bid for which the Bidder offers to perform the work described as the base, to which work may be added, or deleted for sums stated in alternate bids.

1.6 An alternate bid (or alternate) is an amount stated in the bid to be added to the amount of the base bid if the corresponding change in project scope or materials or methods of construction described in the Bid Documents is accepted.

1.7 A Bidder is one who submits a bid for a prime Contract with the Owner for the work described in the Bid Documents.

1.8 A Sub-bidder is one who submits a bid to a Bidder for materials and/or labor for a portion of the work.

1.9 Where the word "Engineer" is used in any of the documents, it shall refer to the Prime Designer of the project, regardless of discipline.

ARTICLE 2

PRE-BID CONFERENCE

2.1 A Pre-Bid Conference may be held at the time and location described in the Advertisement for Bids. The purpose of the Pre-Bid Conference is to familiarize Bidders with the requirements of the Project and the intent of the Bid Documents, and to receive comments and information from interested Bidders. If the Pre-Bid Conference and/or Job Site Visit is stated in the Advertisement for Bids to be a Mandatory Pre-Bid Conference and/or Mandatory Job Site Visit, bids shall be accepted only from those bidders who attend the Pre-Bid Conference and/or Job Site Visit. Contractors who are not in attendance for the entire Pre-Bid Conference and/or Job Site Visit will be considered to have not attended.

2.2 Any revision of the Bid Documents made as a result of the Pre-Bid Conference shall not be valid unless included in an addendum.

ARTICLE 3

BIDDER'S REPRESENTATION

3.1 Each Bidder by making his bid represents that:

3.1.1 He has read and understands the Bid Documents and his bid is made in accordance therewith.

3.1.2 He has visited the site and has familiarized himself with the local conditions under which the work is to be performed.

3.1.3 His bid is based solely upon the materials, systems and equipment described in the Bid Documents as advertised and as modified by addenda.

3.1.4 His bid is not based on any verbal instructions contrary to the Bid Documents and addenda.

3.1.5 He is familiar with the Code of Governmental Ethics requirement that prohibits public servants and/or their immediate family members from bidding on or entering into contracts; he is aware that the Designer and its principal owners are considered Public Servants under the Code of Governmental Ethics for the limited purposes and scope of the Design Contract with the State on this Project (see Ethics Board Advisory Opinion, No.

2009-378 and 2010-128); and neither he nor any principal of the Bidder with a controlling interest therein has an immediate family relationship with the Designer or any principal within the Designer's firm. (see La. R.S. 42:1113). Any Bidder submitting a bid in violation of this clause shall be disqualified and any contract entered into in violation of this clause shall be null and void.

3.2 The Bidder must be fully qualified under any State or local licensing law for Contractors in effect at the time and at the location of the work before submitting his bid. In the State of Louisiana, Revised Statutes 37:2150, et seq. will be considered, if applicable.

The Contractor shall be responsible for determining that all of his Sub-bidders or prospective Subcontractors are duly licensed in accordance with law.

ARTICLE 4

BID DOCUMENTS

4.1 Copies

4.1.1 Bid Documents may be obtained from the Coastal Protection and Restoration Authority as stated in the Advertisement for Bids.

4.1.1.1 In addition to the availability of printed Bid Documents, the Coastal Protection and Restoration Authority will provide the Bid Documents in electronic format. They may be obtained without charge and without deposit as stated in the Advertisement for Bids.

4.1.1.2 Where electronic distribution is provided, all other plan holders are responsible for their own reproduction costs.

4.1.2 Complete sets of Bid Documents shall be used in preparing bids; neither the Owner nor the Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bid Documents.

4.1.3 The Owner or Engineer in making copies of the Bid Documents available on the above terms, do so only for the purpose of obtaining bids on the

work and do not confer a license or grant for any other use.

4.2 Interpretation or Correction of Bid Documents

4.2.1 Bidders shall promptly notify the Coastal Protection and Restoration Authority contact person listed in the Advertisement for Bids of any ambiguity, inconsistency or error which they may discover upon examination of the Bid Documents or of the site and local conditions.

4.2.2 Bidders requiring clarification or interpretation of the Bid Documents shall make a written request to the Coastal Protection and Restoration Authority contact person listed in the Advertisement for Bids, to reach him/her at least seven days prior to the date for receipt of bids.

4.2.3 Any interpretation, correction or change of the Bid Documents will be made by addendum. Interpretations, corrections or changes of the Bid Documents made in any other manner will not be binding and Bidders shall not rely upon such interpretations, corrections and changes.

4.3 Substitutions

4.3.1 The materials, products and equipment described in the Bid Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution. No substitutions shall be allowed after bids are received.

4.3.2 No substitution will be considered unless written request for approval has been submitted by the Proposer and has been received by the Engineer at least seven (7) working days prior to the opening of bids. (La. R.S. 38:2295(C)) Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including model numbers, drawings, cuts, performance and test data and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or work that incorporation of the substitute would require shall be included. It shall be the responsibility of the proposer to include in his proposal all changes required of the Bid Documents if the proposed product is used. Prior approval is given contingent

upon supplier being responsible for any costs which may be necessary to modify the space or facilities needed to accommodate the materials and equipment approved.

4.3.3 If the Engineer approves any proposed substitution, such approval will be set forth in an addendum. Bidders shall not rely upon approvals made in any other manner.

4.4 Addenda

4.4.1 Addenda will be mailed or delivered to all who are known by the Coastal Protection and Restoration Authority to have received a complete set of Bid Documents.

4.4.2 Copies of addenda will be made available for inspection wherever Bid Documents are on file for that purpose.

4.4.3 Except as described herein, addenda shall not be issued within a period of seventy-two (72) hours prior to the advertised time for the opening of bids, excluding Saturdays, Sundays, and any other legal holidays. If the necessity arises of issuing an addendum modifying the Bid Documents within the seventy-two (72) hour period prior to the advertised time for the opening of bids, then the opening of bids shall be extended at least seven but no more than twenty-one (21) working days, without the requirement of re-advertising. The revised time and date for the opening of bids shall be stated in the addendum.

4.4.4 Each Bidder shall ascertain from the Coastal Protection and Restoration Authority prior to submitting his bid that he has received all addenda issued, and he shall acknowledge their receipt on the Bid Form.

4.4.5 The Owner shall have the right to extend the bid date by up to (30) thirty days without the requirement of re-advertising. Any such extension shall be made by addendum issued by the Coastal Protection and Restoration Authority.

ARTICLE 5

BID PROCEDURE

5.1 Form and Style of Bids

5.1.1 Bids shall be submitted on the Louisiana Uniform Public Work Bid Form provided by the Engineer.

5.1.2 The Bidder shall ensure that all applicable blanks on the Bid Form are completely and accurately filled in.

5.1.3 Bid sums shall be expressed in both words and figures, and in case of discrepancy between the two, the written words shall govern.

5.1.4 Any interlineation, alteration or erasure must be initialed by the signer of the bid or his authorized representative.

5.1.5 Bidders are cautioned to complete all alternates should such be required in the Bid Form. Failure to submit alternate prices will render the bid non responsive and shall cause its rejection.

5.1.6 Bidders are cautioned to complete all unit prices should such be required in the Bid Form. Unit prices represent a price proposal to do a specified quantity and quality of work. Unit prices are incorporated into the base bid or alternates, as indicated on the Unit Price Form, but are not the sole components thereof.

5.1.7 Bidder shall make no additional stipulations on the Bid Form nor qualify his bid in any other manner.

5.1.8 Written evidence of the authority of the person signing the bid for the public work shall be submitted in accordance with La. R.S. 38:2212(B)(5).

5.1.9 On any bid in excess of fifty thousand dollars (\$50,000.00), the Contractor shall certify that he is licensed under R.S. 37: 2150-2173 and show his license number on the bid above his signature or his duly authorized representative.

5.2 Bid Security

5.2.1 No bid shall be considered or accepted unless the bid is accompanied by bid security in an amount of five percent (5.0%) of the base bid and all alternates.

The bid security shall be in the form of a certified check or cashier's check drawn on a bank insured by the Federal Deposit Insurance Corporation, or a Bid Bond written by a surety company licensed to do business in Louisiana and signed by the surety's agent or attorney-in-fact. The Bid Bond shall be written on the Coastal Protection and Restoration Authority Bid Bond Form, and the surety for the bond must meet the qualifications stated thereon. The Bid Bond shall include the legal name of the bidder be in favor of the State of Louisiana, Coastal Protection and Restoration Authority, and shall be accompanied by appropriate power of attorney. The Bid Bond must be signed by both the bidder/principal and the surety in the space provided on the Coastal Protection and Restoration Authority Bid Bond Form. Failure by the bidder/principal or the surety to sign the bid bond shall result in the rejection of the bid.

Bid security furnished by the Contractor shall guarantee that the Contractor will, if awarded the work according to the terms of his proposal, enter into the Contract and furnish Performance and Payment Bonds as required by these Bid Documents, within fifteen (15) days after written notice that the instrument is ready for his signature.

Should the Bidder refuse to enter into such Contract or fail to furnish such bonds, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as penalty.

5.2.2 The Owner will have the right to retain the bid security of Bidders until either (a) the Contract has been executed and bonds have been furnished, or (b) the specified time has elapsed so that bids may be withdrawn, or (c) all bids have been rejected.

5.3 Submission of Bids

5.3.1 5.3.1 The Bid shall be sealed in an opaque envelope. The bid envelope shall be identified on the outside with the name of the project, and the name, address, and license number of the Bidder.

The envelope shall not contain multiple bid forms, and will be received until the time specified and at the place specified in the Advertisement for Bids. It shall be the specific responsibility of the Bidder to deliver his sealed bid to the Coastal Protection

and Restoration Authority at the appointed place and prior to the announced time for the opening of bids. Late delivery of a bid for any reason, including late delivery by United States Mail, or express delivery, shall disqualify the bid.

If the bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "Bid Enclosed" on the face thereof. Such bids shall be sent by Registered or Certified Mail, Return Receipt Requested, addressed to:

Coastal Protection and Restoration Authority
P. O. Box 44027
Baton Rouge, Louisiana, 70804-4027.

Bids sent by express delivery shall be delivered to:

Coastal Protection and Restoration Authority
150 Terrace Avenue
Suite 100
Baton Rouge, Louisiana 70802

5.3.2 Bids shall be deposited at the designated location prior to the time on the date for receipt of bids indicated in the Advertisement for Bids, or any extension thereof made by addendum. Bids received after the time and date for receipt of bids will be returned unopened.

5.3.3 Bidder shall assume full responsibility for timely delivery at location designated for receipt of bids.

5.3.4 Oral, telephonic or telegraphic bids are invalid and shall not receive consideration. Owner shall not consider notations written on outside of bid envelope which have the effect of amending the bid. Written modifications enclosed in the bid envelope, and signed or initialed by the Contractor or his representative, shall be accepted.

5.4 Modification or Withdrawal of Bid

5.4.1 A bid may not be modified, withdrawn or canceled by the Bidder during the time stipulated in the Advertisement for Bids, for the period following the time and bid date designated for the receipt of bids, and Bidder so agrees in submitting his bid, except in accordance with R.S. 38:2214

which states, in part, "Bids containing patently obvious, unintentional, and substantial mechanical, clerical or mathematical errors, or errors of unintentional omission of a substantial quantity of work, labor, material, or services made directly in the compilation of the bid, may be withdrawn by the Contractor if clear and convincing sworn, written evidence of such errors is furnished to the public entity within forty eight hours of the Bid Opening excluding Saturdays, Sundays and legal holidays".

5.4.2 Prior to the time and date designated for receipt of bids, bids submitted early may be modified or withdrawn only by notice to the party receiving bids at the place and prior to the time designated for receipt of bids.

5.4.3 Withdrawn bids may be resubmitted up to the time designated for the receipt of bids provided that they are then fully in conformance with these Instructions to Bidders.

5.4.4 Bid Security shall be in an amount sufficient for the bid as modified or resubmitted.

5.5 Prohibition of Discriminatory Boycotts of Israel

By submitting its bid, the bidder certifies and agrees that the following information is correct:

In preparing its bid, the bidder has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israel-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The bidder has also not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. The state reserves the right to reject any bids if this certification is subsequently determined to be false and to terminate any contract awarded based on such a false response.

ARTICLE 6

CONSIDERATION OF BIDS

6.1 Opening of Bids

6.1.1 The properly identified Bids received on time will be opened publicly and will be read aloud, and a tabulation abstract of the amounts of the base bids and alternates, if any, will be made available to Bidders.

6.2 Rejection of Bids

6.2.1 The Owner shall have the right to reject any or all bids and in particular to reject a bid not accompanied by any required bid security or data required by the Bid Documents or a bid in any way incomplete or irregular.

6.3 Acceptance of Bid

6.3.2 It is the intent of the Owner, if he accepts any alternates, to accept them in the order in which they are listed in the Bid Form. Determination of the Low Bidder shall be on the basis of the sum of the base bid and the alternates accepted. However, the Owner shall reserve the right to accept alternates in any order which does not affect determination of the Low Bidder.

ARTICLE 7

POST-BID INFORMATION

7.1 Submissions

7.1.1 The Contractor shall submit a Work Plan and Progress Schedule prior to the Pre-Construction Conference in conformance with applicable sections of the General and Special Provisions.

It is the preference of the Owner that, to the greatest extent possible or practical, the Contractor utilize Louisiana Subcontractors, manufacturers, suppliers and labor.

7.1.2 The General Contractor shall be responsible for actions or inactions of Subcontractors and/or material suppliers.

The General Contractor is totally responsible for any lost time or extra expense incurred due to a Subcontractor's/or Material Supplier's failure to perform. Failure to perform includes, but is not limited to, a Subcontractor's financial failure, abandonment of the project, failure to make prompt delivery, or failure to do work up to standard. Under no circumstances shall the Owner mitigate the General Contractor's losses or reimburse the General Contractor for losses caused by these events.

7.1.3 In accordance with La. R.S. 38:2227 [references La. R.S. 38:2212(A)(3)(c)(ii), which has since been renumbered as La. R.S. 38:2212(B)(3)], La. R.S. 38:2212.10 and La. R.S. 23:1726(B) the apparent low bidder on this project shall submit the completed Attestations Affidavit (Past Criminal Convictions of Bidders, Verification of Employees and Certification Regarding Unpaid Workers Compensation Insurance) form found within this bid package to the Coastal Protection and Restoration Authority contact person listed in the Advertisement For Bids within 10 days after the opening of bids.

ARTICLE 8

PERFORMANCE AND PAYMENT BOND

8.1 Bond Required

8.1.1 The Contractor shall furnish and pay for a Performance and Payment Bond written by a company licensed to do business in Louisiana, which shall be signed by the surety's agent or attorney-in-fact, in an amount equal to 100% of the Contract amount. Surety must be listed currently on the U. S. Department of Treasury Financial Management Service List (Treasury List) as approved for an amount equal to or greater than the contract amount, or must be an insurance company domiciled in Louisiana or owned by Louisiana residents. If surety is qualified other than by listing on the Treasury list, the contract amount may not exceed fifteen percent of policyholders' surplus as shown by surety's most recent financial statements filed with the Louisiana Department of Insurance and may not exceed the amount of \$500,000. However, a Louisiana domiciled insurance company with at least an A- rating in the latest

printing of the A. M. Best's Key Rating Guide shall not be subject to the \$500,000 limitation, provided that the contract amount does not exceed ten percent of policyholders' surplus as shown in the latest A. M. Best's Key Rating Guide nor fifteen percent of policyholders' surplus as shown by surety's most recent financial statements filed with the Louisiana Department of Insurance. The Bond shall be signed by the surety's agent or attorney-in-fact. The Bond shall be in favor of the Coastal Protection and Restoration Authority.

execute the Non-Collusion Affidavit included in the Contract Documents.

9.2.3 When this project is financed either partially or entirely with State Bonds, the award of this Contract is contingent upon the sale of bonds by the State Bond Commission. The State shall incur no obligation to the Contractor until the Contract between Owner and Contractor is duly executed.

8.2 Time of Delivery and Form of Bond

8.2.1 The Bidder shall deliver the required bond to the Owner simultaneous with the execution of the Contract.

8.2.2 Bond shall be in the form furnished by the Coastal Protection and Restoration Authority, entitled CONTRACT BETWEEN OWNER AND CONTRACTOR AND PERFORMANCE AND PAYMENT BOND, a copy of which is included in the Bid Documents.

8.2.3 The Bidder shall require the Attorney-in-Fact who executes the required bond on behalf of the surety to affix thereto a certified and current copy of his power of Attorney.

ARTICLE 9

FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

9.1 Form to be Used

9.1.1 Form of the Contract to be used shall be furnished by the Coastal Protection and Restoration Authority, an example of which is bound in the Bid Documents.

9.2 Award

9.2.1 After award of the Contract, the successful Bidder, if a corporation, shall furnish to the Owner the most current copy of a Disclosure of Ownership Affidavit on file with the Secretary of State.

9.2.2 In accordance with Louisiana Law, when the Contract is awarded, the successful Bidder shall, at the time of the signing of the Contract,

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: Coastal Protection and Restoration Authority **BID FOR:** Bayou Cane Marsh Creation Project
150 Terrace Avenue (PO-0181)
Suite 100
Baton Rouge, LA 70802

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: Coastal Protection and Restoration Authority and dated: June 2025.

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging) _____.

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" * but not alternates) the sum of:

_____ Dollars (\$ _____)

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 (*Add Marsh Creation Area 3*) for the lump sum of:

_____ Dollars (\$ _____)

Alternate No. 2 (*Add Marsh Creation Area 5*) for the lump sum of:

_____ Dollars (\$ _____)

Alternate No. 3 *Not Applicable* for the lump sum of:

Not Applicable Dollars (\$ Not Applicable)

NAME OF BIDDER: _____

ADDRESS OF BIDDER: _____

LOUISIANA CONTRACTOR'S LICENSE NUMBER: _____

NAME OF AUTHORIZED SIGNATORY OF BIDDER: _____

TITLE OF AUTHORIZED SIGNATORY OF BIDDER: _____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **: _____

DATE: _____

THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

** **A CORPORATE RESOLUTION OR WRITTEN EVIDENCE** of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA RS 38:2218.A is attached to and made a part of this bid.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: Coastal Protection and Restoration Authority
 150 Terrace Avenue
 Suite 100
 Baton Rouge, LA 70802

BID FOR: Bayou Cane Marsh Creation Project
 (PO-0181)

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ MOBILIZATION AND DEMOBILIZATION (TS-100)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
1	1	Lump Sum		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ SURVEYS (TS-200)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
2	1	Lump Sum		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ DAILY BIRD ABATEMENT (TS-201)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
3	212	Day		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ GRADE STAKES (TS-250)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
4	158	Each		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ SETTLEMENT PLATES (TS-270)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
5	16	Each		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ EARTHEN CONTAINMENT DIKES (TS-300)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
6	44,000	Linear Foot		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ EARTHEN CONTAINMENT DIKE DEGRADATION (TS-305)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
7	9,200	Linear Foot		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ HYDRAULIC DREDGING AND MARSH CREATION – MCA 1 (TS-400)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
8	175,500	Cubic Yard		

Wording for “DESCRIPTION” is to be provided by the Owner.

All quantities are estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

TO: Coastal Protection and Restoration Authority
 150 Terrace Avenue
 Suite 100
 Baton Rouge, LA 70802

BID FOR: Bayou Cane Marsh Creation Project
 (PO-0181)

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ HYDRAULIC DREDGING AND MARSH CREATION – MCA 2 (TS-400)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
9	192,400	Cubic Yard		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ HYDRAULIC DREDGING AND MARSH CREATION – MCA 4 (TS-400)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
10	473,700	Cubic Yard		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ HYDRAULIC DREDGING AND MARSH CREATION – MCA 6 (TS-400)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
11	360,200	Cubic Yard		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ HYDRAULIC DREDGING AND MARSH CREATION – MCA 7 (TS-400)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
12	593,000	Cubic Yard		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>1</u> MOBILIZATION AND DEMOBILIZATION – MCA 3 (TS-100)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
13	1	Lump Sum		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>1</u> SURVEYS – MCA 3 (TS-200)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
14	1	Lump Sum		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>1</u> DAILY BIRD ABATEMENT – MCA 3 (TS-201)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
15	50	DAY		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>1</u> GRADE STAKES – MCA 3 (TS-250)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
16	11	Each		

Wording for “DESCRIPTION” is to be provided by the Owner.

All quantities are estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

TO: Coastal Protection and Restoration Authority
 150 Terrace Avenue
 Suite 100
 Baton Rouge, LA 70802

BID FOR: Bayou Cane Marsh Creation Project
 (PO-0181)

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>1</u> SETTLEMENT PLATES – MCA 3 (TS-270)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
17	2	Each		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>1</u> EARTHEN CONTAINMENT DIKES – MCA 3 (TS-300)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
18	5,900	Linear Foot		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>1</u> EARTHEN CONTAINMENT DIKE DEGRADATION – MCA 3 (TS-305)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
19	1,300	Linear Foot		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>1</u> HYDRAULIC DREDGING AND MARSH CREATION – MCA 3 (TS-400)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
20	113,200	Cubic Yard		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>2</u> MOBILIZATION AND DEMOBILIZATION – MCA 5 (TS-100)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
21	1	Lump Sum		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>2</u> SURVEYS – MCA 5 (TS-200)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
22	1	Lump Sum		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>2</u> DAILY BIRD ABATEMENT – MCA 5 (TS-201)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
23	50	DAY		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>2</u> GRADE STAKES – MCA 5 (TS-220)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
24	20	Each		

Wording for “DESCRIPTION” is to be provided by the Owner.

All quantities are estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

TO: Coastal Protection and Restoration Authority
 150 Terrace Avenue
 Suite 100
 Baton Rouge, LA 70802

BID FOR: Bayou Cane Marsh Creation Project
 (PO-0181)

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>2</u> SETTLEMENT PLATES – MCA 5 (TS-270)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
25	2	Each		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>2</u> EARTHEN CONTAINMENT DIKES – MCA 5 (TS-300)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
26	6,800	Linear Foot		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>2</u> EARTHEN CONTAINMENT DIKE DEGRADATION – MCA 5 (TS-305)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
27	1,200	Linear Foot		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input checked="" type="checkbox"/> Alt.# <u>2</u> HYDRAULIC DREDGING AND MARSH CREATION – MCA 5 (TS-400)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
28	227,500	Cubic Yard		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ NOT APPLICABLE			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ NOT APPLICABLE			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ NOT APPLICABLE			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ NOT APPLICABLE			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Wording for “DESCRIPTION” is to be provided by the Owner.

All quantities are estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

BID BOND

FOR COASTAL PROTECTION AND RESTORATION AUTHORITY PROJECTS

Date: _____

KNOW ALL MEN BY THESE PRESENTS:

That _____ of _____, as Principal, and _____, as Surety, are held and firmly bound unto the State of Louisiana, Coastal Protection and Restoration Authority (Obligee), in the full and just sum of five (5%) percent of the total amount of this proposal, including all alternates, lawful money of the United States, for payment of which sum, well and truly be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally firmly by these presents.

Surety represents that it is listed on the current U. S. Department of the Treasury Financial Management Service list of approved bonding companies as approved for an amount equal to or greater that the amount for which it obligates itself in this instrument or that it is a Louisiana domiciled insurance company with at least an A - rating in the latest printing of the A. M. Best's Key Rating Guide. If surety qualifies by virtue of its Best's listing, the Bond amount may not exceed ten percent of policyholders' surplus as shown in the latest A. M. Best's Key Rating Guide.

Surety further represents that it is licensed to do business in the State of Louisiana and that this Bond is signed by surety's agent or attorney-in-fact. This Bid Bond is accompanied by appropriate power of attorney.

THE CONDITION OF THIS OBLIGATION IS SUCH that, whereas said Principal is herewith submitting its proposal to the Obligee on a Contract for:

NOW, THEREFORE, if the said Contract be awarded to the Principal and the Principal shall, within such time as may be specified, enter into the Contract in writing and give a good and sufficient bond to secure the performance of the terms and conditions of the Contract with surety acceptable to the Obligee, then this obligation shall be void; otherwise this obligation shall become due and payable.

PRINCIPAL (BIDDER)

SURETY

BY: _____
AUTHORIZED OFFICER-OWNER-PARTNER

BY: _____
AGENT OR ATTORNEY-IN-FACT(SEAL)

BAYOU CANE MARSH
CREATION PROJECT
Name of Project

PO-0181
Project No.

STATE OF LOUISIANA

PARISH OF ST. TAMMANY

ATTESTATIONS AFFIDAVIT

Before me, the undersigned notary public, duly commissioned and qualified in and for the parish and state aforesaid, personally came and appeared Affiant, who after being duly sworn, attested as follows:

LA. R.S. 38:2227 PAST CRIMINAL CONVICTIONS OF BIDDERS

A. No sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes:

- | | |
|---------------------------------------|------------------------------------|
| (a) Public bribery (R.S. 14:118) | (c) Extortion (R.S. 14:66) |
| (b) Corrupt influencing (R.S. 14:120) | (d) Money laundering (R.S. 14:230) |

B. Within the past five years from the project bid date, no sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes, during the solicitation or execution of a contract or bid awarded pursuant to the provisions of Chapter 10 of Title 38 of the Louisiana Revised Statutes:

- | | |
|--|--|
| (a) Theft (R.S. 14:67) | (e) Bank fraud (R.S. 14:71.1) |
| (b) Identity Theft (R.S. 14:67.16) | (f) Forgery (R.S. 14:72) |
| (c) False accounting (R.S. 14:70) | (g) Contractors; misapplication of
payments (R.S. 14:202) |
| (d) Issuing worthless checks
(R.S. 14:71) | (h) Malfeasance in office (R.S. 14:134) |

LA. R.S. 38:2212.10 Verification of Employees

A. At the time of bidding, Appearer is registered and participates in a status verification system to verify that all new employees in the state of Louisiana are legal citizens of the United States or are legal aliens.

B. If awarded the contract, Appearer shall continue, during the term of the contract, to utilize a status verification system to verify the legal status of all new employees in the state of Louisiana.

BAYOU CANE MARSH
CREATION PROJECT
Name of Project

PO-0181
Project No.

- C. If awarded the contract, Appearer shall require all subcontractors to submit to it a sworn affidavit verifying compliance with Paragraphs (A) and (B) of this Subsection.

LA. R.S. 23:1726(B) Certification Regarding Unpaid Workers Compensation Insurance

- A. R.S. 23:1726 prohibits any entity against whom an assessment under Part X of Chapter 11 of Title 23 of the Louisiana Revised Statutes of 1950 (Alternative Collection Procedures & Assessments) is in effect, and whose right to appeal that assessment is exhausted, from submitting a bid or proposal for or obtaining any contract pursuant to Chapter 10 of Title 38 of the Louisiana Revised Statutes of 1950 and Chapters 16 and 17 of Title 39 of the Louisiana Revised Statutes of 1950.
- B. By signing this bid /proposal, Affiant certifies that no such assessment is in effect against the bidding / proposing entity.

NAME OF BIDDER

NAME OF AUTHORIZED SIGNATORY OF BIDDER

DATE

TITLE OF AUTHORIZED SIGNATORY OF BIDDER

**SIGNATURE OF AUTHORIZED
SIGNATORY OF BIDDER/AFFIANT**

Sworn to and subscribed before me by Affiant on the ____ day of _____, 20__.

Notary Public

FOR INFORMATION ONLY

This document will be prepared by the Coastal Protection and Restoration Authority in the form appropriate for the project.

CONTRACT BETWEEN OWNER AND CONTRACTOR AND PERFORMANCE AND PAYMENT BOND

This agreement entered into this _____ day of _____, 2025 by (CONTRACTOR NAME) hereinafter called the "Contractor", whose business address is _____, and the State of Louisiana Coastal Protection and Restoration Authority, herein represented by its Executive Director executing this contract, and hereinafter called the "Owner".

Witnesseth that the Contractor and the Owner, in consideration of premises and the mutual covenants; consideration and agreement herein contained, agree as follows:

Statement of Work: The contractor shall furnish all labor and materials and perform all of the work required to build, construct and complete in a thorough and workmanlike manner:

Project No. _____

Project Name _____

in strict accordance with Contract Documents prepared by Owner.

It is recognized by the parties herein that said Contract Documents, including by way of example and not of limitation, the Plans, Specifications (including General Provisions, Special Provisions, and Technical Specifications), Any Addenda thereto, Instructions To Bidders, this Contract, Advertisement For Bids, Affidavit, Bid Form, Bonds (Bid, Performance, and Payment), any Submitted Post-Bid Documentation, Notice of Award, Notice to Proceed, Change Orders, and Claims, if any, impose duties and obligations upon the parties herein, and said parties thereby agree that they shall be bound by said duties and obligations. For these purposes, all of the provisions contained in the aforementioned Contract Documents are incorporated herein by reference with the same force and effect as though said Contract Documents were herein set out in full.

Time for Completion: The work shall be commenced on a date to be specified in a written order of the Owner and shall be completed within _____ consecutive calendar days from and after the said date.

Liquidated Damages: Contractor shall be assessed Liquidated Damages in the amount of \$_____ per day for each consecutive calendar day which work is not complete beginning with the first day beyond the completion time.

Compensation to be paid to the Contractor: The Owner will pay and the Contractor will accept in full consideration for the performance of the contract the sum of _____ **Dollars (\$)** which sum represents the Contract Price.

Performance and Payment Bond: To these presents personally came and intervened _____, herein acting for _____, a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business in the State of Louisiana, as surety, who declared that having taken cognizance of this Contract and of the Construction Documents mentioned herein, he hereby in his capacity as its Attorney in Fact obligates his said company, as Surety for the said Contractor, unto the said Owner, up to the sum of _____ **Dollars (\$)**. By issuance of this bond, the surety acknowledges they are in compliance with R.S. 38:2219.

The condition of this performance and payment bond shall be that should the Contractor herein not perform the Contract in accordance with the terms and conditions hereof, or should said Contractor not fully indemnify and save harmless the Owner, from all cost and damages which he may suffer by said Contractor's non-performance or should said Contractor not pay all persons who have and fulfill obligations to perform labor and/or furnish materials in the prosecution of the work provided for herein, including by way of example workmen, laborers, mechanics, and furnishers of materials, machinery, equipment and fixtures, then said Surety agrees and is bound to so perform the Contract and make said payment(s).

Provided, that any alterations which may be made in the terms of the Contract or in the work to be done under it, or the giving by the Owner of any extensions of time for the performance of the Contract, or any other forbearance on the part of either the Owner or the Contractor to the other shall not in any way release the Contractor or the Surety from their liability hereunder, notice to the Surety of any such alterations, extensions or other forbearance being hereby waived.

The Contractor agrees to abide by the requirements of the following as applicable: Title VI of the Civil Rights Act of 1964 and Title VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246 as amended, the Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veteran's Readjustment Assistance Act of 1974, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, the Fair Housing Act of 1968 as amended, and Contractor agrees to abide by the requirements of the Americans with Disabilities Act of 1990.

Contractor agrees not to discriminate in its employment practices, and will render services under this Contract without regard to race, color, religion, sex, sexual orientation, national origin, veteran status, political affiliation, disability, or age in any matter relating to employment. Any act of discrimination committed by Contractor, or failure to comply with these statutory obligations when applicable shall be grounds for termination of this Contract.

In Witness whereof, the parties hereto on the day and year first above written have executed this agreement in seven (7) counterparts, each of which shall, without proof or accountancy for the other counterparts, be deemed an original thereof.

WITNESSES:

**STATE OF LOUISIANA
COASTAL PROTECTION AND
RESTORATION AUTHORITY**

BY: _____
J. Clay Parker, Deputy Executive Director

BY: _____

SURETY: _____

BY: _____
ATTORNEY IN FACT

ADDRESS

TELEPHONE NUMBER

STATE OF LOUISIANA
PARISH OF ST. TAMMANY

PROJECT NO.:	PO-0181
NAME:	BAYOU CANE MARSH CREATION
	PROJECT
LOCATION:	ST. TAMMANY PARISH, LA

A F F I D A V I T

Before me, the undersigned authority, duly commissioned and qualified within and for the State and Parish aforesaid, personally came and appeared _____ representing who, being by me first duly sworn deposed and said that he has read this affidavit and does hereby agree under oath to comply with all provisions herein as follows:

PART I.

Section 2224 of Part II of Chapter 10 of Title 38 of the Louisiana Revised Statutes, as amended.

(1) That affiant employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for affiant; and

(2) That no part of the Contract price received by affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the Contract, other than the payment of their normal compensation to persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for affiant.

PART II.

Section 2190 of Part I of Chapter 10 of Title 38 of the Louisiana Revised Statutes, as amended.

That affiant, if an architect or engineer, or representative thereof, does not own a substantial financial interest, either directly or indirectly, in any corporation, firm, partnership, or other organization which supplies materials for the construction of a public work when the architect or engineer has performed architectural or engineering services, either directly or indirectly, in connection with the public work for which the materials are being supplied.

For the purposes of this Section, a "substantial financial interest" shall exclude any interest in stock being traded on the American Stock Exchange or the New York Stock Exchange.

That affiant, if subject to the provisions of this section, does hereby agree to be subject to the penalties involved for the violation of this section.

AFFIANT

SWORN TO AND SUBSCRIBED BEFORE ME THIS _____ DAY OF _____, 2025.

NOTARY

PART I GENERAL PROVISIONS

GP-1 DEFINITION OF TERMS

Whenever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to the singular or plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs and the titles of other documents or forms.

Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

- a. Acceptance: A written approval from the Engineer which certifies that specific items of work in the Contract have been completed and/or obligations have been fulfilled by the Contractor.
- b. Addenda: Those written or graphic documents which are issued prior to opening of Bids in accordance with the Bidding Requirements and clarify or change the bidding requirements or the proposed Contract Documents.
- c. Application of Payment: That form which is used by the Contractor to request partial and final payment and is deemed acceptable to the Owner. It shall be accompanied by any supporting documentation required by the Contract Documents.
- d. A.S.T.M.: American Society for Testing and Materials.
- e. Bid: An offer or proposal submitted on the prescribed form setting forth the prices for the Work.
- f. Bidder: The person, association of persons, firm, or corporation submitting a proposal for the Work.
- g. Bidding Requirements: The Advertisement for Bids, Instructions to Bidders, Form of Bid Security, if any, and Bid Form with any supplements.
- h. Change Order: A written order which is submitted to the Contractor, signed by the Owner, and authorizes an addition, deletion, or revision in the Work, or an adjustment in the contract price or the contract time issued after the effective date of the Contract.
- i. Claim: A written demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both or other relief with respect to the terms of the Contract.
- j. Contract: The written agreement between the Owner and the Contractor which defines the work to be completed and shall be understood to also include all Contract Documents.
- k. Contract Documents: The Contract, all addenda which pertains to the Contract Documents, Bid Documents and specified Attachments accompanying the Bid and any post-bid documentation submitted prior to the Notice of Award, Contractor's Bid when

GENERAL PROVISIONS

attached as an exhibit to the Agreement, the Bonds (Bid and Performance/Payment), General Provisions, Special Provisions, Technical Specifications, Plans, and all Field or Change Orders issued after the execution of the Agreement. Shop Drawings and other submittals by the Contractor are not Contract Documents.

- l. Contract Price: The moneys payable by the Owner to the Contractor for the Work in accordance with the Contract Documents as stated in the Contract.
- m. Contract Time: The number of calendar days specified in the Contract for completion of the Work, together with any extensions authorized through change orders.
- n. Contractor: The person, association of persons, firm, or corporation entering into the duly awarded Contract.
- o. Contracting Agency: The State of Louisiana, Coastal Protection and Restoration Authority (CPRA).
- p. Day: When any period of time is referred to in the Contract Documents using days, it will be computed to exclude the first day and include the last day of such period. If the last day of any such period falls on a Saturday, Sunday, or a legal holiday, that day will be omitted from the computation. A calendar day is measured as twenty-four (24) hour period starting at midnight and ending the following midnight.
- q. Design Report: A written report by the Engineer which provides the design methodology for the Work.
- r. Effective Date of the Contract: The date indicated in the Contract on which it becomes effective.
- s. Engineer: The State of Louisiana, Coastal Protection and Restoration Authority, or its designee.
- t. Equipment: All machinery, implements, and power-tools, in conjunction with the necessary supplies for the operation, upkeep, maintenance, and all other tools and apparatuses necessary for the proper construction and acceptable completion of the Work.
- u. Extension of Contract: Any extension of time for completion of Work beyond the Contract Time which is granted by the Owner, recommended by the Engineer and approved by the Coastal Protection and Restoration Authority in the form of a Change Order.
- v. Federal Sponsor: The federal agency which has been tasked, if applicable, to manage the implementation of the project.
- w. Field Order: A written order issued by the Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or Contract Time.
- x. Laboratory: The firm, company, or corporation which is used to test materials and is approved for use by the Engineer.

GENERAL PROVISIONS

- y. Laws and Regulations; Laws or Regulations: Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- z. Materials: Any substance used in the Work to build structures, but does not include material used in false work or other temporary structures not incorporated in the Work.
- aa. Milestone: A principal event specified in the Contract Documents relating to an intermediated completion date or time prior to the Contract Times.
- bb. Notice of Award: A written notice to the successful Bidder stating that the Bid has been accepted by the Owner and that the successful Bidder is required to execute the Contract and furnish the Payment and Performance Bond and Non-Collusion Affidavit.
- cc. Notice to Proceed: The written notice to the Contractor by the Owner which provides the starting date for the Contract Time.
- dd. Owner: The Owner is the State of Louisiana (State) which acts through the Contracting Agency.
- ee. Performance and Payment Bond: The approved form of security furnished by the Contractor and Surety for the faithful performance of the Work, and the payment for all labor, materials, and/or obligations incurred by the Contractor in the prosecution thereof.
- ff. Plans: That part of the Contract Documents prepared or approved by the Engineer which graphically shows the scope, intent, and character of the Work to be completed by the Contractor.
- gg. Project Site: The location where the Work is to be performed as stated in the Contract Documents.
- hh. Resident Project Representative: An authorized representative of the Engineer who is responsible to inspect the Work and materials furnished by the Contractor.
- ii. Right-of-way: That entire area reserved for constructing, maintaining, and protecting the proposed improvement, structures, and appurtenances of the Work.
- jj. Samples: Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portions of the Work will be judged.
- kk. Shop Drawings: All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for the Contractor and submitted by the Contractor to illustrate some portion of the Work to be performed.
- ll. Specifications: That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the work to be performed and certain administrative details applicable thereto.
- mm. State: The State of Louisiana.

GENERAL PROVISIONS

- nn. Structures: Bridges, plugs, weirs, bulkheads, berms, dams, levees, and other miscellaneous construction encountered during the Work and not otherwise classified herein.
- oo. Subcontractor: Any person, association of persons, firm, or corporation who contracts with the Contractor to perform any part of the project covered by the Contract.
- pp. Submittals: Certificates, samples, shop drawings, and all other project data which are submitted to the Engineer in order to verify that the correct products will be installed on the project.
- qq. Successful Bidder: The lowest responsive and responsible Bidder whom the Owner makes an award.
- rr. Special Provisions: That part of the Contract Documents which amends or supplements these General Provisions.
- ss. Surety: The corporate body, licensed to do business in Louisiana, bound with and for the Contractor's primary liability, and engages to be responsible for payment of all obligations pertaining to acceptable performance of the Work contracted.
- tt. Temporary Structures: Any non-permanent structure required while engaged in the prosecution of the Contract.
- uu. Work: All work specified herein or indicated on the Plans.
- vv. Work Plan: A written plan by the Contractor that details how the Work will be provided including layout drawings, projected schedule (Initial Progress Schedule), and a list of labor hours, materials, and equipment.

GP-2 BID REQUIREMENTS

The Contract and Bonds which govern the Work shall be performed in accordance with the Plans, Specifications, and the Louisiana Standard Specifications for Roads and Bridges, 2016 edition. The Bidder understands that all quantities for performing the Work have been estimated by the Engineer, and that the Bid shall be the sum of the quantities multiplied by their respective unit rates. The Contract shall be awarded by the Owner through a comparison of all bids. It is the responsibility of each Bidder before submitting a Bid to:

- 2.1. Examine the Bidding Documents including the Plans and Specifications and any Addenda or related data identified in the Bidding Documents;
- 2.2. Visit the Project Site to become familiar with the local conditions if they are believed to affect cost, progress, or the completion of the Work;
- 2.3. Become familiar and satisfied with all federal, state, and local Laws and Regulations that may affect cost, progress, or the completion of the Work;
- 2.4. Study and correlate all information known to the Bidder including observations obtained from Bidder's visits, if any, to the Project Site, with the Bidding Documents;

GENERAL PROVISIONS

- 2.5. Submit a written notice to the Engineer within three (3) days regarding any conflicts, errors, ambiguities, or discrepancies discovered in the Bidding Documents and confirm that the written resolution thereof by the Engineer is acceptable to the Bidder; and
- 2.6. Determine that the Bidding Documents are generally sufficient to convey an understanding of all terms and conditions for completing the required Work.

The submission of a Bid will constitute an incontrovertible representation that the Bidder has complied with every requirement of these Specifications. The Bidder shall comply with all other requirements specified in the Advertisement For Bids and the Instruction To Bidders.

GP-3 AVAILABILITY OF PLANS AND SPECIFICATIONS

One (1) set of Plans and Specifications shall be furnished to each Bidder. Three (3) sets of the Plans and Specifications shall be furnished to the Contractor upon award of the Contract. Additional sets may be furnished to the Contractor upon request from the Coastal Protection and Restoration Authority, 150 Terrace Avenue, Suite 100, Baton Rouge, Louisiana 70802.

GP-4 LAWS, REGULATIONS, STANDARDS, SPECIFICATIONS, AND CODES

Bidders are required to become familiar and remain in compliance with all Federal, State, and local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority which may affect those employed for the execution of the Work or which may affect the conduct of the Work. The Contractor shall indemnify the Owner and its representatives against any claim or liability arising from all violations of any laws, bylaws, ordinances, codes, regulations, orders, or decrees, whether by the Contractor or by the Contractor's employees. The filing of a bid will be presumptive evidence that the Bidder has complied with this requirement. The Owner will not be responsible for any inaccurate interpretations or conclusions drawn by the Contractor from information and documentation provided by the Owner.

References to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws and Regulations, whether such reference be specific or by implication, may not be in effect at the time of opening the Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents. No provision of any such standard, specification, manual, or code, or any instruction of a supplier shall be effective to change the duties or responsibilities of the Owner or Engineer, or any of their Subcontractors, consultants, agents, or employees from those set forth in the Bid Documents. No such provision shall be effective to assign to the Owner or Engineer, or any of their consultants, agents, or employees any duty or authority to supervise or direct the performance of the Contractor's obligations or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

The obligations imposed by these specifications are in addition to and are not to be construed in any way as a limitation of any rights available to the Engineer or Owner which are otherwise imposed by any laws or regulations or other provisions within the Contract Documents.

The Contractor shall abide by laws set forth in the Davis-Bacon Act of 1931 which states that all laborers and mechanics employed by recipients, the recipient's contractors, or subcontractors on this project shall be paid wages at rates no less than those prevailing on

projects of a character similar in the locality as determined by the Secretary of Labor in accordance with Subchapter IV of Chapter 31 of Title 40 United States Code. Additionally, with respect to the labor standards specified in this section, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Number 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and The Copeland Act of Title 40 (40 U.S.C. § 3145). Prevailing Wage Determination Schedules, as determined by the United States Department of Labor, are provided in the Appendix. Prevailing Wage Determination Schedules are subject to modification by the United States Department of Labor. The Contractor is responsible for utilizing the most current Prevailing Wage Determination Schedule. These documents can be downloaded from the following link: <https://sam.gov/content/home>. Modifications to Prevailing Wage Determination Schedules shall be effective if received (or posted) no less than 10 days prior to bid opening.

GP-5 PRE-BID CONFERENCE AND SITE VISIT

A Pre-Bid Conference and/or Job Site Visit may be held at the location and on the date provided in the Advertisement For Bids. If the Pre-Bid Conference and/or Job Site Visit is stated in the Advertisement for Bids to be a MANDATORY Pre-Bid Conference and/or MANDATORY Job Site Visit, bids shall be accepted only from those bidders who attend the Pre-Bid Conference and/or Job Site Visit in its entirety. Failure to attend a mandatory Pre-Bid Conference and/or mandatory Job Site Visit in its entirety will result in a null or void Bid.

All questions shall be in writing and faxed or emailed to the Coastal Protection and Restoration Authority contact person listed in the Advertisement For Bids after the Pre-Bid Conference and by the due date announced at the Pre-Bid conference. In order to ensure adequate response time, all questions and/or requests for clarification or interpretation of the Bid Documents should be received by the Coastal Protection and Restoration Authority at least seven days prior to the date for receipt of bids. Oral statements will not be binding or legally effective. The Coastal Protection and Restoration Authority will issue addenda in response to all questions arising at the Pre-Bid Conference and site visit to all prospective Bidders on record. All prospective Bidders on record may contact the Coastal Protection and Restoration Authority contact person for any additional information.

GP-6 NOTICE OF AWARD

The Owner, or its designated bidding agent, shall provide written notice to the Successful Bidder stating that the Owner will sign and deliver the Contract upon compliance with the conditions enumerated therein and within the time specified.

GP-7 NOTICE TO PROCEED AND CONTRACT TIME

The Contractor shall start the Work and begin the Contract Time on the dates provided in the Notice to Proceed. The Work shall be conducted using sufficient labor, materials, and equipment as necessary to ensure completion within the Contract Time. The Contract Time for completion of the Base Bid for the Work is provided in the Instructions To Bidders, unless an extension is granted to the Contract Time as specified in GP-44. If the Bid contains an Alternate Bid(s), and the Alternate Bid(s) is awarded and included in the Contract, the Contract Time associated with the Alternate Bid(s) will be as provided in the Instructions To Bidders.

GENERAL PROVISIONS

Unless otherwise noted in the Contract Documents, Contract Time will be on a calendar day basis. Contract Time shall consist of the number of calendar days stated in the Instructions To Bidders and the Contract beginning with the date noted in the written Notice to Proceed, including Saturdays, Sundays, holidays and non-work days.

The following table defines the monthly anticipated adverse weather days that are expected to occur during the Contract Time and will constitute the baseline monthly weather time for evaluations. The schedule is based upon National Oceanic and Atmospheric Administration (NOAA) or similar data for the regional geographic area.

Monthly Anticipated Adverse Weather Calendar Days											
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug	Sep.	Oct.	Nov	Dec.
5	5	4	4	4	5	7	7	5	3	3	4

Adverse weather days must prevent Work for fifty percent (50%) or more of the work day and delay work critical to the timely completion of the project. The number of actual adverse weather days shall be calculated chronologically from the first to the last day of each month.

If adverse weather conditions are the basis for a claim for additional time, the Contractor shall document that weather conditions had an adverse effect on the scheduled construction. An increase in Contract Time due to weather shall not be cause for an increase in the contract sum.

GP-8 WORK PLAN

The Contractor shall develop a written Work Plan which accounts for all of the construction activities required by the Contract Documents. The Work Plan shall include a list of the individual construction tasks to be completed and the estimated dates for beginning and completing the tasks. It shall also include all other items which are applicable to completing the Work such as, but not limited to, the following:

- a. Typical report form for the Bi-Weekly Progress Meeting;
- b. Typical form for Daily Progress Report;
- c. Hurricane and Severe Storm Plan;
- d. Site-specific Health and Safety Plan;
- e. The delivery method and source(s) of all construction materials (company or producer name, mailing and physical address, phone number, and name of contact person).
- f. The personnel, material, subcontractors, fabricators, suppliers, types of equipment, and equipment staging areas the Contractor proposes to use for construction;
- g. Shop drawings, test results, and sample submittals;
- h. Survey layout and stakeout;

- i. All supplemental items specified in the Special Provisions.

The Work Plan shall be submitted to the Engineer prior to the Pre-Construction Conference by the date provided in the Special Provisions. The Engineer shall review the Work Plan and have the Contractor make any necessary revisions prior to acceptance of the plan. **No payment for mobilization will be made until the Work Plan has been accepted by the Engineer.**

GP-9 PROGRESS SCHEDULE

The Contractor shall develop a written Progress Schedule which provides for an orderly progression of the Work, submittals, tests, and deliveries in order to complete the Work within the specified Milestones and Contract Time. All of the items listed in the Work Plan shall be integrated into the Progress Schedule. The format of the schedule shall be composed using Microsoft Project®, or any other software deemed acceptable by the Engineer. It shall be updated weekly by the Contractor, at a minimum. The Progress Schedule shall also include, but not be limited to the following:

- a. All of the elements in the Work Plan, including updates;
- b. A work order issued from Louisiana One Call ordering all their subscribers in the project area to mark their utilities;
- c. A telephone log verifying that all property owners and utilities have been contacted. This log should list the time, date, and names of the personnel representing the property owners, utilities, and Contractor;

The Progress schedule must reflect the anticipated adverse weather delays described in GP-7 on all weather dependent activities.

The Progress Schedule shall be submitted to the Engineer prior to the Pre-Construction Conference by the date provided in the Special Provisions. The Engineer shall perform a review and have the Contractor make any necessary revisions prior to acceptance of the schedule. Acceptance will not impose responsibility on the Owner or Engineer for the sequencing, scheduling, or progression of the Work. The Contractor is fully responsible for progression of the Work in order to maintain compliance with the Progress Schedule and Contract Time.

GP-10 DAILY PROGRESS REPORTS

The Contractor shall record the following daily information on Daily Progress Reports:

- a. Date and signature of the author of the report;
- b. Dollar amount of all bid items that are fabricated, installed, backfilled, pumped, constructed, damaged, replaced, etc. The amount of material shall be expressed in the units stated in the bid;
- c. Field notes of all surveys;

GENERAL PROVISIONS

- d. Notes on all inspections;
- e. Details of Health and Safety meetings;
- f. A brief description of any Change Orders, Field Orders, Claims, Clarifications, or Amendments;
- g. Condition of all navigation aids (i.e., warning signs, lighted marker buoys) and any repairs performed on them;
- h. Weather conditions (adverse weather day, wind speed and direction, temperature, wave height, precipitation, etc.);
- i. The amount of time lost to severe weather or personnel injury, etc;
- j. Notes regarding compliance with the Progress Schedule;
- k. Visitor log (Instructions for format will be furnished by the Field Engineer).

The daily progress reports shall be submitted to the Engineer at the Bi-Weekly Progress Meetings specified in GP-13 in both hard copy and digital format (Adobe Acrobat® Format, or approved equal). The typical form for Daily Progress Reports shall be developed by the Contractor and incorporated into the Work Plan.

GP-11 HURRICANE AND SEVERE STORM PLAN

The Contractor shall develop and maintain a written Hurricane and Severe Storm Plan. The Plan shall include, but not be limited to, the following:

- a. What type of actions will be taken before storm strikes at the Project Site. The plan should specify what weather conditions or wave heights will require shutdown of the Work and removal of equipment, personnel, etc.
- b. Notes from continuous monitoring of NOAA marine weather broadcasts and other local commercial weather forecasts.
- c. Equipment list with details on their ability to handle adverse weather and wave conditions.
- d. List of safe harbors or ports and the distance and travel time required to transfer equipment from the Project Site.
- e. Hard copies of any written approvals or operations schedules associated with the use of the safe harbors or ports.
- f. Method of securing equipment at the safe harbors or ports.

GENERAL PROVISIONS

- g. List of tug boats and work boats and their respective length, horsepower, etc. which will adequately transfer the equipment to safe harbor or port under adverse weather conditions.
- h. Methods which will be used to secure equipment left onsite during adverse weather conditions.
- i. Evacuation or immediate reaction plans to be taken by personnel for sudden storm occurrences.
- j. Operations procedures which will be used to secure critical dredging equipment such as spuds, swing wires, anchor wires, or tugs during adverse weather conditions.
- k. Communications protocol with local law enforcement and fire and rescue agencies.

The Contractor shall incorporate the Hurricane and Severe Storm Plan into the Work Plan. The Owner and Engineer are not responsible for the adequacy of this plan.

GP-12 HEALTH AND SAFETY PLAN AND INSPECTIONS

The Contractor shall develop and maintain a written Health and Safety Plan which allows the Work to be performed in compliance with all applicable laws, ordinances, rules, and regulations of any government agency having jurisdiction over the safety of personnel or property. This includes maintaining compliance with the Code of Federal Regulations, Title 29, Occupational Safety and Health Administration (OSHA) and all applicable Health and Safety Provisions of the State of Louisiana.

The Contractor shall institute a daily inspection program to assure that the requirements of the Health and Safety Plan are being fulfilled. Inspections shall include the nature of deficiencies observed, corrective action taken or to be taken, location of inspection, date, and signature of the person responsible for its contents. The results of the inspections shall be recorded on Daily Progress Reports and kept at the Project Site during the Work.

The Contractor shall incorporate the Health and Safety Plan into the Work Plan. The Owner and Engineer are not responsible for the adequacy of this plan.

GP-13 PROGRESS MEETINGS AND REPORTS

The Engineer shall schedule meetings to review the progress of the Work, coordinate future efforts, discuss compliance with the Progress Schedule and resolve miscellaneous problems. The Engineer or Resident Project Representative, Contractor, and all Subcontractors actively working at the Project Site shall attend each meeting. Representatives of suppliers, manufacturers, and other Subcontractors may also attend at the discretion of the Contractor. The Contractor shall record the details of each meeting in a Progress Report. The format of this report shall be developed by the Contractor, approved by the Engineer, and included in the Work Plan. The progress meetings and reports shall be scheduled according to the Special Provisions.

GP-14 PRE-CONSTRUCTION CONFERENCE

A Pre-Construction Conference shall be held by the Contractor, Owner, Engineer, local stakeholders, and other appropriate personnel prior to starting construction on the date specified in the Special Provisions. This conference shall serve to establish a mutual understanding of the Work to be performed, the elements of the Progress Schedule and Work Plan, expectations for bi-weekly progress meetings, the Plans and Specifications, processing Applications for Payment, and any other items of concern. If any subcontractors are not present, another pre-construction conference will be required.

GP-15 CONTRACT INTENT

The Bid Documents are complementary; what is called for by one is as binding as if called for by all. Clarifications and interpretations or notifications of minor variations and deviations of the Contract Documents will be issued by Engineer as provided in these Specifications. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Bid Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided at no additional cost to the Owner.

GP-16 ENGINEER AND AUTHORITY OF ENGINEER

The Engineer will be the designated representative of the Owner, the initial interpreter of the Contract Documents and the judge over acceptability of all the Work. Claims, disputes, and other matters relating to the acceptability of the Work, performance by the Contractor or the interpretation of the requirements of the Contract Documents must be submitted to the Engineer in writing. Upon written request from the Contractor, the Engineer shall issue written clarifications or interpretations which are consistent with the overall intent of the Contract Documents. Such written clarifications and interpretations will be binding on the Owner and the Contractor. Either the Owner or the Contractor may make a Claim if a written clarification or interpretation justifies an adjustment in the Contract Price or Contract Times.

The Engineer has the authority to suspend the Work in whole or in part due to failure of the Contractor to correct conditions unsafe for workmen or the general public, carry out provisions of the Contract, perform conformance work, or to carry out orders. The Engineer shall submit a written order to the Contractor for work which must be suspended or resumed. Nothing in this provision shall be construed as establishing responsibility on the part of the Engineer for safety which is the responsibility of the Contractor.

The Engineer or Resident Project Representative shall keep a daily record of weather and flood conditions and may suspend the Work as deemed necessary due to periods of unsuitable weather, conditions considered unsuitable for execution of the Work, or for any other condition or reason deemed to be in the public interest.

GP-17 CONFORMITY WITH PLANS AND SPECIFICATIONS

All work and materials involved with the Work shall conform with the lines, grades, cross sections, dimensions, and other requirements shown on the Plans or indicated in these Specifications unless otherwise approved by the Engineer.

GP-18 CLARIFICATIONS AND AMENDMENTS TO CONTRACT DOCUMENTS

The Contract Documents may be clarified or amended by the Engineer to account for additions, deletions, and revisions to the Work after the Effective Date of the Contract. The clarifications and amendments shall be addressed by either a Change Order or a written clarification by the Engineer. The Contractor shall not proceed with the Work until the Change Order or clarification has been issued by the Engineer. The Contractor shall not be liable to the Owner or Engineer for failure to report any such discrepancy unless the Contractor had reasonable knowledge.

The Contractor may request a clarification or amendment for the following:

- a. Any conflict, error, ambiguity, or discrepancy within the Contract Documents; or
- b. Any conflict, error, ambiguity, or discrepancy between the Bid Documents and the provision of any Law or Regulation applicable to the performance of the Bid; or
- c. Any standard, specification, manual, or code (whether or not specifically incorporated by reference in the Bid Documents); or
- d. Instructions by a supplier.

The official form for a written clarification is provided in the appendices of the Contract Documents. This form shall be filled out appropriately by the Contractor and submitted to the Engineer. The Engineer shall clarify the issue in writing on either the clarification form, Field Order or a Change Order and submit it to the Contractor.

GP-19 SUBCONTRACTS

The Contractor shall provide the names of all Subcontractors to the Engineer in writing before awarding any Subcontracts. The Contractor shall be responsible for the coordination of the trades and Subcontractors engaged in the Work. The Contractor is fully responsible to the Owner for the acts and omissions of all the Subcontractors. The Owner and Engineer will not settle any differences between the Contractor and Subcontractors or between Subcontractors. The Contractor shall have appropriate provisions in all Subcontracts to bind Subcontractors to the Contractor by the terms of the General Provisions and other Contract Documents, as applicable to the Work of Subcontractors. The provisions should provide the Contractor the same power regarding termination of Subcontracts that the Owner may exercise over the Contractor under any provisions of the Contract Documents.

GP-20 WORKERS, METHODS, AND EQUIPMENT

The Contractor shall provide competent, qualified, and trained personnel to perform the Work. The Contractor shall not employ any person found objectionable by the Engineer. Any person employed by the Contractor or any Subcontractor who, in the opinion of the Engineer, does not perform the Work in a proper, skillful, and orderly manner shall be immediately removed upon receiving a written order by the Engineer. The Engineer may also suspend the Work until the Contractor removes the employee or provides a suitable replacement. Such an employee shall not be re-employed in any portion of the Work without written approval from the Engineer.

The on-site superintendent for the Contractor shall be competent, English-speaking, and qualified to receive orders, supervise, and coordinate all Work for the Contractor and any Subcontractors. The qualifications of the superintendent must be established and approved by the Engineer prior to commencement of the Work. The superintendent shall be furnished by the Contractor regardless of how much Work may be sublet. In the performance of the Work under this Contract, the Contractor shall conduct operations to avoid interference with any other Contractors.

All equipment, products, and material incorporated into the Work shall be as specified, or if not specified, shall be new, of good quality, and protected, assembled, used, connected, applied, cleaned, and conditioned in accordance with the manufacturer's instructions, except as otherwise may be provided in the Bid Documents. All equipment shall be of sufficient size and mechanical condition to meet the requirements of the Work and produce a satisfactory quality of work. Equipment shall not damage adjacent property throughout the performance of the Work. The Plant and Equipment Schedule should be completed by the Contractor.

The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures used to complete the Work in conformance with the Contract Documents.

The Contractor shall obtain permission from the Engineer if a method or type of equipment other than specified in the Contract is desired. The request shall be in writing and shall include a full description of the methods, equipment proposed, and reasons for the modification. A proposed item of material or equipment may be considered by the Engineer to be functionally equal to an item specified in the Contract if:

- a. It is at least equal in quality, durability, appearance, strength, and design characteristics;
- b. There is no increase in any cost including capital, installation, or operating to the Owner;
- c. The proposed item will conform substantially, even with deviations, to the detailed requirements of the item named in the Bid Documents.

If, after trial use of the substituted methods or equipment, the Engineer determines that the Work produced does not meet Contract requirements, the Contractor shall discontinue use of the substituted methods or equipment and shall complete the Work with the specified methods and equipment. The Contractor shall remove the deficient Work and replace it with Work of specified quality or take other corrective action as directed. No change will be made in basis of payment for construction items involved or in Contract Time as a result of authorizing a change in methods or equipment.

GP-21 ACCIDENT PREVENTION, INVESTIGATIONS, AND REPORTING

The Contractor shall be responsible to develop and maintain all safeguards and safety precautions necessary to prevent damage, injury, or loss throughout the performance of the Work. All accidents at the Project Site shall be investigated by the immediate supervisor of employee(s) involved and reported to the Engineer or Resident Project Representative within one (1) working day. A complete and accurate written report of the accident including estimated lost time days shall be submitted to the Engineer within four (4) calendar days. A

follow-up report shall be submitted to the Engineer if the estimated lost time days differ from the actual lost time days.

GP-22 PRESERVATION AND RESTORATION OF PROPERTY, MONUMENTS, ETC.

The Contractor shall comply with all applicable laws, ordinances, rules, and regulations of any government agency having jurisdiction over the preservation and protection of public and private property. The Contractor shall install and maintain suitable safeguards and safety precautions during the Work as necessary to prevent damage, injury, or loss to property. This responsibility shall remain with the Contractor until the Work has been completed and accepted. Any damage, injury, or loss to property which is caused by the Contractor or Subcontractors shall be repaired or replaced at the expense of the Contractor.

The Contractor shall protect all land monuments, State and United States bench marks, geodetic and geological survey monuments, and property markers from disturbance or damage until an authorized agent has witnessed or otherwise referenced their location. The Contractor shall also provide protection for all public and private property including trees, utilities, pipes, conduits, structures, etc. These items shall not be removed unless directed by the Engineer.

The Contractor shall be responsible to completely repair all damages to public or private property due to any act, omission, neglect, or misconduct in the execution of the Work unless it is due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God, public enemies, or governmental authorities. The damage must be repaired at the expense of the Contractor before final acceptance of the Work can be granted by the Engineer. If the Contractor fails to repair the damage within forty-eight (48) hours, the Owner may independently proceed with the repairs at the expense of the Contractor by deducting the cost from the Contract. If the Contractor cannot provide for the cost of repairs, the Surety of the Contractor shall be held until all damages, suits, or claims have been settled.

GP-23 PROTECTION OF THE WORK, MATERIALS, AND EQUIPMENT

It shall be the responsibility of the Contractor to protect the Work, materials, and equipment from damages or delays due to inflows, tidal rise, and storm water runoff which may occur at the Project Site. The Owner shall not be held liable or responsible for these types of delays or damages.

GP-24 LAND RIGHTS

The Owner has been granted all of the temporary easements, servitudes, and right-of-way agreements from public and private landowners in order to perform the Work. A land rights memorandum which lists all known responsible contacts and required stipulations is provided in the appendices of the Contract Documents. The Contractor is responsible to notify all of the contacts and abide by stipulations listed in that memorandum.

GP-25 UTILITIES

The Owner has been granted all of the temporary easements, servitudes, and right-of-way agreements from known public and private utilities in order to perform the Work. The utilities

GENERAL PROVISIONS

include, but are not limited to telephone, telegraph, power poles or lines, water or fire hydrants, water or gas mains and pipelines, sewers, conduits, and other accessories or appurtenances of a similar nature which are fixed or controlled by a city, public utility company or corporation.

The Contractor shall conduct the Work in such a manner as to cooperate and minimize inconveniences with utilities. Prior to commencement of the Work, the Contractor is responsible to notify all of the utilities and abide by stipulations required by the utility company(s). The Contractor shall also call Louisiana One Call at 811 or (800) 272-3020 a minimum of 5 working days prior to construction to locate existing utilities at the Project Site.

Any damage to utilities that is caused by the Contractor within the Project Site shall be repaired at the expense of the Contractor. The Owner will not be responsible for any delay or damage incurred by the Contractor due to working around or joining the Work to utilities left in place or for making adjustments.

Any unidentified pipes or structures which may be discovered within the limits of the Project Site shall not be disturbed and shall be reported to the Engineer as soon as possible. Construction or excavation shall not be performed around unidentified utilities without prior approval from the Engineer.

GP-26 PERMITS

Federal and State permits that are required to perform the Work, such as the Department of the Army Permit, Coastal Use Permit, LDEQ Clean Water Permit, LDWF Fill Material License, and LADOTD highway crossing permit have been secured by the Owner. Permit conditions affecting the construction processes have been included in these Specifications. Copies of these permits will be provided to the Contractor at the pre-construction conference. These permits will not relieve the responsibility of the Contractor from obtaining any additional permits which may be needed to complete the Work. Copies of any special permits that are obtained by the Contractor must be submitted to the Owner. The Contractor shall conform to the requirements therein and display copies of the permits in a public setting at the Project Site at all times.

GP-27 PROJECT SITE CLEAN-UP

The Contractor shall keep the Project Site free from accumulations of waste material or trash at all times. All trash and waste materials shall be removed by the Contractor and disposed off-site in an approved waste disposal facility. In addition, all equipment, tools, and non-conforming work shall also be removed prior to the Work being accepted. No materials shall be placed outside of the Project Site.

GP-28 OWNER INSPECTION

The Owner, Resident Project Representative, and Federal Sponsor shall have the right to perform reasonable inspections and testing of the Work at the Project Site. Access shall be granted to the entire Project Site including all materials intended for use in the Work. The Contractor shall allow reasonable time for these inspections and tests to be performed. The inspections shall not relieve the Contractor from any obligation in accordance with the requirements of the Contract.

The Owner shall notify the Contractor prior to all tests, inspections, and approvals of the Work which are to be conducted at the Project Site. The Owner shall also provide the Contractor with the written results of all inspections and tests. Inspections, tests, or Payments made by the Owner shall not constitute acceptance of non-conforming Work or prejudice the Owner's rights under the Contract.

GP-29 DUTIES OF RESIDENT PROJECT REPRESENTATIVE

A Resident Project Representative may be assigned by the Engineer to the Project Site to observe the Contractor and monitor the progress and manner in which the Work is being performed. The Resident Project Representative will also report to the Engineer and Contractor whenever materials or Work fail to comply with the Contract. The Resident Project Representative is authorized to reject any materials or suspend work which does not comply with the Contract until the issue is resolved by the Engineer.

However, the Resident Project Representative is not authorized to revoke, alter, enlarge, relax, or release any requirements of the Contract, or to approve or accept any portion of the Work, or to issue instructions contrary to the Plans and Specifications. The Resident Project Representative shall not manage or perform duties for the Contractor.

GP-30 CONSTRUCTION STAKES, LINES, AND GRADES

The Engineer shall direct the Contractor to all control points necessary for setting stakes and establishing lines and grades as shown on the Plans. The Contractor shall be responsible for laying out all of the Work. All layouts shall be witnessed and verified by the Engineer or Resident Project Representative prior to beginning the Work. The Contractor shall be responsible for proper execution of the Work according to the layouts after receiving verification from the Engineer.

The Contractor shall be responsible for furnishing and maintaining stakes such that the Work can be verified for acceptance. The Engineer may suspend the Work at any time if it cannot be adequately verified due to the number, quality, or condition of the stakes.

GP-31 CONTRACTOR'S RESPONSIBILITY FOR WORK

The Contractor shall execute all items covered by the Contract, and shall furnish, unless otherwise definitely provided in the Contract, all materials, implements, machinery, equipment, tools, supplies, transportation, and labor necessary to complete the Work. The Contractor shall pay constant attention to the progress of the Work and shall cooperate with the Engineer in every way possible. The Contractor shall maintain a complete copy of the Contract at all times, including the Plans, Specifications, and any authorized modifications.

GP-32 ENVIRONMENTAL PROTECTION

The Contractor shall comply with and abide by all federal, state, and local laws and regulations controlling pollution of the environment, including air, water, and noise. The Contractor shall take precautions to prevent pollution of waters and wetlands with fuels, oils, bituminous materials, chemicals, sewage, or other harmful materials and contaminants, and to prevent pollution of the atmosphere from particulate and gaseous matter, in accordance with all terms

GENERAL PROVISIONS

and conditions of federal, state, and local air and water pollution control laws and programs and their rules and regulations, including the federal Clean Air Act and the federal Clean Water Act.

The Contractor shall adhere to the provisions which require compliance with all standards, orders, or requirements contained under Section 306 of the Clean Air Act and Section 508 of the Clean Water Act, which prohibit the use under non-exempt Federal contracts, grants, or loans, of facilities included on the Environmental Protection Agency (EPA) list of Violating Facilities.

Construction operations in rivers, streams, lakes, tidal or coastal waters, reservoirs, canals, wetlands, and any other impoundments shall be restricted to areas where it is necessary to accomplish the Work and performed in accordance with any applicable federal, state, and local laws, regulations, permit requirements, and guidelines, and the Contractor shall conduct the Work in a manner that will not cause damaging concentrations of silt or pollution to water.

Contractor shall maintain and operate equipment to minimize noise, dust, and vibration near noise, dust and vibration-sensitive areas such as churches, hospitals, schools, and residential areas, and assure that any activities conducted near such areas are not unduly disruptive. Contractor shall maintain all equipment with properly functioning mufflers.

The Contractor shall be responsible for determining and utilizing any erosion and pollution control features or methods that may be necessary to comply with all federal, state, and local laws and regulations.

GP-33 SANITARY PROVISION

The Contractor shall provide and maintain sanitary accommodations for use by all employees and Subcontractors. Facilities shall comply with the requirements of the Louisiana State Board of Health and Hospitals and other authorities having jurisdiction. Committing public nuisance on the Project Site is prohibited.

GP-34 PAYMENT OF TAXES

The Contractor shall be responsible for all taxes and duties that maybe levied under existing State, Federal, and local laws during the completion of the Work. The Owner will presume that the amount of such taxes is included in the unit prices bid by the Contractor and will not provide additional reimbursement.

GP-35 RADIO AND TELEPHONES

The Contractor shall furnish and maintain radio and telephone equipment throughout the Contract Time which will allow communication between the Contractor and the Engineer or Resident Project Representative.

GP-36 NAVIGATION

All marine vessels shall comply with the following Federal Laws and Regulations:

GENERAL PROVISIONS

- a. The International Navigational Rules Act of 1977 (Public Law 95-75, 91 Stat. 308, or 33 U.S.C. 1601-1608); and
- b. The Inland Navigation Rules Act of 1980 (Public Law 96-591, 94 Stat. 3415, 33 U.S.C. 2001-2038).

These rules can be found on the Internet at:
<http://www.navcen.uscg.gov/?pageName=navRulesContent>.

All marine vessels shall display the lights and day shapes required by Part C- Lights and Shapes of the Inland Navigation Rules. The location, type, color, and size of the lights and day shape shall be in accordance with Annex I - Positioning and Technical Details of Lights and Shapes. Any vessel engaged in dredging is considered a "Vessel restricted in her ability to maneuver" and shall display all the lights and shapes required in Rule 27, "Vessel Not Under Control."

GP-37 OBSTRUCTION TO NAVIGATION

The Contractor shall minimize all obstructions to navigation in compliance with pertinent U. S. Coast Guard regulations while conducting the Work. The Contractor shall promptly move any floating equipment or marine vessels which obstruct safe passage of other marine vessels. Upon completion of the Work, the Contractor shall remove all marine vessels and other floating equipment such as temporary ranges, buoys, piles, and other marks or objects that are not permanent features of the Work.

GP-38 MARINE VESSELS AND MARINE ACTIVITIES

All marine vessels regulated by the USCG shall have the required USCG documentation that is current before being placed in service. A copy of any USCG Form 835 issued to the vessel in the preceding year shall be made available to the Owner and Engineer and a copy shall be on board the vessel. All officers and crew shall possess valid USCG licenses as required by USCG regulations. These certificates, classifications, and licenses shall be posted in a public area on board each vessel.

All dredges and quarter boats not subject to USCG inspection and certification or not having a current ABS classification shall be inspected in the working mode annually by a marine surveyor accredited by the National Association of Marine Surveyors (NAMS) or the Society of Accredited Marine Surveyors (SAMS) and having at least 5 years' experience in commercial marine plant and equipment. The inspection certificate shall be posted in a public area on board each dredge and/or quarter boat.

All other plant and support vessels shall be inspected before being placed in service and at least annually by a qualified person. The inspection certificate shall be posted in a public area on board each plant and/or vessel.

GP-39 RECORD KEEPING

The Contractor shall maintain orderly records of the Progress Schedule, Daily Progress Reports, Progress Meetings, correspondence, submittals, reproductions of original Contract Documents, Change Orders, Field Orders, certificates, additional drawings issued subsequent

to the executed Contract, clarifications and interpretations of the Contract Documents by the Engineer, and other related documents at the Project Site until all of the Work is accepted by the Engineer.

GP-40 CERTIFICATES OF COMPLIANCE

Any certificates required for demonstrating proof of compliance of materials with specification requirements shall be executed in three (3) copies. Each certificate shall be certified by an authorized agent of the supplying company and shall contain the name and address of the Contractor, the project name and location, and the quantity and date of shipment. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the testing date. The Contractor shall also certify that all materials and test reports conform to the requirements of the Contract. Certification shall not be construed as relieving the Contractor from furnishing satisfactory material if the material is tested and determined to be in nonconformance.

GP-41 SUBMITTALS

The Contractor shall review all Submittals for compliance with the requirements of the Contract prior to delivery to the Engineer. Each Submittal shall contain a signed statement by the Contractor that it complies with the Contract requirements with any exceptions explicitly listed. The Contractor shall comply with these requirements for Submittals from Subcontractors, manufacturers, and suppliers.

All Submittals shall include sufficient data to demonstrate that the requirements of the Contract are met or exceeded. All submittals shall be legible and marked with the project title and clearly identify the item submitted. Each submittal package shall include an itemized list of the items submitted.

All Submittals will be reviewed within fourteen (14) days after being received by the Engineer. The Contractor shall allow the Engineer sufficient time for review, corrections, and resubmission of all Submittals prior to beginning the associated Work. The Contract Time shall not be extended based on incorrect or incomplete Submittals.

GP-42 CLAIMS FOR EXTRA COST

The Contractor is expected to complete the Work according to the Contract Price specified in the Bid Documents. If the Contractor deems additional compensation is due for work, materials, delays or other additional costs/or expenses not covered in the Contract or not ordered as extra work, the Contractor shall give the Engineer written notice thereof within fourteen (14) calendar days after the receipt of such instructions and, in any event, before commencing the procedure. The Contractor shall justify the claim for extra cost by providing supporting data and calculations. The Engineer shall determine whether the Contractor is entitled to be compensated for such extra cost and shall make any required adjustments of the Contract in accordance with GP-43. If no written claim is made within this fourteen (14)

calendar-day period, the Contractor will be deemed to have waived any claim for extra cost for such work.

Claim for damages or delays of the Work shall not be made by the Contractor for a relocation of the construction operation or portions thereof to other locations within the geographical scope of the project, when in the opinion of the Engineer, such relocation is necessary for the most effective prosecution of the Work and may be accomplished without undue hardship.

GP-43 ALTERATION OF THE CONTRACT AND COMPENSATION

Using Change Orders, Field Orders, or Written Amendments, the Owner may order extra work or make changes by altering the details of construction, add to or deduct from the Work. The requirements and stipulations of these documents shall be binding on the Owner and Contractor throughout the remainder of the Contract. Any claim for an extension of Contract Time caused thereby shall be adjusted at the time of ordering such change.

The value of any such extra work or change shall be determined in one or more of the following ways and in the following priority:

- a. By application of the unit prices in the Contract to the quantities of the items involved or subsequently agreed upon; or
- b. By mutual acceptance between the Owner and Contractor of a lump sum.

If none of the above methods is agreed upon, the Contractor, provided he is so ordered by the Owner in writing, shall proceed with the Work on a "force account" basis. In such a case, the Contractor shall keep and preserve in such form as the Engineer may direct, a correct itemized account of the direct cost of labor, materials, equipment, together with vouchers bearing written certification by the Contractor. In any case, the Engineer shall certify to the amount, including an allowance of fifteen percent (15%) for jobsite and home office overhead indirect expenses and profit due to the Contractor. Where such change involves a subcontractor, an allowance of fifteen percent (15%) for overhead and profit shall be due the subcontractor and an allowance of ten percent (10%) shall be due the Contractor. Pending final determination of value, payments on account of changes shall be made on the Engineer's estimate and as approved in an executed Change Order.

If the Contractor is prevented from completing the Work according to the Contract Price due to the Owner, the Contractor may be entitled to any reasonable and necessary addition of cost as determined by the Engineer. Neither the Owner nor the Contractor shall be entitled to any damages arising from events or occurrences which are beyond their control, including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, acts of war, and other like matters. The provisions of this section exclude recovery for damages caused by the Contractor and compensation for additional professional services by either party.

GP-44 EXTENSION OF CONTRACT TIME

The Contractor is expected to complete the Work within the Contract Time specified in the Bid Documents. A legitimate increase of the Contract time may be requested by the Contractor throughout the course of the Work. This Claim must be submitted to the Engineer in writing within fourteen (14) days of the event which caused the time delay to the Contractor. If an extension of Contract Time involves an increase in Contract Price, both claims shall be

submitted together. The Contractor shall justify the increase of the Contract Time in the Claim using supporting data and calculations. The Engineer may deny the claim if there is insufficient information to make a determination. If the Claim is approved, the Engineer shall issue a Change Order within thirty (30) days of the Claim. The Contract Time shall be increased on a basis that is commensurate with the amount of additional or remaining Work. For example, the Contract Time can be increased where the number of actual adverse weather days exceeds the number of days estimated in the Contract.

GP-45 OWNER'S RIGHT TO TERMINATE CONTRACT FOR CAUSE OR CONVENIENCE

45.1 TERMINATION FOR CAUSE

The Owner shall submit a written notice to the Contractor and Surety which justifies placement of the Contractor in default if:

- a. The Work is not begun within the time specified in the Notice to Proceed; or
- b. The Work is performed with insufficient workmen, equipment, or materials to assure prompt completion; or
- c. The Contractor performs unsuitable, neglected or rejected work, refuses to remove materials; or
- d. The Work is discontinued; or
- e. The Work is not completed within the Contract Time or time extension; or
- f. Work is not resumed within a reasonable time after receiving a notice to continue; or
- g. The Contractor becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency; or
- h. The Contractor allows any final judgment to stand unsatisfied for a period of ten (10) days; or
- i. The Contractor makes an assignment for the benefit of creditors; or
- j. The Work is not performed in an acceptable manner.

If the Contractor or Surety does not remedy all conditions cited in the written notice within ten (10) days after receiving such a notice, the Contractor will be in default and the Owner shall remove the Contractor from the Work. If the Contractor is placed into default, the Owner may obtain the necessary labor, materials, and equipment or enter into a new Contract in order to complete the Work. All costs incurred by the Owner for completing the Work under the new Contract will be deducted from the payment due the Contractor. If the expense exceeds the sum payable under the Contract, the Contractor and Surety shall be liable to pay the Owner the difference.

45.2 TERMINATION FOR CONVENIENCE

Owner may, at any time, terminate this Contract or any portion thereof, for Owner's convenience, upon providing written notice to the Contractor. In such case, Contractor shall be paid for all work completed through the date notice was provided (less payments already received) and reasonable demobilization and restocking charges incurred and reasonable overhead and profit based upon industry standards on the work performed. In no event shall the Contractor be entitled to payment of overhead and profit on work not performed. In the event it is determined that the Contractor was wrongfully terminated for cause, pursuant to Section GP 45.1 above, such termination shall be automatically converted to a termination for convenience under and payment made as provided under this Section.

GP-46 TEMPORARY SUSPENSION OF WORK

The Engineer shall have the authority to temporarily suspend the Work in whole or in part. A Field Order shall be issued to the Contractor for any of the Work that is suspended for periods exceeding one (1) calendar day. The Field Order shall include the specific reasons and details for the suspension. The Contract Time shall not be extended if the Work is suspended due to failure by the Contractor to comply with a Field Order or with the Plans and Specifications. If the Work is suspended in the interest of the Owner, the Contractor shall make due allowances for the lost time.

GP-47 NON-CONFORMING AND UNAUTHORIZED WORK

Work not conforming to the Plans, Specifications, Field Orders, or Change Orders shall not be accepted for payment. Unacceptable or unauthorized work shall be removed and replaced in an acceptable manner at the expense of the Contractor in order to obtain final acceptance of the Work.

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this Contract, the Owner after seven (7) calendar days written notice to the Contractor, may correct such deficiencies itself or by use of other contractors without prejudice to any other remedy it may have, and may deduct the cost thereof from the payment then or thereafter due to the Contractor.

GP-48 CONTRACTOR'S RIGHT TO TERMINATE CONTRACT

The Contractor may terminate the Contract or Work and recover payment from the Owner for labor and materials if the Work is stopped through no act or fault of the Contractor for more than three (3) months. For example, such an occurrence could be caused by a court order or other public authority. In any case, the Contractor shall submit a written notice to the Engineer at the beginning of the occurrence, and a written Claim to the Owner at the end of the occurrence.

GP-49 BREACH OF CONTRACT

The Owner shall submit a written Claim to the Contractor regarding any breach of the Contract. The Contractor must provide a written response to the Owner regarding the breach of Contract within ten (10) days after the Claim. This response must provide either an admission to the Claim or a detailed denial based on relevant data and calculations. The failure of the Contractor

to provide a proper response within ten (10) days shall result in justification of the Claim by default.

GP-50 NO WAIVER OF LEGAL RIGHTS

The Owner shall not be prevented from recovering costs from the Contractor, Surety, or both due to failure of the Contractor to fulfill all of the obligations under the Contract. If a waiver is provided to the Contractor for a breach of Contract by the Owner, it shall not apply to any other breach of Contract. Final acceptance of the Work shall not prevent the Owner from correcting any measurement, estimate, or certificate. The Contractor shall be liable to the Owner without prejudice to the terms of the Contract or any warranty for latent defects, fraud, or gross negligence.

GP-51 LIABILITY FOR DAMAGES AND INJURIES

To the fullest extent permitted by Laws and Regulations, the Contractor shall indemnify and hold harmless the Owner, Engineer, and their officers, employees, representatives, and/or agents from all suits, actions, claims, costs, losses, demands, and judgments (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) brought because of injuries or damage sustained by a person or property due to the operations of Contractor; due to negligence in safeguarding the Work, or use of unacceptable materials in constructing the Work; or any negligent act, omission, or misconduct of the Contractor; or claims or amounts recovered under the Workmen's Compensation Act or other law, ordinance, order, or decree; any money due the Contractor as considered necessary by the Owner for such purpose may be retained for use of the State or in case no money is due, the performance and payment bond may be held until such suits, actions, claims for injuries or damages have been settled and suitable evidence to that effect furnished to the Owner; except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that adequate Workman's Compensation, Public Liability, and Property Damage Insurance are in effect.

The indemnification obligations of the Contractor shall not extend to the liability of the Owner, Engineer, and their affiliates arising out of the preparation or approval of the Plans, Specifications, maps, opinions, reports, surveys, or Change Orders, or for providing directions or instructions which are the primary cause of the injury or damage.

Should the Owner or Contractor suffer from any injury or damage due to an error, omission, or act of the other party or their legally liable affiliates, a written Claim shall be submitted to the other party within ten (10) days. The Claim shall provide all details regarding the injury or damage, the results of any investigations, and the action to be taken to prevent any reoccurrence.

GP-52 LIABILITY FOR LOSSES BY ACTS OF THE GOVERNMENT

The Owner shall not be liable for any loss or damage suffered by the Contractor arising out of a cessation of Work under this Contract due to any act or order of any local, state, or federal government agency. If this cessation occurs, the Contractor may request an extension of the Contract Time according to the provisions in GP-44.

GP-53 FINAL INSPECTION AND ACCEPTANCE

Whenever the Work provided for, or contemplated by the contract, has been satisfactorily completed, all punch list items completed and the final cleaning up is performed, the Engineer shall be notified in writing that said work is completed and ready for final inspection. The Engineer shall, unless otherwise provided, make the final inspection within a reasonable length of time after the receipt of such notification.

If all construction provided for in the contract is found completed to the Engineer's satisfaction, the inspection shall constitute the final inspection and the Engineer will make recommendation to the Owner for final acceptance and notify the Contractor in writing of this recommendation of acceptance.

The Owner will record the Notice of Acceptance with the Clerk of Court in the Parish(s) in which the Work has been performed. The recording of the Notice of Acceptance shall commence a lien period of not less than forty-five (45) consecutive calendar days, during which period the retainage will be withheld by the Owner. The Owner will provide the Contractor with a copy of the Certificate of Recordation.

GP-54 AS-BUILT DRAWINGS

The Contractor shall submit all originals and copies of the As-Built Drawings to the Engineer for review and acceptance in accordance with the Special Provisions. The As-Built Drawings shall provide complete data for quantities, dimensions, specified performance and design criteria, and similar items which clearly represent the services, materials, and equipment the Contractor has provided. All revision sheets shall be clearly stamped with the words "As-Built".

GP-55 COMPLETION OF CONTRACT

Notwithstanding any other provision of this Contract and all applicable and necessary time delays under Louisiana law, completion of the Contract requires all of the Work to be complete, inspected by the Engineer, accepted by the Owner as recommended by the Engineer, and after final payment is made. After the Contract is complete, the Contractor will then be released from further obligation except as set forth in the Contract Bond and Contractor's Guarantee.

GP-56 CONTRACTOR'S GUARANTEE

The Contractor is obligated to provide a written guarantee to the Owner that all of the Work conforms to the Contract Documents. The Work shall be guaranteed to survive for a minimum period of 1 year after final acceptance, unless otherwise specified in the Technical Specifications.

- a. The guarantee shall include:
 1. A written warranty by the manufacturer for each piece of installed project equipment or apparatus furnished under the Contract.
 2. Any necessary repair or replacement of the warranted equipment during the

guarantee period at no cost to the Owner.

3. Satisfactory operation of installed equipment including, but not limited to, any mechanical and electrical systems furnished and constructed under the Contract during the guarantee period. The Contractor shall repair all equipment which fails due to defective materials or faulty workmanship during the guarantee period. The Contractor shall also be liable for all other ancillary expenses incurred by the Owner due to the failure.
- b. The guarantee shall exclude defects or damage caused by:
1. Abuse or improper modification, maintenance, or operation by anyone other than the Contractor; or
 2. Wear and tear under normal usage.
- c. This obligation by the Contractor shall be absolute. The following actions will not constitute acceptance of non-conformance Work or release the Contractor from obligation to furnish the Work in accordance with the Contract Documents:
1. Observations by the Owner or Engineer; or
 2. Recommendations by the Engineer or payment by the Owner; or
 3. Use of the Work by the Owner; or
 4. Issuance of a notice of acceptance by the Owner pursuant to the provisions of GP-53, or failure to do so; or
 5. Any inspection, test, or approval by others; or
 6. Any correction to non-conforming work by the Owner.

GP-57 DISPUTE RESOLUTION

The parties shall use their best efforts to resolve all disputes in an amicable fashion. Prior to filing suit by either party with respect to any claims, or disputes arising between the parties, the disputes shall be submitted first to non-binding mediation. The mediation shall be conducted in accordance with the Construction Industry Mediation Rules of the American Arbitration Association. If the parties cannot agree to a private mediator, then the mediator shall be selected by the American Arbitration Association, upon the filing of a demand for mediation.

If the dispute is not resolved by mediation within 60 days from the request for mediation, then either party may institute legal proceedings. Any litigation involving the Owner and arising under or related to the Contract or the bidding or award thereof shall be instituted exclusively in the 19th Judicial District Court in and for the Parish of East Baton Rouge, State of Louisiana.

GP-58 PAYMENT

GENERAL PROVISIONS

The Owner hereby agrees to pay to the Contractor as full compensation for all work performed under the contract, and/or supplemental agreements thereto, the monetary value of the actual quantities in the completed work according to the schedule of unit prices and/or lump sum prices set forth in attached bid proposal and/or duly authorized supplements thereto, and made a part of the Contract.

Partial payments under the Contract shall be made at the request of the Contractor not more than once each month, based upon partial estimates agreed to by the Contractor and Engineer and shall be furnished to the Engineer and approved by the Engineer prior to transmittal to the Owner for approval and payment.

A Subcontractor Report (included in the appendices of the Contract Documents) should be submitted by the Contractor with each request for partial payment, to be used for informational purposes only by CPRA.

The partial estimates will be approximately stated, and all partial estimates and payments shall be subject to corrections in the estimate rendered following the discovery of any error in any previous estimates.

The payment of the partial estimate shall be taken as verification that the work has been performed and that its quality is satisfactory, however it will in no way serve as a release to the Contractor for the responsibility of any portions thereof. The work and any particulars relating thereto shall be subject to revision and adjustment by the Engineer and/or the Owner at any time prior to final payment, regardless of any previous action taken.

There shall be reserved from the payments provided for the Contract ten percent (10%) for contracts less than \$500,000 or five percent (5%) for contracts of \$500,000 or more, of the estimates submitted, said sum to constitute a trust fund for the protection of and payment to any person or persons, mechanic, subcontractor or materialmen who shall perform any labor upon such contract, or the doing of said work, and all persons who shall supply such person or persons or subcontractors with provisions and supplies for the carrying on of such work, and shall be withheld for a minimum of forty-five (45) calendar days after final acceptance of the completed contract and filing of the Notice of Acceptance as described in GP-53.

After the expiration of the forty-five (45) calendar day period, the reserve in excess of a sum sufficient to discharge the claims of materialmen and laborers who have filed their claims, together with a sum sufficient to defray the cost of such action and to pay attorneys' fees, shall be paid to the Contractor.

The Contractor shall be responsible for obtaining and furnishing a clear lien and privilege certificate to the Owner at the expiration of the retainage period, and prior to payment of any reserve withheld.

GP-59 PAYMENTS WITHHELD

In addition to the percentage provided for in Section GP-58 of these General Provisions and in accordance with any other provision of this Contract, the Owner may withhold such amounts from any payment as may be necessary to protect himself from loss on account of:

- a) Defective work not remedied;

GENERAL PROVISIONS

- b) Claims filed or reasonable evidence indicating probable filing of claims;
- c) Failure of the Contractor to make payments properly to subcontractors or for material or labor;
- d) Reasonable evidence that the Work will not be completed within the Contract time and that the unpaid balance would not be adequate to cover damages for the anticipated delay;
- e) A reasonable doubt that the contract can be completed within the time period remaining under the contract;
- f) Damage to another contractor;
- g) Failure to submit required reports; or
- h) Modifications of the contract which necessitate the execution of change orders prior to payment of funds.

Furthermore, nothing contained in this Section shall be deemed to limit the right of the Owner to withhold liquidated damages, as stated in the Instructions to Bidders, from any amounts which may be due and owed the Contractor for work performed under the contract.

GP-60 LIENS

Neither the final payment nor any part of the retained percentage shall come due until the Contractor shall deliver to the Owner a complete release of all liens arising out of this contract, or receipts in full in lieu thereof, and, if required by the Owner, an affidavit that so far as he has knowledge or information, the releases and receipts include all labor and material for which a lien could be filed; but if any subcontractor refuses to furnish a release or receipt in full, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against any lien, construction cost, or attorney's fees.

GP-61 EQUAL EMPLOYMENT OPPORTUNITY

The State of Louisiana is an equal opportunity employer, and looks to its Contractor, subcontractors, vendors and suppliers to comply with all applicable laws and regulations.

By submitting the bid proposal and executing the Contract, the Contractor agrees to abide by the requirements of the following as applicable: Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, the Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veterans Readjustment Assistance Act of 1974, Title IX of the Education Amendments of 1972, and the Age Act of 1975, and the Contractor agrees to abide by the requirements of the Americans with Disabilities Act of 1990.

The Contractor agrees not to discriminate in its employment practices, and will render services the Contract, without regard to their race, age, color, religion, sex, national origin, veteran status, political affiliation or disabilities. Any act of discrimination committed by the Contractor, or failure to comply with these statutory obligations when applicable, shall be grounds for termination of the Contract.

GP-62 ANTI-KICKBACK CLAUSE

The Contractor agrees to adhere to the mandate dictated by the Copeland “Anti-Kickback” Act which provides that each contractor or subcontractor shall be prohibited from inducing, by any means, any person employed in the completion of the work, to give up any part of the compensation to which he is otherwise entitled.

GP-63 SUSPENSION/DEBARMENT

Contractor certifies, by signing and submitting any bid that their company, any subcontractors, or principals are not suspended, debarred, or ineligible from entering into contracts with any department or agency of the Federal Government or of the State of Louisiana, or in receipt of notice of proposed debarment or suspension.

Contractor agrees to secure from any contractor(s) and subcontractor(s) for the captioned project, certification that such contractor(s) and subcontractor(s) are not suspended, debarred or declared ineligible from entering into contracts with any department or agency of the Federal Government or of the State of Louisiana, or in receipt of a notice of proposed debarment or suspension.

Contractor shall provide immediate notice to Owner in the event of it or its contractor(s) or any subcontractor(s) being suspended, debarred or declared ineligible by any department or agency of the Federal Government or of the State of Louisiana, or upon receipt of a notice of a proposed debarment or suspension, either prior to or after execution of this Contract.

Upon receipt of notice of suspension, debarment, or declaration that Contractor or its contractor(s) or any subcontractor(s) is/are ineligible to enter into contracts with any department or agency of the Federal Government or of the State of Louisiana, either prior to or after execution of this Contract, Owner reserves the right to review cause for said debarment, suspension, or declaration of ineligibility, and to terminate this Contract pursuant to the terms of GP-45 OWNER’S RIGHT TO TERMINATE CONTRACT FOR CAUSE OR CONVENIENCE, or take such other action it deems appropriate under this Contract.

GP-64 LOUISIANA FIRST HIRING ACT

Contractor shall comply with the Louisiana First Hiring Act (La. R.S. 39:2201-2204), which requires that within ten (10) days of executing the Contract, Contractor shall submit the following information to the Louisiana Workforce Commission:

1. The number and types of jobs anticipated for the Work.
2. The skill level of the jobs anticipated for the Work.
3. The wage or salary range for each job anticipated for the Work.
4. Methods, if any, that the Contractor will use to recruit unemployed persons or person employed in low wage jobs to fill job openings for the Work.

GP-65 PROHIBITION OF DISCRIMINATORY BOYCOTTS OF ISRAEL

By submitting a Bid, the Contractor certifies and agrees that the following information is correct:

In preparing its Bid, the Contractor has considered all proposals submitted from qualified potential subcontractors and suppliers, and has not, in the Bid, selection or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israel-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The Contractor has also no retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. The state reserves the right to reject any Bids if this certification is subsequently determine to be false and to terminate any contract awarded bases on such a false response.

GP-66 PROHIBITION OF DISCRIMINATION OF FIREARM ENTITY AND/OR FIREARM TRADE ASSOCIATION

In accordance with LA. R.S. 39:1602.2, the following applies to any competitive sealed bid, competitive sealed proposals, or contract(s) with a value of \$100,000.00 or more involving a for-profit company with at least fifty full time employees:

Unless otherwise exempted by law, submitting a response to this solicitation or entering into this contract, the Bidder, Proposer, or Contractor certifies the following:

1. The company does not have a practice, policy, guidance, or directive the discriminates against a firearm entity of firearm trade association based solely on the entity's or association's status as a firearm entity or firearm trade association;
2. The company will not discriminate against a firearm entity or firearm trade association during the term of the contract based solely on the entity's or association's status as a firearm entity or firearm trade association.

The state reserves the right to reject the response of the Bidder, Proposer, or Contractor if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response or if the certification is no longer true.

GP-67 DBE, MINORITY OWNED, AND WOMEN'S BUSINESS ENTERPRISES

In accordance with 40 C.F.R. § 33.301 and 2 C.F.R. § 200.321, as applicable, the Contractor agrees to ensure that Disadvantaged Business Enterprises ("DBEs"), the minority business, women's business enterprises, and labor surplus area firms are used when possible and have the maximum opportunity to participate in the performance of a resulting contract and any subcontracts for supplies, equipment, constructions or services that may be let. In this regard, if and as required by an applicable law or regulation, the Contractor shall take all necessary steps to ensure that DBEs, minority businesses, women's business enterprises, and labor surplus area firms have the maximum opportunity to compete for and perform services relating

to a resulting Contract.

END OF PART I - GENERAL PROVISIONS

PART II SPECIAL PROVISIONS

SP-1 LOCATION OF WORK

The Project Site is located in St. Tammany Parish, Louisiana, in the Pontchartrain Hydrologic Basin. The Project consists of seven (7) Marsh Creation Areas spanning approximately six (6) miles along the north shore of Lake Pontchartrain between Mandeville and Lacombe. A majority of the Project Site is located within Fontainebleau State Park, the Big Branch National Wildlife Refuge, and the St. Tammany Wildlife Refuge. The Project Site is bordered to the southeast by Bayou Lacombe and the previously constructed Goose Point / Point Platte Marsh Creation Project (PO-0033). To the west, the project Site is bordered by the facilities of Fontainebleau State Park. The Marsh Creation Borrow Area is located in Lake Pontchartrain, south and west of the Marsh Creation Areas. Approximate coordinates for the center of the Marsh Creation Areas are 30°18'46.03"N, 89°59'42.42"W (NAD 83), and approximate coordinates of the Marsh Creation Borrow Area are 30°18'14.55"N, 90°01'3.67"W (NAD 83). The Marsh Creation Areas and the Marsh Creation Borrow Area are only accessible by boat.

SP-2 WORK TO BE DONE

The Contractor shall provide all labor, Materials, and Equipment necessary to perform the Work. The Work shall be performed in accordance with these Specifications and in conformity to the lines, grades, and elevations shown on the Plans or as directed by the Engineer. Quantity calculations, layouts, shop drawings, and construction sequencing of the Work shall be provided in the Work Plan. The Equipment used for the Work shall be operated within the boundaries of the Project Site and away from delineated No Work and Restricted Work Zones, existing vegetated wetlands, or any other sensitive areas. The Contractor shall be responsible for returning all disturbed wetlands to pre-construction conditions at no additional expense to the Owner.

2.1 Base Bid:

The Work associated with the Base Bid is listed in the Louisiana Uniform Public Works Bid Form provided with these Specifications. Additional details on these construction bid items are listed in the Technical Specifications. The following are major takes of the Work associated with the Base Bid.

- 2.1.1 Mobilization and Demobilization: The Contractor shall mobilize and demobilize all personnel, Equipment, supplies, and incidentals necessary to complete the Work to the Project Site. Mobilization also includes the establishment of offices, buildings, or other facilities necessary for the Work.
- 2.1.2 Site Examination: The Contractor shall examine the Project Site and data included in the Appendices of these Specifications to make determinations of the character of the material to be dredged, the Equipment Access and Dredge Pipeline Corridor alignments, and the condition of the proposed Marsh Creation Areas. All landowners shall be notified prior to accessing the Project Site in accordance with SP-10. Material such as logs, stumps, snags, tires, scrap, debris, concrete piles, and other obstructions may be encountered within the Project Site. If these materials are encountered, the Engineer will determine if they shall be dispersed within or removed from the Project Site. No separate payment for removal and disposal of these obstructions shall be made. Additionally, geotechnical analysis of the Marsh Creation Borrow Area

indicates the presence of shells. Materials including shells and shall be dispersed within the Marsh Creation Areas and covered with dredge material in accordance with these Specifications and as shown on the Plans. No consideration shall be given to any claims for additional payments based on the failure of the Contractor to inspect the Project Site and data provided in the Appendices of these Specifications.

- 2.1.3 Surveying: Prior to construction, a Pre-Construction Survey shall be performed on the Marsh Creation Borrow Area, Marsh Creation Areas, Earthen Containment Dikes, Earthen Containment Dike Borrow Areas, Adjacent Waterways, Dredge Pipeline Corridors and Equipment Access Corridors (and associated crossings), Grade Stakes, and Settlement Plates. During construction, Process Surveys shall be performed for Acceptance and payment as per TS-200. After construction is complete, the Contractor shall perform an As-Built Survey for Acceptance of the Work.
- 2.1.4 Locating Pipelines, Utilities, and Existing Infrastructure: The Contractor shall be responsible for investigating, locating, and protecting all existing facilities, structures, high-voltage power lines, pipelines, and other utilities on, above, or under the surface of the Project Site. The Owner shall not be held responsible for damage to the Contractor's equipment, employees, subcontractors, adjacent property owners, or anyone else connected with this project due to encountering objects above and below the water surface and existing ground.

Existing infrastructure, where indicated on the Plans, is shown only to the extent such information was made available to, or discovered by, the Engineer during preparation of the Plans. There is no guarantee as to the accuracy or completeness of such information, and all responsibility for the accuracy and completeness is expressly disclaimed. If the Contractor fails to discover an underground installation and damages the same, the Contractor shall be responsible for the cost of the repair of the infrastructure plus the cost of environmental damage and clean up.
- 2.1.5 Navigation Aids: The Contractor shall contact the Eighth Coastal Region District of the United States Coast Guard (USCG) and determine the type and location of aids to navigation that are required to be installed or removed in order to safely perform the Work.
- 2.1.6 Dredge Pipeline Corridor: A hydraulic dredge pipeline, which facilitates the transfer of dredge material from the Marsh Creation Borrow Area to the Marsh Creation Areas, shall be installed along the proposed Dredge Pipeline Corridor shown on the Plans. This corridor includes crossing submerged aquatic vegetation (SAV) within Lake Pontchartrain, as well as the shoreline of Lake Pontchartrain. The Contractor shall provide any proposed modifications to the Dredge Pipeline Corridor in the Work Plan for approval by the Engineer.
- 2.1.7 Daily Bird Abatement: The Contractor shall monitor and abate all nesting birds within the Work Areas and within a 1,000' (one-thousand foot) buffer during bird nesting season.
- 2.1.8 Grade Stakes: Grade stakes shall be installed in the Marsh Creation Areas as required in these Specifications and approved in the Work Plan.

- 2.1.9 Settlement Plates: Settlement Plates (SPs) shall be installed in the Marsh Creation Areas as shown on the Plans.
 - 2.1.10 Earthen Containment Dikes: The Earthen Containment Dikes (ECDs) shall be constructed from in-situ soils in order to create perimeter containment for the Marsh Creation Areas as shown on the Plans.
 - 2.1.11 Earthen Containment Dike Degradation: Portions of the Earthen Containment Dikes (ECDs) within each Marsh Creation Area shall be degraded as shown on the Plans.
 - 2.1.12 Marsh Creation Areas: Fill material shall be hydraulically dredged from the Marsh Creation Borrow Area and placed in the Marsh Creation Areas (MCAs) as shown on the Plans.
- 2.2 Alternate Bid No. 1
- An Alternate Bid is defined as the portion of the Work that is priced separately to be included in the Work if accepted by the Owner and included in the Award of the Contract. The Work associated with Alternate Bid No. 1 is listed in the Louisiana Uniform Public Works Bid Form provided with these Specifications.
- The Contractor will be responsible for: (1) Coordination related to requirements among sections of Specifications, as required, that relate to the Alternate Bid item, (2) Include as part of each Alternate Bid item labor, Equipment, and Materials necessary to complete the construction of the item, and (3) Coordination of Alternate Bid Item Work with adjacent Work and modify and/or adjust as necessary to ensure all Work is integrated. The following are major tasks of Work associated with Alternate Bid No. 1, which adds MCA-3 (32 acres) to the project:
- 2.2.1 Mobilization and Demobilization: The Contractor shall mobilize and demobilize all personnel, Equipment, supplies, and incidentals necessary to complete the Work associated with MCA-3.
 - 2.2.2 Surveying: Additional performance and administration of Construction surveys for MCA-3.
 - 2.2.3 Daily Bird Abatement: Additional monitoring and abatement of all nesting birds within MCA-3 and within a 1,000' (one-thousand foot) buffer during bird nesting season.
 - 2.2.4 Grade Stakes: Installation of Grade Stakes associated with MCA-3.
 - 2.2.5 Settlement Plates: Installation of Settlement Plates associated with MCA-3.
 - 2.2.6 Earthen Containment Dikes: Construction of Earthen Containment Dikes associated with the boundary of MCA-3.
 - 2.2.7 Earthen Containment Dike Degradation: Degradation of portions of Earthen Containment Dikes associated with MCA-3 as shown on the Plans.

- 2.2.8 Marsh Creation Area: Fill material shall be hydraulically dredged from the Marsh Creation Borrow Area and placed within the boundary of MCA-3 as shown on the Plans.

2.3 Alternate Bid No. 2

An Alternate Bid is defined as the portion of the Work that is priced separately to be included in the Work if accepted by the Owner and included in the Award of the Contract. The Work associated with Alternate Bid No. 2 is listed in the Louisiana Uniform Public Works Bid Form provided with these Specifications.

The Contractor will be responsible for: (1) Coordination related to requirements among sections of Specifications, as required, that relate to the Alternate Bid item, (2) Include as part of each Alternate Bid item labor, Equipment, and Materials necessary to complete the construction of the item, and (3) Coordination of Alternate Bid Item Work with adjacent Work and modify and/or adjust as necessary to ensure all Work is integrated. The following are major tasks of Work associated with Alternate Bid No. 2, which adds MCA-5 (59 acres) to the project:

- 2.3.1 Mobilization and Demobilization: The Contractor shall mobilize and demobilize all personnel, Equipment, supplies, and incidentals necessary to complete the Work associated with MCA-5.
- 2.3.2 Surveying: Additional performance and administration of Construction surveys for MCA-5.
- 2.3.3 Daily Bird Abatement: Additional monitoring and abatement of all nesting birds within MCA-5 and within a 1,000' (one-thousand foot) buffer during bird nesting season.
- 2.3.4 Grade Stakes: Installation of Grade Stakes associated with MCA-5.
- 2.3.5 Settlement Plates: Installation of Settlement Plates associated with MCA-5.
- 2.3.6 Earthen Containment Dikes: Construction of Earthen Containment Dikes associated with the boundary of MCA-5.
- 2.3.7 Earthen Containment Dike Degradation: Degradation of portions of Earthen Containment Dikes associated with MCA-5 as shown on the Plans.
- 2.3.8 Marsh Creation Area: Fill material shall be hydraulically dredged from the Marsh Creation Borrow Area and placed within the boundary of MCA-5 as shown on the Plans.

SP-3 CONTRACT MILESTONES

Milestone	Date
Bid Advertisement	As advertised.
Non-Mandatory Pre-Bid Conference and Non-Mandatory Site Visit (GP-5)	Provided in Advertisement for Bids.

Milestone	Date
Bid Opening	Provided in Advertisement for Bids.
Effective Date of Contract	Stated in Contract.
Start of Contract Time	Stated in Notice to Proceed.
Pre-Construction Conference (GP-14)	Scheduled by the Engineer after the Notice to Proceed is issued.
Final Inspection (GP-53)	Upon completion of the Work.
End of Contract Time	Four hundred sixty (460) consecutive calendar days from the Notice to Proceed (additional thirty (30) consecutive calendar days for Alternate Bid No. 1; additional thirty (30) consecutive calendar days for Alternate Bid No. 2).

SP-4 DELIVERABLES

Owner and Engineer are not responsible for the accuracy of information prepared or otherwise provided by Contractor in deliverables. Owner's and Engineer's review of submittals is only for general conformance with the design concept and the information given in the construction documents. Owner's and Engineer's review, and acceptance of submittals, does not relieve Contractor from compliance with the requirements of the Contract Documents. Refer to individual technical specifications for Engineer's role in reviewing specific submittals.

Incomplete submittals and submittals with inadequate data will be rejected. All construction submittals shall be provided electronically via email or other method approved by Owner.

4.1 Prior to Construction

4.1.1 The Contractor shall submit the following documents to the Engineer prior to the Pre-Construction Conference specified in GP-14:

4.1.1.1 Work Plan as specified in GP-8 and SP-7, by the date required in SP-4.4; and,

4.1.1.2 Progress Schedule as specified in GP-9.

4.1.2 The Contractor shall provide the following information to the Engineer at the Pre-Construction Conference specified in GP-14:

4.1.2.1 Updates to the Work Plan and Progress Schedule based on comments from the Engineer; and,

4.1.2.2 A communication plan, which specifies the Contractor chain of command, Owner, Engineer, and Resident Project Representative(s) points of contact, corresponding contact information, and procedures for routine and emergency notification.

4.1.3 Records of communication, including any permits, between the Contractor and private property owners, pipeline and utility owners/operators, government agencies, etc.;

4.1.4 The Contractor shall submit a Pre-Construction survey for a project feature a minimum of fourteen (14) working days prior to the start of Construction of that respective

feature. This survey shall be conducted as described in Section TS-200.

4.2 During Construction

The Contractor shall provide the following information to the Engineer during construction upon request or as specified in these provisions:

- 4.2.1 Updates to the Work Plan as needed;
- 4.2.2 The results of all surveys and calculations as specified in TS-200;
- 4.2.3 Progress Schedule as specified in GP-9;
- 4.2.4 Daily Progress Reports as specified in GP-10 and throughout the Technical Specifications;
- 4.2.5 Copies of all inspection and monitoring reports;
- 4.2.6 Copies of all pipeline and utility owner/operator Agreements/Letters of No Objection/Letters of Consent, and/or any other communications with pipeline and utility Owners/Operators;
- 4.2.7 Records of communication, including any permits, between Contractors and private property owners, pipeline and utility owners/operators, government agencies, etc.;
- 4.2.8 All Change Orders, Field Orders, Claims, Clarifications, and Amendments;
- 4.2.9 Results of any materials testing;
- 4.2.10 Copies of all delivery slips, which shall include the source of construction materials, date of delivery, exact quantity, and size of materials delivered with each shipment to the Project Site; and,
- 4.2.11 The Contractor shall contact the Engineer a minimum of five (5) working days prior to the anticipated completion of the Work in order to schedule the Final Inspection. The Contractor shall also submit a Written Notice of the Completion of Work and a draft version of the As-Built Drawings.

4.3 Post Construction

The following documents shall be submitted to the Engineer after completion and Acceptance of the Work:

- 4.3.1 As-Built Drawings (as specified in GP-54 and TS-200) with revisions such as field or Change Orders shown in red such that revisions are easily distinguishable from the original design; and,
- 4.3.2 Copy of the Contract Documents at the site in order and marked to show all Field and Change Orders made by the Owner.

4.4 Summary of Project Submittals

The following table is a summary of submittals required of the Contractor as part of this section and other sections of these Specifications.

Submittal	Recipient	Date Due
Questions on Bid Documents (GP-5 & SP-5)	CPRA	Provided in Instructions to Bidders
List of all Subcontractors (GP-19)	Engineer	Prior to awarding any subcontracts
Work Plan (GP-8 & SP-7)	Engineer	Fourteen (14) days prior to Pre-Construction Conference
Progress Schedule (GP-9)	Engineer	At least fourteen (14) days prior to starting construction, monthly thereafter
Daily Progress Report (GP-10)	Resident Project Representative, CPRA Engineer, CPRA Project Manager, and CPRA Construction Manager (contact info to be provided at pre-construction conference)	By 12:00 PM the following day, from mobilization to demobilization
USCG Notice to Mariners (SP-17)	USCG; Submit copy to Engineer	Thirty (30) days prior to mobilization of the dredge and dredge pipeline
Copy of Navigational Aids Permits (TS-150)	Engineer	Seven (7) days prior to any excavation or hydraulic dredging
Progress Meetings and Reports (GP-13)	Engineer and Resident Project Representative	Bi-weekly or as determined at the Pre-Construction Conference
Copies of Pipeline/Utility Agreements/LONOs/Letters of Consent and any other communications with pipeline/utility Owners/Operators (SP-10)	Engineer	Prior to any work within 500 feet (500') of the associated pipeline or utility
Pre-Construction Survey (TS-200)	Engineer	Fourteen (14) working days prior to anticipated start of Construction
Process Survey (TS-200)	Engineer	Within five (5) working days after notification that field data collection for each Process Survey is complete

Submittal	Recipient	Date Due
As-Built Survey (TS-200)	Engineer	Draft version due five (5) working days prior to the anticipated completion of the Work. Final version due fourteen (14) working days after Final Inspection
Written Notice of Completion of Work (GP-53)	Engineer	Five (5) working days prior to the anticipated completion of the Work.

SP-5 CONTACT INFORMATION

Prior to the Bid opening date, the Contractor shall send all questions and requests for clarification or interpretation of the Bid Documents in writing to the attention of Sharissa Felder of the Coastal Protection and Restoration Authority. The address and contact information is as follows:

Coastal Protection and Restoration Authority (CPRA)

150 Terrace Avenue
Baton Rouge, LA 70802
Attn: Sharissa Felder
Phone: (225) 342-0811
Fax: (225) 800-5599
Email: cpra.bidding@la.gov

After execution of the contract between Owner and Contractor, the successful Contractor shall contact the Engineer concerning bid documentation or questions. The addresses and contact information for the Construction Manager and Engineer are listed as follows:

CPRA Construction Manager

Connor Hannan, P.E.
CERM Building, Suite 309
2045 Lakeshore Drive
New Orleans, LA 70122
Phone: 504-280-4070
Fax: 504-280-4066
E-mail: connor.hannan@la.gov

CPRA Project Engineer

Adam D. Linson, P.E.
150 Terrace Ave.
Baton Rouge, LA 70802
Phone: (225) 342-4485
Fax: (225) 800-5596
E-mail: adam.linson@la.gov

The Owner and Engineer shall submit all written Claims, Field Orders, Change Orders and all other documentation to the Contractor at the address indicated on the Bid.

SP-6 INSURANCE AND BONDS

The Contractor shall purchase and maintain without interruption, for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by the Contractor, its agents, representatives, employees or subcontractors. The duration of the contract shall be from the inception of the contract until the date of final payment.

6.1 Minimum Scope and Limits of Insurance

6.1.1 Worker's Compensation

Worker's Compensation insurance shall be in compliance with the Worker's Compensation Law of the State of Louisiana. Employers Liability is included with a minimum limit of \$500,000 per accident/per disease/per employee. If Work is to be performed over water and involves maritime exposure, applicable LHWCA, Jones Act or other maritime Law coverage shall be included and the Employers Liability limit increased to a minimum of \$1,000,000. A.M. Best's insurance company rating requirement may be waived for Worker's compensation coverage only.

6.1.2 Commercial General Liability

Commercial General Liability insurance, including Personal and Advertising Injury Liability and Products and Completed Operations Liability, shall have a minimum limit per occurrence based on the project value. The Insurance Services Office (ISO) Commercial General Liability occurrence coverage form CG 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. A Claims-made form is unacceptable.

The aggregate loss limit must apply to each project. ISO form CG 25 03 (current form approved for use in Louisiana), or equivalent, shall also be submitted. The State project number, including part number, and project name shall be included on this endorsement.

COMBINED SINGLE LIMIT (CSL) PER OCCURRENCE

The required minimum combined single limit amount of insurance shall be as provided below:

<u>Initial Contract Amount</u>	<u>Minimum Insurance</u>
Up to \$1,000,000	\$1,000,000
From \$1,000,001 to \$2,000,000	\$2,000,000
Over \$2,000,000	\$5,000,000

6.1.3 Automobile and Watercraft Liability

Automobile Liability Insurance and Watercraft Liability Insurance shall have a minimum combined single limit per occurrence of \$1,000,000. ISO form number CA 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. This insurance shall include third-party bodily injury and property damage liability for owned, hired and non-owned automobiles and/or watercraft. If any non-licensed motor vehicles and/or watercraft are engaged in operations within the terms of the contract on the site of the work to be performed thereunder, such insurance shall cover the use of any such vehicles.

NOTE: If the Contractor does not own an automobile and/or watercraft and such vehicles are utilized in the execution of the Contract, then hired and non-owned coverage is acceptable. If an automobile and/or watercraft is not utilized in the

execution of the contract, then automobile and/or watercraft coverage is not required.

6.1.4 Excess Umbrella

Excess Umbrella Insurance may be used to meet the minimum requirements for General Liability, Automobile Liability, and Watercraft Liability only.

6.1.5 Pollution Liability (*required when asbestos or other hazardous material abatement is included in the contract*)

Pollution Liability insurance, including gradual release as well as sudden and accidental, shall have a minimum limit of not less than \$1,000,000 per claim. A Claims-made form will be acceptable. A policy period inception date of no later than the first day of anticipated Work under this contract and an expiration date of no earlier than 30 days after anticipated completion of all Work under the contract shall be provided. There shall be an extended reporting period of at least 24 months, with full reinstatement of limits, from the expiration date of the policy. The policy shall not be cancelled for any reason, except non-payment of premium.

6.1.6 Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and accepted by the Owner. The Contractor shall be responsible for all deductibles and self-insured retentions.

6.2 Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

6.2.1 Worker's Compensation and Employers Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Owner, its officers, agents, employees and volunteers for losses arising from Work performed by the Contractor for the Owner.

6.2.2 General Liability Coverage

The Owner, its officers, agents, employees and volunteers are to be added as additional insureds as respects liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor, premises owned, occupied or used by the Contractor. ISO Form CG 20 10 (current form approved for use in Louisiana), or equivalent, is to be used.

The Contractor's insurance shall be primary as respects the Owner, its officers, agents, employees and volunteers. The coverage shall contain no special limitations on the scope of protection afforded to the Owner, its officers, officials, employees or volunteers. Any insurance or self-insurance maintained by the Owner shall be excess and non-contributory of the Contractor's insurance.

The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the policy limits.

6.2.3 All Coverages

Coverage shall not be canceled, suspended, or voided by either party (the Contractor or the insurer) or reduced in coverage or in limits except after 30 days written notice has been given to the Owner. Ten-day written notice of cancellation is acceptable for non-payment of premium. Notifications shall comply with the standard cancellation provisions in the Contractor's policy.

Neither the Acceptance of the completed Work nor the payment thereof shall release the Contractor from the obligations of the insurance requirements or indemnification agreement.

The insurance companies issuing the policies shall have no recourse against the Owner for payment of premiums or for assessments under any form of the policies.

Any failure of the Contractor to comply with reporting provisions of the policy shall not affect coverage provided to the Owner, its officers, agents, employees and volunteers.

6.2.4 Acceptability of Insurers

All required insurance shall be provided by a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located. Insurance shall be placed with insurers with an A.M. Best's rating of **A-:VI or higher**. This rating requirement may be waived for Worker's compensation coverage only.

If at any time an insurer issuing any such policy does not meet the minimum A.M. Best rating, the Contractor shall obtain a policy with an insurer that meets the A.M. Best rating and shall submit another certificate of insurance as required in the Contract.

6.2.5 Verification of Coverage

Contractor shall furnish the Owner with Certificates of Insurance reflecting proof of required coverage. The Certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The Certificates are to be received and approved by the Owner before Work commences and upon any contract renewal thereafter.

The Certificate Holder must be listed as follows:

State of Louisiana
Coastal Protection and Restoration Authority
150 Terrace Avenue
Baton Rouge, LA 70802
Attn: Project # PO-0181

In addition to the Certificates, Contractor shall submit the declarations page and the cancellation provision endorsement for each insurance policy. The Owner reserves the right to request complete certified copies of all required insurance policies at any time.

Upon failure of the Contractor to furnish, deliver and maintain such insurance as above

provided, this contract, at the election of the Owner, may be suspended, discontinued or terminated. Failure of the Contractor to purchase and/or maintain any required insurance shall not relieve the Contractor from any liability or indemnification under the Contract.

If the Contractor does not meet the insurance requirements at policy renewal, at the option of the Owner, payment to the Contractor may be withheld until the requirements have been met, OR the Owner may pay the renewal premium and withhold such payment from any monies due the Contractor, OR the contract may be suspended or terminated for cause.

6.2.6 Subcontractors

Contractor shall include all Subcontractors as insureds under its policies OR shall be responsible for verifying and maintaining the certificates provided by each Subcontractor. Subcontractors shall be subject to all of the requirements stated herein. The Owner reserves the right to request copies of Subcontractor's certificates at any time.

If Contractor does not verify Subcontractors' insurance as described above, Owner has the right to withhold payments to the Contractor until the requirements have been met.

6.2.7 Worker's Compensation Indemnity

In the event Contractor is not required to provide or elects not to provide Worker's compensation coverage, the parties hereby agree the Contractor, its Owners, agents and employees will have no cause of action against, and will not assert a claim against, the State of Louisiana, its departments, agencies, agents and employees as an employer, whether pursuant to the Louisiana Worker's Compensation Act or otherwise, under any circumstance. The parties also hereby agree that the State of Louisiana, its departments, agencies, agents and employees shall in no circumstance be, or considered as, the employer or statutory employer of Contractor, its Owners, agents and employees. The parties further agree that Contractor is a wholly independent Contractor and is exclusively responsible for its employees, Owners, and agents. Contractor hereby agrees to protect, defend, indemnify and hold the State of Louisiana, its departments, agencies, agents and employees harmless from any such assertion or claim that may arise from the performance of this contract.

6.2.8 Indemnification/Hold Harmless Agreement

Contractor agrees to protect, defend, indemnify, save, and hold harmless, the State of Louisiana, all State Departments, Agencies, Boards and Commissions, its officers, agents, servants, employees and volunteers, from and against any and all Claims, damages, expenses and liability arising out of injury or death to any person or the damage, loss or destruction of any property which may occur, or in any way grow out of, any act or omission of Contractor, its agents, servants and employees, or any and all costs, expenses and/or attorney fees incurred by Contractor as a result of any Claims, demands, suits or causes of action, except those Claims, demands, suits or causes of action arising out of the negligence of the State of Louisiana, all State Departments, Agencies, Boards, Commissions, its officers, agents, servants, employees and volunteers.

Contractor agrees to investigate, handle, respond to, provide defense for and defend any such Claims, demands, suits or causes of action at its sole expense and agrees to bear all other costs and expenses related thereto, even if the Claims, demands, suits, or causes of action are groundless, false or fraudulent.

SP-7 WORK PLAN SUPPLEMENTAL

The following items from GP-8 shall include the information listed below:

- 7.1 The personnel, material, subcontractors, fabricators, suppliers, types of equipment, and equipment staging areas the Contractor proposed to use for construction (GP-8f):
 - 7.1.1 Layout and schedule of any proposed additional or alternate Equipment Access Corridors which may be approved by the Engineer on an as-needed basis (TS-100.4.1);
 - 7.1.2 Layout and schedule of proposed staging areas which may be approved by the Engineer on an as-needed basis (TS-100.4.1);
 - 7.1.3 Location and details of any vessel-shore transfers (SP-16);
 - 7.1.4 Hydraulic Dredge Data Sheet in Appendix I (TS-100.3.1);
 - 7.1.5 Equipment Data Sheet in Appendix J for all proposed equipment other than the hydraulic dredge (TS-100.4.3);
 - 7.1.6 List of subcontractors; and,
 - 7.1.7 Any other details of mobilization and demobilization of personnel, materials, and equipment to the Project Site.
- 7.2 Survey layout and stakeout (Survey Plan) (GP-8h and TS-200):
 - 7.2.1 Layout, schedule, and sequencing for all survey field work and deliverables (TS-200.1);
 - 7.2.2 Field equipment, methodology, and software to be used for survey data collection, post-processing, and calculations of quantities (TS-200.1); and,
 - 7.2.3 Earthen Containment Dike Pre-Construction stakeout plan (TS-200.8.9.1).

The following items shall be included in the Work Plan in addition to those required by GP-8:

- 7.3 Any proposed changes to the layout of the Work;
- 7.4 Existing Pipeline Plan:
 - 7.4.1 Pipeline emergency response plan (SP-10.2.3);
 - 7.4.2 Layout and materials for the installation of protective measures at all equipment and pipeline/utility crossings (SP-10.2.4 and SP-10.3.4); and,

- 7.4.3 Proposed methods for marking existing infrastructure (SP-10.2.6, SP-10.3.6, and TS-200.8.3).
- 7.5 Earthen Containment Dike Work Plan:
 - 7.5.1 Layout, schedule, and sequencing for construction of the Earthen Containment Dikes (TS-300.1);
 - 7.5.2 Earthen Containment Dike breach repair procedures and communications protocol (TS-300.8);
 - 7.5.3 Layout, schedule, and sequencing for degradation/gapping of Earthen Containment Dikes (TS-300.9); and,
 - 7.5.4 Mechanical excavator monitoring plan (TS-300.5.5).
- 7.6 Dredge Pipeline Corridor Work Plan:
 - 7.6.1 Layout, schedule, and sequencing for installing and removing all portions (trunk and laterals) of the dredge pipeline. This information shall include the type, diameter and length of the dredge pipeline, and plans for all dredge pipeline crossings including location and details for any permanent or temporary pipeline markers (TS-100.5);
 - 7.6.2 Layout and materials for the installation of protective measures along the Lake Pontchartrain shoreline crossing (TS-100.5.3.2) and proposed methods for restoring the shoreline crossings to pre-project conditions following Acceptance of all Marsh Creation Areas; and,
 - 7.6.3 Layout of any additional or alternate Dredge Pipeline Corridors (other than what is provided), which may be approved by the Engineer on an as-needed basis (TS-100.5).
- 7.7 Hydraulic Dredge Work Plan:
 - 7.7.1 Equipment protection plan for the hydraulic dredge (TS-100.3);
 - 7.7.2 Layout of booster pump area(s) (TS-100.4.2);
 - 7.7.3 Dredging Plan for dredging the Marsh Creation Borrow Area (See Appendix L for template) (TS-400.2); and,
 - 7.7.4 Proposed dredge location equipment and tide correction methods (TS-400.3.5).
- 7.8 Marsh Creation Area Work Plan:
 - 7.8.1 Layout, schedule, and sequencing for dredged material placement into the Marsh Creation Areas (TS-400.4.2);
 - 7.8.2 Dredge pipeline outfall management plan (TS-400.4.4);
 - 7.8.3 Layout, schedule, and sequencing for dewatering the Marsh Creation Areas, including proposed locations of the dewatering weirs (TS-TS-510); and,

7.8.4 Turbidity Monitoring and Response Plan (TS-400.5).

The Work Plan shall be formatted as follows:

- Section 1: Typical Report Form for the Bi-Weekly Progress Meeting (GP-8a)
- Section 2: Typical Form for Daily Progress Reports (GP-8b, Appendix K)
- Section 3: Hurricane and Severe Storm Plan (GP-8c, GP-11)
- Section 4: Site-Specific Health and Safety Plan (GP-8d, GP-12)
- Section 5: Delivery Method and Sources of Construction Materials (GP-8e)
- Section 6: Personnel, Materials, Subcontractors, Fabricators, Suppliers, and Equipment (GP-8f, SP-7.1)
- Section 7: Shop Drawings, Test Results, and Sample Submittals (GP-8g)
- Section 8: Survey Plan (GP-8h, SP-7.2)
- Section 9: Proposed Changes to Layout of Work (SP-7.3)
- Section 10: Existing Pipeline Plan (SP-7.4)
- Section 11: Earthen Containment Dike Work Plan (SP-7.5)
- Section 12: Dredge Pipeline Corridor Work Plan (SP-7.6)
- Section 13: Hydraulic Dredge Work Plan (SP-7.7)
- Section 14: Marsh Creation Area Work Plan (SP-7.8)
- Section 15: Project Schedule (GP-8, GP-9)

The Work Plan shall be submitted to the Engineer prior to the Pre-Construction Conference by the date provided in SP-4. The Engineer shall review the Work Plan and have the Contractor make any necessary revisions prior to acceptance of the Work Plan.

SP-8 FAILURE TO COMPLETE ON TIME

For each day the Work remains incomplete beyond the Contract Time, as specified in SP-3, or Extension of Contract Time, as specified in GP-44, the sum of five thousand dollars (\$5,000) per calendar day will be deducted from any money due to the Contractor as liquidated damages. The Contractor and Surety shall be liable for any liquidated damages that are in excess of the amount due the Contractor.

SP-9 TRANSPORTATION AND FACILITIES

The following provision outlines the requirements for transportation and facilities to be provided by the Contractor. In the event that the Contractor refuses, neglects, or delays

compliance with the requirements of this provision, the Owner may obtain and use another necessary office, boat(s), and/or boarding facility/facilities at the expense of the Contractor. The cost for providing and furnishing the following items shall be included in the contract lump sum price for Bid Item No. 1, "Mobilization and Demobilization."

9.1 Transportation

The Contractor shall provide a safe and reasonable means of transportation to and from the staging area(s) and Project Site for the Engineer, Construction Manager, Resident Project Representative, and Federal Sponsor. The schedule and pickup location shall be arranged by the Owner with the Contractor prior to Mobilization.

The Contractor shall provide the Engineer, Construction Manager, Resident Project Representative, Federal Sponsor, and other representatives from the State and Federal Government daily access to a boat, an airboat, and a track-mounted vehicle or equivalent, as necessary, capable of access to the entire Work area, to properly inspect the various project features during the duration of construction activities. The boat and airboat shall have the following features:

- Four (4) passenger capacity;
- Capable of maintaining 25 knots (29 mph)
- Coast Guard Certified;
- Operable marine radio, and;
- All safety equipment required by the Coast Guard for the size and type of that boat.

The Contractor shall supply an operator and fuel and shall maintain the boat and airboat. All mechanical malfunctions shall be repaired within twelve (12) hours.

9.2 Office for Owner

The Contractor shall provide an office for the Engineer and Resident Project Representative at the Project Site. This office shall be for the sole use of the Engineer or Resident Project Representative, suitably sized, and provided with lighting, heat, air conditioning, sufficient electrical outlets for a computer workstation, and a high-speed internet connection. The office furnishings shall include a work table, two chairs, and locking doors for security purposes.

9.3 Boarding Facilities

During Mobilization, construction layout, construction, Demobilization, and until Final Inspection and Acceptance, should the Contractor utilize a boat, quarters barge, or quarters and stay at the project area overnight, then the Contractor may be required to provide room and board for the Engineer and Resident Project Representative.

SP-10 LANDOWNER, PIPELINE OWNER/OPERATOR, AND UTILITY, AND EXISTING INFRASTRUCTURE REQUIREMENTS

10.1 Landowner Requirements

10.1.1 General

The Owner has executed temporary landowner easement, servitude, or right-of-way agreements required to perform the Work at the Project Site. Copies of these agreements with landowners (Grantors) are included in the Land Rights Memorandum in Appendix D. The Contractor shall abide by the stipulations set forth by the executed agreements.

The Contractor shall add all Grantors as additional insured. It is also agreed and understood that the Contractor will at all times indemnify and hold harmless all landowners from and against any and all claims, demands, causes of action, judgments, liabilities, and expense of every nature, including attorney's fees, by reason of personal injury, death (including but not limited to injuries to and death of employees of the landowners and the Contractor's employees) or damage to property, (including environmental) which arises out of, results from, or is in any manner related to, directly or indirectly, any operations or acts hereunder, or to the exercise of your rights hereunder, or to your presence upon or use of the landowners' premises above referred to, or to the use or existence of your facilities on such premises. The indemnity provisions of this paragraph shall not apply if any such injury, death, damage, liability claim, or cause of action is caused by the negligence of the landowners, their employees, agents, or representatives.

10.1.2 Landowner Notifications

The Contractor shall notify all Grantors at least fourteen (14) working days prior to initiation of access to the said lands for the purpose of work planning, implementing, constructing, operating, modifying, monitoring and maintaining the Project Site, or as otherwise stipulated in the executed agreements. The Contractor shall abide by the stipulations set forth by the respective landowners provided in the Land Rights Memorandum in Appendix D.

10.2 Pipeline Owner/Operator Requirements

The following sections supersede the first paragraph of GP-25.

10.2.1 General

Pipelines may exist within the Project Site and may include, but may not be limited to, flow lines, pipelines, and associated pipeline facilities. Generally, "pipelines" are larger diameter, long-distance, high-pressure lines, and are subject to federal regulations. Pipelines typically range in size from 6 inches (6") to 48 inches (48") in diameter. "Flow lines" or "production lines" are generally smaller, short-distance, or lower-pressure lines, and typically range from 2 inches (2") to 6 inches (6") in diameter. These lines are typically located within the coastal zone, are primarily underwater, and may contain oil, gas, water, or other substances. For clarity, both flow

lines and pipelines are designated as pipelines on the Plans and in the Specifications, and do not include oil and gas operations that might commence at some future date.

The Owner has performed a two-part pipeline investigation in accordance with the American Society of Civil Engineers, CI/ASCE 38-02, “Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data”. The initial investigation consisted of reviewing Geographic Information System (GIS) pipeline location records meeting CI/ASCE 38-02 Quality Level D. No pipelines were discovered during this review. Upon completion of this review, the Owner conducted magnetometer surveys meeting Quality Level B. It was the intent of the Owner to perform probings of pipeline locations identified from the magnetometer survey to evaluate pipeline horizontal and vertical positions, however no pipelines were discovered during the magnetometer survey (refer to Appendix G).

The Contractor shall provide an independent magnetometer survey prior to Construction as per TS-200. The verification of pipeline locations, horizontal and vertical positions, and vessel draft of the Contractor’s equipment, is essential for project safety. The dredge pipeline shall be floated over pipelines or as required by the pipeline owners/operators stipulations.

10.2.2 Pipeline Owner/Operator Agreements

CPRA has **NOT** acquired written agreements with any pipeline owners/operators to perform the Work. The Contractor will be responsible for obtaining all necessary Agreements/Letters of No Objections (LONOs)/Letters of Consent, as required by the known pipeline owners/operators, to perform the Work within the pipeline owners/operators right-of-ways. Copies of all Contractor and pipeline owners/operators Agreements/(LONOs)/Letters of Consent, shall be submitted to the Owner prior to the commencement of Work within five hundred feet (500’) of any pipeline. The Contractor shall also provide the Engineer with written correspondence for any pipeline owners/operators not requiring Agreements/(LONOs)/Letters of Consent.

10.2.3 Pipeline Safety

The Contractor shall safely conduct Work operations in such a manner as to adhere to current federal and state of Louisiana Administrative Code, Title 43, Part XI, pipeline safety, damage prevention, incident prevention, and emergency response practices, and not interfere with pipeline operations. The Contractor shall submit a pipeline emergency response plan in the Work Plan, which shall include, but is not limited to, emergency response protocol and evacuation procedures, 24/7 emergency contacts for all pipeline operators and other emergency contacts (911, USCG, etc.), and any other pertinent emergency response information.

The Contractor shall adhere to the most current publications of “Recommended Best Practices Guide for Safe Dredging near Underwater Gas & Hazardous Liquid Pipelines”, developed by the Council for Dredging and Marine Construction Safety (www.cdmcs.org), and “Working Safely Near Underwater Pipelines”, developed by the Coastal and Marine Operators Pipeline Industry Initiative (CAMO) and the Lake Pontchartrain Basin Foundation (LPBF):

<http://www.camogroup.org/wp-content/uploads/2020/04/Working-Safely-Near-Underwater-Pipelines.pdf>

10.2.4 Pipeline Crossings

All equipment shall either remain floating over existing pipelines or shall only traverse over pipelines (and associated facilities, structures, and appurtenances) after the placement of protective measures as required by the pipeline owner/operator. Protective measures shall be capable of supporting equipment and pipeline loads while protecting the existing buried pipelines from damage. For known pipelines, protective measure types/material and dimensions/tolerances shall be coordinated with, and approved by, the pipeline owner and included in the Work Plan. For unknown pipelines, proposed protective measure types/material and dimensions/tolerances shall be included in the Work Plan for approval by the Engineer. Protective measures shall be installed a minimum of five (5) days prior to commencement of any Work near the respective pipeline. In the event that protective measures are not required by the known pipeline owner/operator(s), the Contractor shall provide written documentation from the pipeline owner/operator stating as such in the Work Plan. The Contractor shall remove the protective measures from the Project Area prior to demobilization. Any damages to existing pipelines or associated facilities, structures, and appurtenances shall be returned to pre-construction conditions at no additional cost to the Owner. The Owner will not be held responsible for damage to the Contractor's Equipment, employees, subcontractors, adjacent property owners, or anyone else connected with this Work due to negligence by the Contractor.

10.2.5 Pipeline Excavation Tolerances

No mechanical excavation, anchors, or spuds, shall be permitted within a tolerance zone of **seventy-five feet (75')** from any existing pipeline or wellhead, unless specified otherwise in the Contract Documents. No hydraulic dredging, excavation, anchors, or spuds shall be permitted within a tolerance zone of **five hundred feet (500')** from any existing pipeline or wellhead in the Marsh Creation Borrow Area, unless specified otherwise in the Contract Documents.

10.2.6 Pipeline Location Markings

The Contractor shall investigate, locate, mark, and protect all pipelines where equipment and construction activities will be performed. Pipeline location markings as specified in TS-200.8.3 and any protective measures required in the Agreement(s)/LONO's shall be installed minimum of five (5) days prior to commencement of Work near pipelines. Pipeline locations markings shall be maintained throughout construction. The Owner shall conduct a hold point inspection at the completion of the marking of all pipelines prior to the start of construction activities, including equipment access.

10.2.7 Pipeline Notifications

The Contractor shall contact Louisiana 811 at 1-800-272-3020 at least five (5) business days prior to any construction activities. Notification of pipeline owner(s)/operators shall be performed in accordance with the timeline(s) established in the

Agreement(s)/(LONO's) specified in SP-10.2.2, but not less than fourteen (14) days, prior to commencement of Work near affected utilities.

10.2.8 Known Pipeline Owners/Operators Contact Information

No entities are known to have pipelines within the project limits. If pipelines are identified during the Pre-Construction Survey specified in TS-200, the Contractor shall provide contact information for pipeline owner/operators to the Engineer and notify the pipeline owner/operators in accordance with SP-10.2.7.

10.3 Utility Requirements

10.3.1 General

Utilities may exist within the Project Site and may include, but may not be limited to, telecommunications, power poles or lines, water or fire hydrants, water or gas mains and pipelines, sewers, conduits, and other accessories or appurtenances of a similar nature, which are fixed or controlled by a city, public utility company or corporation.

Contractor shall provide an independent survey prior to construction as per TS-200.8. The verification of utility locations, horizontal and vertical positions, will be essential for project safety.

10.3.2 Utility Owner/Operator Agreements

The Owner has **NOT** acquired written agreements with any utilities to perform the Work. The Contractor will be responsible for obtaining all necessary Agreements/(LONOs)/Letters of Consent, as required by the utilities, to perform the Work within the known utilities' right-of-ways. Copies of all Contractor and utility Agreements/(LONOs)/Letters of Consent, shall be submitted to the Owner prior to the commencement of Work within five hundred feet (500') of the respective utility. The Contractor shall also provide the Engineer written correspondence for any utility not requiring Agreements/(LONOs)/Letters of Consent.

10.3.3 Utility Safety

The Contractor shall safely conduct Work operations in such a manner as to utilize current federal and state utility safety, damage prevention, incident prevention, and emergency response practices, and not interfere with utility operations. The Contractor shall provide written correspondence to the Engineer for any utility provider requiring, or not requiring, utility protective measures, and shall submit a utility emergency response plan in the Work Plan.

The Contractor shall adhere to the most current publication of:

- ATMOS Energy, "Damage Prevention Awareness Brochure 2021", <https://www.atmosenergy.com/safety/call-811-excavating>;
- Current Entergy Contractor Safety requirements <https://www.entergy.com/safety/contractor/>, and;

- “Best Practices, The Definitive Guide for Underground Safety and Damage Prevention”, developed by the Common Ground Alliance for Work near underground utilities and facilities, <https://commongroundalliance.com/Publications-Media/Best-Practices-Guide>

10.3.4 Utility Crossings

All equipment shall either remain floating over, or shall only traverse over, existing utilities (and associated facilities, structures, and appurtenances) after the placement of protective measures as required by the utility owner/operator. Protective measures shall be capable of supporting equipment and dredge pipeline loads while protecting the existing buried utilities from damage. For known utilities, protective measure types/material and dimensions/tolerances shall be coordinated with and approved by the utility owner and included in the Work Plan. For any unknown utilities, proposed protective measure types/material and dimensions/tolerances shall be included in the Work Plan for approval by the Engineer. Protective measures shall be installed a minimum of five (5) days prior to commencement of any Work near the respective utility. In the event that protective measures are not required by the known utility owner(s), the Contractor shall provide written documentation from the utility owner stating as such in the Work Plan. The Contractor shall remove the protective measures from the Project Area prior to demobilization. Any damages to existing utilities or associated facilities, structures, and appurtenances shall be returned to pre-construction conditions at no additional cost to the Owner. The Owner will not be held responsible for damage to the Contractor’s Equipment, employees, subcontractors, adjacent property owners, or anyone else connected with this Work due to negligence by the Contractor.

10.3.5 Utility Excavation Tolerance Zones

No mechanical excavation shall be permitted within a tolerance zone of **seventy-five feet (75’)** of any existing utility, unless specified otherwise in the Contract Documents, or permitted by the utility provider in writing. No hydraulic dredging, excavation, anchors, or spuds shall be permitted **within five hundred feet (500’)** of any existing utility in the Marsh Creation Borrow Area, unless specified otherwise in the Contract Documents, or permitted by the utility provider in writing.

10.3.6 Utility Location Markings

The Contractor shall investigate, locate, mark, and protect all existing utilities, facilities, structures, and services on, above, or below the surface of the area where equipment and construction activities will be performed. All utility locations shall be marked as specified in TS-200.8.3 and any protective measures required in the Agreement(s)/LONO’s installed minimum of five (5) days prior to commencement of Work near utilities. The Owner shall conduct a hold point inspection at the completion of the marking of all utilities prior to the start of construction activities, including equipment access.

10.3.7 Utility Notifications

The Contractor shall contact Louisiana 811 at 1-800-272-3020 at least five (5) business days prior to any construction activities. Notification of utility owner(s)/operators shall

be performed in accordance with the timeline(s) established in the Agreement(s)/(LONO's) specified in SP-10.3.2, but not less than fourteen (14) days, prior to commencement of Work near affected utilities.

10.3.8 Utility Contact Information

No entities are known to have utilities within the project limits. If utilities are identified during the Pre-Construction Survey as specified in TS-200, the Contractor shall provide contact information for utilities owner/operators to the Engineer and notify the utility owners/operators in accordance with SP-10.3.7.

10.4 Existing Infrastructure

10.4.1 General

Existing infrastructure are present within the Project Site as shown on the Plans, and other types of existing infrastructure may also exist within the Project Site. The Contractor shall provide an independent survey prior to construction as per TS-200.8.3, to verify the horizontal and vertical positions of any existing infrastructure, including the aforementioned piles/pilings and any unknown infrastructure.

10.4.2 Existing Infrastructure Safety

For all known and unknown existing infrastructure, the Contractor shall propose protective measure types/materials and dimensions/tolerances to be included in the Work Plan for approval by the Engineer. The Contractor shall remove the protective measures from the Project Area prior to demobilization. Any damages to existing infrastructure shall be returned to pre-construction conditions at no additional cost to the Owner. The Owner will not be held responsible for damage to the Contractor's Equipment, employees, subcontractors, adjacent property owners, or anyone else connected with this Work due to negligence by the Contractor.

10.4.3 Existing Infrastructure Excavation Tolerance Zones

No mechanical excavation shall be permitted within a tolerance zone of **seventy-five feet (75')** of any existing infrastructure. No hydraulic dredging, excavation, anchors, or spuds, shall be permitted **within five hundred feet (500')** of any existing infrastructure in the Marsh Creation Borrow Area, unless specified otherwise in the Contract Documents. The Engineer reserves the right to adjust tolerance zones of known and unknown existing infrastructure.

10.4.4 Existing Infrastructure Location Markings

The Contractor shall investigate, locate, mark, and protect all existing infrastructure, on, above, or below the surface of the area where equipment and construction activities will be performed. All existing infrastructure locations shall be marked as specified in TS-200.8.3, and any protective measures installed minimum of five (5) days prior to commencement of Work near the existing infrastructure. Existing infrastructure locations markings shall be maintained throughout construction. The Owner shall conduct a hold point inspection at the completion of the marking of all existing infrastructure prior to the start of construction activities, including equipment access.

10.4.5 Existing Infrastructure Notifications

Notification of existing infrastructure owners shall be performed no less than fourteen (14) days prior to commencement of Work near affected utilities.

10.4.6 Existing Infrastructure Contact Information

The following entities are known to have existing infrastructure within the project limits. If additional existing infrastructure are identified during the Pre-Construction Survey as specified in TS-200, the Contractor shall notify the Engineer and adhere to the requirements stated in SP-10.4 and provide contact information for the discovered infrastructure to the Engineer.

Fontainebleau State Park

Attn: Jennifer Wallace
(985) 624-4640 (phone)
(985) 624-4177 (phone)
fntbleau_mgr@crt.la.gov

SP-11 OYSTER LEASE AND SEED GROUND RESTRICTIONS

There are no known existing oyster leases or seed grounds near or within the boundaries of the Project Site. The Contractor shall keep all Equipment contained to the permitted Marsh Creation Areas, Marsh Creation Borrow Area, and Equipment Access Corridors and Dredge Pipeline Corridors as shown on the Plans. In addition, the Contractor shall avoid impacts to oyster seed grounds and leases outside the boundaries of the Project Site.

SP-12 THREATENED AND ENDANGERED SPECIES

The National Marine Fisheries Service (NMFS) consulted with the United States Army Corps of Engineers on the permit for this project, pursuant to Section 7 of the Endangered Species Act (ESA). The Contractor shall review all environmental documents contained in Appendix E, as well as comply with the conditions listed therein, regarding the protection of species of concern throughout performance of the Work.

SP-13 NOTIFICATION OF DISCOVERY OF HISTORICAL OR CULTURAL SITES

If during construction activities the Contractor observes items that may have prehistoric, historical, archeological, or cultural value, the Contractor shall immediately cease all activities that may result in the destruction of these resources and shall prevent his employees from trespassing on, removing, or otherwise damaging such resources. Such observations shall be reported immediately to the Owner and Engineer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special dispositions of the finds should be made. The Contractor shall report any observed unauthorized removal or destruction of such resources by any person to the Owner and Engineer so the appropriate State of Louisiana authorities can be notified. The Contractor shall not resume work at the site in question until State authorities have rendered judgment concerning the artifacts of interest. The Unanticipated Archaeological Discoveries Plan is located in Appendix O.

For purposes of this Project, an unanticipated discovery is a discovery that would require Project implementation activities to stop, so that an archaeologist may evaluate the nature of

the find. Such archaeological evaluation may require a very short period of time if the discovery is easily determined by the professional archaeologist to be of modern origin or to be not significant, or a longer period of time, to be established through Project implementation planning documents prepared for the Project, for the archaeologist to determine, as appropriate, the nature and extent of the discovery. An unanticipated discovery may consist of archaeological feature(s), including discrete deposits of non-human skeletal material. An unanticipated discovery may also consist of any human remains located anywhere in the Project APE that were not previously identified in the Phase I survey of the fill area or the Phase I survey of the borrow area.

SP-14 SPECIAL USE PERMIT

The Owner has obtained a Special Use Permit from the Big Branch National Wildlife Refuge (refer to Appendix E). The Contractor shall comply with all of the conditions of this permit during the performance of the Work, including but not limited to, the installation of signage.

SP-15 NAVIGATION

Navigable waterways shall not be impaired except as allowed by applicable laws or regulations. Dredging of access channels shall not be permitted unless otherwise specified in the Contract Documents. It is the responsibility of the Contractor to select equipment that can navigate from a maintained navigation channel to the Project Site without deepening or widening existing water bottoms unless otherwise specified in the Contract Documents. All equipment shall remain floating at all times during transit to the Project Site. The Contractor shall obtain NOAA Nautical Charts and/or other charts to become familiar with the water bottom depths in the vicinity of the Project Site.

SP-16 VESSEL-SHORE TRANSFERS

For shore-to-vessel and vessel-to-shore transfers of personnel and supplies, the Contractor may utilize any commercial, public, or private facility for shallow draft vessels. It is the responsibility of the Contractor to obtain the required permission from the facility owner and to pay any costs associated with the use of the sites. The Contractor shall be responsible for any damages caused by the use of any site for landing and transfers, and shall maintain navigation through all navigation channels and boat ramps. The Contractor shall use any landing site, transfer area, or staging area at their own risk. For informational purposes, the Contractor will be required to inform the Engineer of the site that the Contractor will be using for vessel-shore transfers. Temporary docks and landing facilities may be used. Details on these features should be included in the Work Plan for review by the Engineer.

SP-17 NOTICE TO MARINERS

The Contractor shall contact the Eighth Coastal Region District of the United States Coast Guard (USCG) at least thirty (30) days prior to mobilization of the hydraulic dredge and installation of the dredge pipeline and provide all necessary information regarding the layout and schedule for the entire dredging operation. This notification must be given in sufficient time so that it appears in the Notice to Mariners at least seven (7) days prior to the commencement of this dredging operation. The USCG shall publish this information in the local notice to mariners. A copy of the original notice and all updates shall be provided to the Engineer.

SP-18 WORK AREA

The construction and borrow area limits available to the Contractor for accomplishing the work are shown on the Plans. The Contractor shall accomplish the Work in such a manner so as to minimize disruption to boat traffic. The Contractor will be required to exclude the public, for safety purposes, from the work areas in the immediate vicinity of the hydraulic fill placement, grading, and transporting operations, or any other area, which may be dangerous to the public. Staging/storing areas shall be kept neat, orderly, and in a safe manner. Temporary fencing (if necessary) and cautionary signage shall be used by the Contractor to exclude the public from work areas and staging/storage areas (refer to SP-14 for further information regarding Special Use Permit conditions from the Big Branch National Wildlife Refuge).

The Contractor shall not perform any lakeside construction activities, including accessing the Project Site, within five hundred feet (500') of the shoreline of Lake Pontchartrain in order to avoid impacts to existing submerged aquatic vegetation (SAV), except for within the Equipment Access Corridors shown on the Plans. The Contractor shall only access the Marsh Creation Areas by crossing the shoreline of Lake Pontchartrain at the locations denoted on the Plans. The Contractor shall not access the Marsh Creation Areas at any other location along the shoreline or through any existing tidal creeks, streams, bayous, or waterways unless otherwise shown on the Plans. All construction activities (including site access) within Bayou Cane, which is designated as a scenic river by the Louisiana Department of Wildlife and Fisheries (LDWF), is prohibited. The Contractor may submit additional/alternate Equipment Access Corridors or shoreline crossing locations in the Work Plan for approval by the Engineer (refer to TS-100.4).

SP-19 ADJUSTMENT OF QUANTITIES AND UNIT PRICE

Where the quantity of work with respect to any item is covered by a unit price, such quantities are estimates to be used when comparing bids and the right is reserved by the Owner to increase/decrease such quantities without adjustment to the unit price as may be necessary to complete the Work and remain within the funding limits.

Deviations in unit price from the initial contract are allowable and may be considered by the Owner when computing negotiated change order costs. When a unit price change order is required, it shall be submitted to the Owner within thirty days from the date of discovery of the work to be performed by the change order.

SP-20 FINAL CLEAN-UP

Final clean-up shall include the removal of the Contractor's plant, all equipment, and materials either for disposal or reuse. The Contractor shall remove all non-perishable debris, trash, and garbage from the Project Site prior to Acceptance. Unless otherwise approved in writing by the Engineer, the Contractor is not permitted to abandon pipelines, cables, pipeline supports, pontoons, or other equipment or materials in the disposal area, pipeline access areas, water areas, underwater in Lake Pontchartrain, or in any harbors, canals, passes, or inlets, or other areas adjacent to the Work site. Any stakes or other markers placed by the Contractor shall be removed as a part of the final clean-up. All stakes placed as part of the Work shall be completely removed and not be left buried in the fill. Grade Stakes shall either be removed in their entirety or cut off at marsh grade (refer to TS-250.6).

SP-21 AERIAL PHOTOGRAPHY

Aerial photography shall be obtained to illustrate pre-construction conditions, verify the progress of Work, and for Acceptance. Prior to commencing construction, monthly thereafter, and upon completion of all construction activities, low-elevation color, digital, oblique aerial photography shall be acquired and submitted that shows the progress of the Work. The photography shall obtain a project view(s) of the entire Project Site, with best efforts to repeat at the same locations, altitude and viewpoints. Best efforts shall also be made to acquire imagery during good weather for adequate lighting. Submittals shall include high-resolution aerial photograph(s) in digital (TIF or JPG) format.

The Contractor shall provide notice to the Engineer and name/contact information for aerial photography subcontractor a minimum of one (1) week prior to execution of aerial photography.

There will be no direct payment for providing the Aerial Photography as described herein. Payment for Aerial Photography shall be included in the lump sum price for Bid Item No. 1, "Mobilization and Demobilization". Unrestricted rights to use of the photos shall be conveyed to the Owner.

SP-22 COMPLIANCE WITH STATE AND FEDERAL LAW

The Contractor and any subcontractors must comply with applicable Federal labor laws covering non-Federal construction, including but not limited to, the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c) and to the extent if applicable 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change to the provisions of the Davis-Bacon Act) (formerly 40 U.S.C. 276a et seq). Contractor further agrees, in the case of any equipment and/or product authorized to be purchased under this Contract, to comply with the Buy American Act 41 U.S.C. 8301-8305 (formerly 41 U.S.C. 10a-10c).

Further, the Contractor and its employees, subcontractors and agents shall agree to comply with all applicable Federal, State, and Local laws, policies, and ordinances, in carrying out all provisions of this Contract.

SP-23 PROTECTION OF WORK

The Work Areas may be subject to water inundation during construction. It will be the responsibility of the Contractor to protect his/her Work and Equipment from damages due to inflows, rises in Lake Pontchartrain or other surrounding bodies of water, and ground water. The Owner shall not be held liable or responsible for delays or damages to the Contractor's Work or Equipment resulting from inflows of surface or ground water or other conditions.

The Project Site is within close proximity to residential property, camps, recreational areas, fishing/crabbing equipment, and areas of public congregation. The Contractor shall protect the job site from public access at all times. Additionally, the Owner shall not be held liable or responsible for delays from, or damages to, any of the aforementioned items.

SP-24 MISPLACED MATERIAL AND EQUIPMENT

The Project Site is within close proximity to residential property, camps, recreational areas,

oil/gas infrastructure, and areas of public congregation. The Contractor should at all times be aware of the location and/or position of the any slurry, dredged sediment, Equipment, or other Materials. Should the Contractor, during the progress of the Work misplace any slurry, dredged sediment, Equipment, or other Materials outside of what is authorized and permitted without the approval of the Owner or Engineer, the Contractor shall give immediate notice, with description and location of such misplaced Materials to the Owner and Engineer. This includes, but is not limited to, misplaced fill material resulting from overtopping, breaching, or failure of the Earthen Containment Dike. Following coordination with the Engineer, the Contractor shall immediately recover and remove the misplaced Material. This may require redeposit or redistribution of misplaced dredge sediments as directed by the Owner or Engineer. Misplaced Materials shall be removed/redistributed at the Contractor's expense. Additionally, the Contractor will be responsible for restoring unauthorized disposal areas to pre-construction conditions at his/her own expense.

In the event of refusal, neglect, or delay in compliance with the above requirements, such misplaced Materials may be removed by the Owner, and the cost of such removal may be deducted from any money due or to become due to the Contractor or may be recovered under his/her bond. The Engineer will not allow the associated construction activities to resume within the impacted area until these provisions have been met. Additionally, the Owner shall not be responsible for downtime, field office overhead, or any other costs to the Contractor associated with stoppage of the Work.

SP-25 SEQUENCE OF WORK

The Contractor shall consider the following during development of the Work plan and initial progress schedule:

- 25.1 Commencement of mobilization, dredge pipe installation, or any other dredging operations shall not begin until the Contractor has initiated coordination with the USCG and deployed the required USCG aids to navigation and the Equipment Access Corridor and Dredge Pipeline Corridor Pre-Construction Surveys have been accepted by the Engineer.
- 25.2 Construction of the Earthen Containment Dikes shall not begin prior to Acceptance of the Earthen Containment Dike Pre-Construction Survey (TS-200.8.9) and Earthen Containment Dike Stakeout (TS-200.8.9.1) for a respective Marsh Creation Area.
- 25.3 Pre-Construction Surveys of a respective Marsh Creation Area shall not begin until the associated Earthen Containment Dikes have been Accepted by the Engineer (TS-300.10).
- 25.4 Hydraulic Dredging and Fill Placement shall not begin prior to Acceptance of the Marsh Creation Area Pre-Construction Survey (for a respective Marsh Creation Area) (TS-200.8.10), the Marsh Creation Borrow Area Pre-Construction Surveys (TS-200.8.11), and the Adjacent Waterways Pre-Construction Surveys (TS-200.8.8).

Additionally, the Contractor shall not begin construction of any Work item prior to the Acceptance of the associated section(s) of the Work Plan.

SP-26 HOLD POINT INSPECTIONS

The Contractor shall observe construction "hold points" in order to permit the Owner or the Owner's representative to inspect the Work of key construction elements. The scope of each

hold point inspection shall be discussed with the Contractor prior to inspection. Hold point inspections shall include the following:

- 26.1 Completion of marking of all pipelines, utilities, and other existing infrastructures (refer to SP-10);
- 26.2 Prior to, and following the completion of, installation of any protective measures for existing pipelines, utilities, and other existing infrastructures (refer to SP-10);
- 26.3 Prior to installation of board mats or equipment access within the shoreline crossings to document the pre-construction conditions (TS-100.5.3.2);
- 26.4 At the completion of the Earthen Containment Dike stakeout (TS-300.3).

The Contractor shall notify the Engineer at least three (3) days prior to reaching each hold point.

END OF PART II - SPECIAL PROVISIONS

PART III TECHNICAL SPECIFICATIONS

TS-100 MOBILIZATION AND DEMOBILIZATION

- 100.1 Scope: The Contractor shall furnish all labor and Equipment necessary to mobilize a hydraulic dredge and any necessary booster pump(s), as well as furnish all labor and Equipment necessary to move personnel, Equipment, construction materials (including dredge pipeline), and incidentals necessary to perform the Work to and from the Project Site. This work shall include, but is not limited to, establishing offices, buildings, and other facilities necessary for the Work. As part of this Bid Item, the Contractor shall obtain bonds, required insurance, and include any other Pre-Construction expenses necessary to perform the Work. This Bid Item shall exclude the cost of other construction materials explicitly listed on the Bid Form. All costs associated with the dredge pipeline corridor and associated appurtenances and crossings shall be included in Bid Item No. 1 “Mobilization and Demobilization”.
- 100.2 Arbitrary Mobilization and Demobilization by Contractor: The Owner shall pay for only one (1) Mobilization and Demobilization effort. Should the Contractor demobilize and/or remobilize prior to completing the Work, it shall be performed at no additional expense to the Owner.
- 100.3 Hydraulic Dredge: The Contractor shall utilize an appropriate hydraulic cutter head dredge and, if necessary, a booster pump(s) (refer to TS-100.4.2) to perform the Work within the Contract Time. This Equipment shall have sufficient draft to access the Project Site without excavating water bottoms or causing damage to existing infrastructure. This Equipment shall be sized such that it efficiently performs the Work within the Contract Time and the afforded Hydraulic Dredging Window (refer to TS-400.3.1), the production capacity or discharge velocity does not overwhelm or overtop the Earthen Containment Dikes during marsh fill placement or displace, damage, or cause any other impacts to existing infrastructure such as oil and gas pipelines/wells, and the fill elevation of the Marsh Creation Areas is within the specified tolerances. All Equipment shall remain in satisfactory working condition and be subject to inspection by the Engineer or Resident Project Representative throughout the duration of the Work. Hourly usage and downtime for the hydraulic dredge shall be reported on the Daily Progress Reports. All Equipment shall be able to withstand difficult wave and weather conditions in Lake Pontchartrain and the Contractor shall provide an Equipment Protection Plan as part of the Hurricane and Severe Storm Plan (GP-11) addressing procedures for stage fluctuations and adverse weather conditions.
- 100.3.1 Hydraulic Dredge Data Sheet: The Hydraulic Dredge Data Sheet in Appendix I shall be included in the Work Plan. Submittal of the Hydraulic Dredge Data Sheet shall constitute a certificate that the described equipment is available to, and under control of, the Contractor. The data is pertinent to the evaluation of the proposed dredge and its capability to perform the Work. The Contractor may omit data or information that is considered to be proprietary. The Hydraulic Dredge Data Sheet shall be updated and submitted to the Engineer prior to mobilizing a different hydraulic dredge.
- 100.4 Equipment: All Equipment shall be in satisfactory operating condition, capable of efficiently performing the Work as set forth on the Plans and in these Specifications, and shall be subject to inspection by the Engineer or Resident Project Representative at all times. Hourly usage and downtime for all Equipment shall be reported on the Daily

Progress Reports.

- 100.4.1 Equipment Access and Equipment Staging Area(s): The Contractor shall utilize the Equipment Access Corridors as shown on the Plans. Any alternative or additional Equipment Access Corridors and any proposed Equipment Staging Areas shall be provided in the Work Plan for Approval by the Engineer. The Contractor shall be responsible for acquiring the appropriate permits and access agreements for all proposed Equipment Access Corridors outside of the permitted areas as well as any proposed Equipment Staging Area(s). The Contractor shall provide a copy of the permit and/or access agreement to the Owner prior to Mobilization. It is the Contractor's responsibility to make minimum necessary improvements to the Equipment Staging Area as required to perform the Work. Channel excavation is not allowed for this project. The Contractor shall not mobilize any equipment prior to Acceptance of the Pre-Construction Survey of the Equipment Access Corridor (TS-200.8.5).
- 100.4.1.1 Existing Pipelines, Utilities, and Infrastructure: Refer to SP-10 for requirements pertaining to existing pipelines, utilities, and infrastructure.
- 100.4.1.2 Impacts to Submerged Aquatic Vegetation (SAV): Equipment shall remain floating at all times within the forty-foot (40') wide Equipment Access Corridors from the shoreline of Lake Pontchartrain to a minimum distance of five hundred feet (500') from the shoreline to minimize impacts to the existing SAV, as shown on the Plans. **Equipment access outside of the permitted Equipment Access Corridors within five hundred feet (500') of the shoreline is not permitted.** This distance may be increased based on field conditions. The Contractor will be required to pay any costs, fines, or other expenses related to permit violations for damage to existing SAV outside of the permitted Equipment Access Corridor at no additional cost to the Owner.
- 100.4.1.3 Impacts to Wetlands and Water Bottoms: Travel across marsh vegetation outside the designated Marsh Creation Areas and Equipment Access Corridor will not be allowed. Access to the internal areas shall be through open water to the maximum extent possible. Any impacts to wetlands or water bottoms, outside of the Project Area shall be repaired prior to demobilization at no direct pay.
- 100.4.1.4 Excess Materials and Equipment: Excess materials and equipment shall not be stored within the Equipment Access Corridor or impact existing drainage or access. Materials not in use shall be stored in approved Equipment Staging Area(s).
- 100.4.2 Booster Pumps: If booster pump(s) are deemed necessary to perform the Work, the Contractor shall submit proposed booster pump(s) locations in the Work Plan for approval by the Engineer. Booster pump(s) shall be positioned within the limits of the Marsh Creation Borrow Area or within the Dredge Pipeline Corridor at all times during the Work. The booster pump(s) shall remain floating and shall not be anchored within five-hundred feet (500') of infrastructure, pipelines, utilities, or the shoreline of Lake Pontchartrain throughout the duration of the Work, unless otherwise specified on the Plans. The Equipment Data Sheet in Appendix J shall be included in the Work Plan for all booster pump(s) proposed to perform the Work.

Refer to TS-100.4.3 “Equipment Data Sheets”.

- 100.4.3 Equipment Data Sheets: The Equipment Data Sheet in Appendix J shall be submitted in the Work Plan for all heavy Equipment proposed to perform the Work other than the hydraulic dredge (i.e. marsh buggies, tenders, booster pumps, etc.). The Equipment Data Sheets shall serve as certification that the Equipment is under the control of the Contractor and is capable of performing the Work. The Contractor may omit information deemed proprietary from the Equipment Data Sheets. The Equipment Data Sheets shall be updated and submitted to the Engineer prior to mobilizing different Equipment.
- 100.5 Dredge Pipeline: The Contractor shall utilize a dredge pipeline to transfer dredged material from the Marsh Creation Borrow Area to the Marsh Creation Areas along the Dredge Pipeline Corridor shown on the Plans. The Contractor shall include the type, diameter, and length of the dredge pipeline, plans and locations for all dredge pipeline crossings, and details for any temporary pipeline markers in the Work Plan. Any proposed alternative Dredge Pipeline Corridors shall be submitted in the Work Plan for approval by the Engineer. The Contractor shall be responsible for acquiring the appropriate permits and agreements for any proposed alternative corridors or crossings outside of the permitted area. The dredge pipeline shall be subject to inspection by the Engineer or Resident Project Representative at all times. The Contractor shall not begin construction of the Dredge Pipeline Corridor prior to Acceptance of the associated Pre-Construction Surveys (TS-200.8.5). Existing waterways’ drainage and navigation shall not be impeded due to placement of the dredge pipeline.
- 100.5.1 Dredge Pipeline Outfalls: Lateral lines may be installed from the trunk line to the dredge outfall as deemed necessary. Each outfall location of the dredge pipeline shall be placed a sufficient distance away from the Earthen Containment Dikes and Settlement Plates such that the integrity of the aforementioned features are maintained during fill placement (refer to TS-400.4.4). The alignment of the proposed laterals (shore or floating pipe) within each Marsh Creation Area shall be submitted in the Work Plan for approval by the Engineer.
- 100.5.2 Dredge Pipeline Reaches: The dredge pipeline shall be denoted by the following reaches:
- 100.5.2.1 West Dredge Pipeline Corridor: The dredge pipeline shall exit the Marsh Creation Borrow Area and be installed along the Dredge Pipeline Corridor(s) toward the marsh creation areas west of Bayou Cane (MCA-1, MCA-2, and MCA-3 (Alternate Bid No. 1)), as shown on the Plans.
- 100.5.2.2 East Dredge Pipeline Corridor: The dredge pipeline shall exit the Marsh Creation Borrow Area and be placed along the dredge pipeline corridor(s) toward the marsh creation areas east of Bayou Cane (MCA-4, MCA-5 (Alternate Bid No. 2), MCA-6, and MCA-7), as shown on the Plans.

The aforementioned reaches both include the crossing of submerged aquatic vegetation (SAV) through the use of floated dredge pipe (refer to TS-100.5.3.1) as well as the crossing of the Lake Pontchartrain shoreline (refer to TS-100.5.3.2).

- 100.5.3 Dredge Pipeline Crossings: The Contractor shall furnish all labor, Equipment, and Materials needed to construct and maintain the following dredge pipeline crossings.
- 100.5.3.1 Floating Dredge Pipeline Sections for Submerged Aquatic Vegetation (SAV): The dredge pipeline shall be floated at all times within the forty-foot (40') wide Dredge Pipeline Corridor from the shoreline of Lake Pontchartrain to a minimum distance of five hundred feet (500') from the shoreline to minimize impacts to existing SAV, as shown on the Plans. This distance and exact location may be adjusted based on field conditions. The Contractor may submit an alternate proposed location of crossing the existing SAV to minimize impacts.
- 100.5.3.2 Shoreline Crossing of Lake Pontchartrain: The shoreline of Lake Pontchartrain shall be crossed at the locations shown on the Plans. The dredge pipeline shall be placed on board mats, or other equivalent as approved by the Engineer, to minimize impact to the shoreline and existing marsh. The Contractor may submit an alternate proposed location of, or method for, crossing the shoreline to minimize impacts. As part of the Work Plan, the Contractor shall propose methods for restoring the shoreline crossings to pre-project conditions following acceptance of all Marsh Creation Areas. Any impacts to wetlands within the shoreline crossing shall be repaired prior to demobilization at no direct pay. The Owner shall conduct a hold point field inspection prior to installation of board mats or equipment within the shoreline crossings to document the pre-construction conditions.
- 100.5.3.2.1. Shoreline Crossing into MCA-6: In order to minimize the potential for impacts, utilization of the shoreline crossing of Lake Pontchartrain into MCA-6 is restricted to the installation, monitoring, surveying, and demobilization of dredge pipeline. Equipment access that is not associated with the aforementioned activities will not be permitted to utilize this crossing location.
- 100.5.3.3 Existing Infrastructure Crossings: The dredge pipeline shall be floating or supported on pontoons for the purpose of crossing existing infrastructure (i.e. pipelines, utilities, etc.). The Contractor shall obtain written approval from the infrastructure owner/operator for any option that could cause impacts (weight, vibrations, etc.) to said infrastructure. The written agreement shall be submitted to the Engineer as per SP-4 and SP-10.
- 100.5.4 Removal: The Contractor shall regrade those portions of the water bottom along the Dredge Pipeline Corridor and at all shoreline and existing infrastructure crossings that have been disturbed in excess of +1.0 feet from original grade after removal of the dredge pipeline. Areas containing SAV shall not be disturbed.
- 100.6 Ratio of Effort: The Contractor shall not perform any Work prior to the Acceptance of the initial Work Plan. Ten percent (10%) of the Contract cost for this bid item shall be paid to the Contractor upon Acceptance of the initial Work Plan and start of the Surveys. Fifteen percent (15%) of the Contract cost for this bid item shall be paid to the Contractor upon confirmation of the start of Earthen Containment Dike construction. Fifty percent (50%) of the Contract cost for this bid item shall be paid to the Contractor upon mobilization/arrival of the hydraulic dredge, booster pump(s), and support equipment, and

after hydraulic dredging operations have commenced. The remaining twenty-five percent (25%) of the cost for this bid item shall be paid to the Contractor upon Acceptance of the Work and confirmation of the removal of all equipment and unused materials and restoration of any marsh impacts.

- 100.7 Justification of Costs: If the Engineer determines that the unit price for this bid item does not bear a reasonable relation to the amount of Work, the Contractor shall be required to justify the unit price in the Application for Payment using cost data. Failure to justify such price to the satisfaction of the Engineer may result in payment of actual Mobilization and Demobilization costs, as determined by the Engineer, at the completion of Mobilization and Demobilization, respectively. Payment of the remainder of this item will be made in the final payment under this contract. The determination by the Engineer is not subject to appeal.
- 100.8 Measurement and Payment: Payment for Mobilization and Demobilization shall be made at the Contract Lump Sum price for Bid Item No. 1, "Mobilization and Demobilization (TS-100)". Partial Payments for Mobilization and Demobilization will be made in accordance with the Ratio of Effort stated in TS-100.6 up to a maximum of twenty-five percent (25%) of the original total contract amount, including this item. Payment of any remaining amount will be made upon completion and Acceptance of all Work under the Contract. Payment shall constitute full compensation for moving personnel, Equipment, supplies, and incidentals to and from the job site and establishing offices, buildings, and other facilities for the Work, obtaining bonds, insurance, permit application fees, and any other associated expenses.
- 100.8.1 Alternate Bid No. 1: If Alternate Bid No. 1 is awarded, payment shall be made at the Contract Lump Sum price for Bid Item No. 13 "Mobilization and Demobilization – MCA-3 (TS-100)". If the unit price for this Bid Item exceeds fifteen percent (15%) of the sum total of all Alternate Bid No. 1 Items, the remainder shall not be paid until Acceptance of all of the Work.
- 100.8.2 Alternate Bid No. 2: If Alternate Bid No. 2 is awarded, payment shall be made at the Contract Lump Sum price for Bid Item No. 21 "Mobilization and Demobilization – MCA-5 (TS-100)". If the unit price for this Bid Item exceeds ten percent (10%) of the sum total of all Alternate Bid No. 1 Items, the remainder shall not be paid until Acceptance of all of the Work.

TS-150 AIDS TO NAVIGATION

- 150.1 General Description: The Contractor shall provide, install, maintain, and remove aids to navigation as specified herein at no additional expense to the Owner. The Contractor shall contact the Eight Coastal Region District of the United States Coast Guard (USCG) and determine the type and location of aids to navigation that are required to be installed or removed in order to safely perform the Work no later than ninety (90) days prior to installation of any fixed structures in navigable waters and/or prior to installation of any floating private aids to navigation. The types of aids to navigation may include, but are not limited to, warning signs, buoys, pontoons, beacons, and/or lights.

Discharge lines that cross a navigable channel shall be submerged. Lighted aids to navigation shall be deployed prior to commencement of any dredging operations. Lighted aids to navigation are required to maintain safe working conditions for construction in navigation channels. Any damages to existing USCG or private navigation aids caused by the Contractor shall be repaired by the Contractor to USCG standards at no expense to the Owner.

- 150.2 Permit: The Contractor shall also submit a permit application and obtain a permit from the USCG prior to installation or removal of any aids to navigation. The permit application shall include the type, position, color, and dates for installation or removal of all aids to navigation. New aids to navigation shall not be installed in a manner which conflicts with existing aids to navigation. The Contractor shall not otherwise remove, modify, obstruct, willfully damage, make fast to or interfere with any existing aids to navigation. The Contractor shall provide a copy of the permit and permit application to the Engineer at least seven (7) days prior to installation of the dredge pipeline and/or performing any excavation.

- 150.3 Temporary Warning Signs: The Contractor shall furnish all of the Materials, labor, and Equipment necessary to construct and install the Temporary Warning Signs in accordance with the Plans and these Specifications. The USCG typically requires that Temporary Warning Signs be installed along dredge pipelines, temporary spoil placement areas, and access channels. Temporary warning signs shall be installed prior to any dredging Equipment entering the Marsh Creation Borrow Area or placing the dredge discharge pipeline from the Marsh Creation Borrow Area to the Marsh Creation Areas. Submerged dredge pipelines and any anchors securing the pipeline shall rest on the channel bottom and shall be marked in accordance with USCG requirements

The Temporary Warning Signs shall conform to Title 33, Chapter 1 of the Code of Federal Regulations which requires signage, lighted buoys, or a combination of both aids to be installed near hazards to navigation. The USCG may require that the Contractor provide the coordinates of the Temporary Warning Signs after they are installed. The depth of any dredge pipeline crossing a navigation channel shall be submitted to the USCG for publication.

- 150.3.1 Submerged Dredge Pipeline Markers: All submerged pipelines installed shall be marked with fluorescent orange buoys and signs stating "DANGER SUBMERGED PIPELINE" every one hundred fifty feet (150') for the length of the pipeline. "DANGER SUBMERGED PIPELINE" signs shall also be placed at the beginning and end of all submerged pipelines and at all abrupt changes of direction. Unless otherwise specified by the USCG, submerged pipelines are considered to require special marks in accordance with USCG regulations and shall have USCG approved

flashing yellow lights. When the submerged line is placed in shallow water outside the navigable channel, where the possibility exists for small boats to cross over the submerged pipeline, the pipeline shall be marked with fluorescent orange buoys and signs stating "DANGER SUBMERGED PIPELINE" every one hundred fifty feet (150') throughout the length of the submerged pipeline. The Contractor shall notify the USCG in accordance with subparagraph "Notice to Mariners" as described in SP-17. The notification shall contain maps, latitude/longitude coordinates, and descriptions of lighted aids for inclusion in the Notice to Mariners.

- 150.4 Operation and Maintenance: The Contractor shall operate and maintain all aids to navigation, piles, chains, anchors, buoys, and lighting, and shall attest in the Daily Report that all aforementioned items are positioned in the proper locations and are functioning as required. Should the Contractor's aids to navigation be displaced from their positioned locations, or otherwise fail to function as required, the Contractor shall reposition/repair the aids within twenty-four (24) hours. If any of the buoys are not maintained in the proper location or condition, the Contractor shall cease dredging operations until the buoys are maintained, replaced, or repositioned.
- 150.5 Lighting and Markings: The dredge, anchor buoys, buoy markers, pontoons, and floating dredge pipelines in the area shall be marked in accordance with USCG Navigation Rules.
- 150.6 Removal: The Contractor shall removal all aids to navigation, piles, chains, anchors, and buoys from the project area upon completion of this project.
- 150.7 Measurement and Payment: No direct payment will be made for this item. The Contractor shall include all costs for Aids to Navigation in the Lump Sum price for Bid Item No. 1 "Mobilization and Demobilization".

TS-200 SURVEYS

- 200.1 Scope: The Contractor shall furnish all of the Materials, labor and Equipment necessary to perform the Pre-Construction, Process, and As-Built Surveys of the Work in compliance with the Plans and these Specifications. All Surveys shall be performed by personnel who are approved by the Engineer and under the direct supervision of a Professional Land Surveyor or Professional Engineer licensed in the state of Louisiana. All survey drawings shall be signed and sealed by the Louisiana licensed Professional Surveyor or Professional Engineer under which supervision of the surveys were conducted. The Contractor shall provide schedules for the survey field work and deliverables and the field equipment, methodology, and software to be used for survey data collection, post-processing, and calculations of quantities in the Work Plan.
- 200.2 Notifications to the Engineer: The Contractor shall notify the Engineer a minimum of two (2) working days prior to performing the Pre-Construction, Process, and As-Built Surveys. The Contractor shall also notify the Engineer immediately after the field data collection for each survey is complete. The Owner may stop the associated portions of the Work if the notifications are not made. The Contractor shall not submit a Claim for this type of Work stoppage.
- 200.3 Reference and Control: Survey data shall reference the North American Datum of 1983 (NAD 83), Louisiana South Zone, U. S. Survey Feet, and the North American Vertical Datum of 1988 (NAVD 88), U. S. Survey Feet Geoid 12B-Epoch 2010.00. Horizontal and vertical control shall be established by using the CPRA monuments provided in Appendix F.
- 200.3.1 Temporary Benchmarks (TBMs): Temporary Benchmarks (TBMs) shall be installed as deemed necessary by the Contractor to perform all surveys. Proposed TBMs shall be included in the Work Plan. Horizontal and vertical coordinates shall be determined for all TBMs installed. The Contractor shall maintain the TBMs for the duration of the Work. In the event that a single TBM is disturbed and/or destroyed, the TBM may be reinstalled by approved personnel at the expense of the Contractor. If multiple TBMs are destroyed, the Engineer may require the TBMs to be reinstalled by a Professional Surveyor licensed in the State of Louisiana.
- 200.3.2 Temporary Staff Gauges / Tidal Range Boards: Temporary Staff Gauges and/or Tidal Range Boards shall be installed as deemed necessary by the Contractor, and shall be included in the Work Plan. Horizontal and vertical coordinates shall be determined for all gauges / tidal range boards installed. The Contractor shall maintain the gauges/ boards for the duration of the Work.
- 200.4 Method: Surveys shall follow CPRA's *Contractor's Guide to the Standard Practice – Surveying* (<http://coastal.la.gov/engineering-and-design-standards/>) and utilize conventional Real-Time Kinematic (RTK) surveying methods or an appropriate Global Navigation Satellite System (GNSS) or Global Positioning System (GPS) Real Time Network such as the Gulfnet Virtual Real-Time Network (VRS).
- 200.5 Survey Equipment: The Contractor shall utilize appropriate equipment to survey the Work as described in the following subsections. Proposed equipment shall be included in the Work Plan.

- 200.5.1 Topographic Surveys: Topographic survey Equipment shall have a minimum vertical and horizontal accuracy of one-tenth of a foot (0.1'). A six-inch (6") diameter metal plate shall be attached to the bottom of the survey rod to prevent the rod from sinking below ground level. In vegetated areas, the survey rod shall rest among living vegetative stems and be supported by soil containing living vegetative roots. Bathymetric and topographic surveys shall overlap by twenty-five feet (25') at all interfaces between land and water.
- 200.5.2 Bathymetric Surveys: Bathymetric survey Equipment shall have a minimum vertical accuracy of one-tenth of a foot (0.1') \pm 0.1% of depth and a minimum horizontal accuracy of one-tenth of a foot (0.1'). Bathymetric surveys collected on board vessels must be differentially corrected to the referenced datum for tidal fluctuations and vessel pitch, roll, and heave. Bathymetric and topographic surveys shall overlap by twenty-five feet (25') at all interfaces between land and water.
- 200.5.3 Magnetometer Surveys: Magnetometer survey Equipment shall have a minimum accuracy of three (3) gammas throughout its operational range.
- 200.5.4 Survey Stakes: Survey stakes utilized for topographic survey stakeout shall consist of forty-eight inch (48") long survey laths and be composed of #1 grade pine wood or approved equal. Survey stakes utilized for bathymetric survey stakeout shall consist of bamboo cane of sufficient length to remain a minimum of two feet (2') above mean water level. Survey stakes shall be removed after completion of the project unless otherwise directed by the Engineer.
- 200.6 Design Survey: The Design Survey Report is provided in Appendix G. The layout of the design survey shown on the Plans is for informational purposes only.
- 200.7 Construction Survey Layout: The Construction Survey Layout for the Work is provided in the Plans and shall be used to perform the Pre-Construction, Process, and As-Built Surveys. Any modifications to the Construction Survey Layout shall be submitted in the Work Plan for approval by the Engineer.
- 200.8 Pre-Construction Survey: The Pre-Construction Surveys shall be performed after the Pre-Construction Conference, Acceptance of the initial Work Plan, and prior to Mobilization, unless otherwise stated in these Specifications. This survey shall be used to verify the existing conditions at the Project Site, adjust quantities of the bid items (if needed), modify the layout of the Work as deemed necessary by the Engineer, and lay out and stake out the Work. The Pre-Construction Survey shall show the existing bathymetry, topography, existing infrastructure, and magnetic detections in plan and profile using markers, spot elevations, coordinates, contours, lines, and grades. The Pre-Construction Survey shall follow the Construction Survey Layout shown on the Plans and shall include the following items:
- 200.8.1 Quantities: The Pre-Construction Survey shall provide the calculated quantities of all the bid items and shall not include contingencies for bulking, losses, etc. The methodology or software that is proposed to be used to calculate quantities shall be approved by the Engineer and provided in the Work Plan.
- 200.8.2 Temporary Aids to Navigation: All temporary aids to navigation shall be surveyed after installation and coordinates submitted to the Owner within two (2) weeks of

installation.

- 200.8.3 Existing Infrastructure: All infrastructure (flow lines, pipelines, power lines, utilities, etc.) that is located within two hundred fifty feet (250') of the Marsh Creation Borrow Area, Earthen Containment Dikes, Earthen Containment Dike Borrow Areas, Marsh Creation Areas, Equipment Access Corridors (and associated crossings), and the Dredge Pipeline Corridors (and associated crossings) shall be surveyed and marked at a minimum of fifty-foot (50') intervals and all points of inflection. Markers shall be maintained throughout construction. The proposed methods for marking the infrastructure shall be included in the Work Plan. Pipelines shall be identified to a CI/ASCE 38-02 minimum utility level of B and probed for depth of cover (top of pipe to existing ground) at fifty-foot (50') intervals.
- 200.8.4 Significant Magnetic Detections: For all anomalies that exhibit amplitudes greater than fifty (50) gammas, the elevation, mudline elevation, and source of the anomalies shall be determined by running a thirty-foot (30') closed loop path and by probing. The Contractor shall determine if the sources of any anomalies will interfere with the performance of the Work and provide proposed corrective measures in the Progress Schedule. Failure by the Contractor to identify the sources of anomalies and provide corrective measures shall not provide grounds for any Claims against the Owner.
- 200.8.5 Dredge Pipeline and Equipment Access Corridors: A topographic/bathymetric and magnetometer survey shall be performed along the entirety of the Dredge Pipeline Corridors and Equipment Access Corridors prior to Mobilization of any equipment or installation of any dredge pipeline. Centerline profiles of the corridors shall be surveyed and recorded at fifty-foot (50') intervals, at changes in elevation greater than one-half foot (0.5'), and at all points of inflection. Perpendicular transects to the centerline of the corridors shall be surveyed at one thousand-foot (1000') intervals, and shall extend two hundred fifty feet (250') on each side of the centerline, as shown on the Construction Survey Layout on the Plans. Bottom elevations and coordinates shall be recorded along the perpendicular transects at five-foot (5') intervals and changes in elevation greater than one-half-foot (0.5').

The Contractor shall establish stationing along the entire Dredge Pipeline Corridor, and include proposed booster pump location(s), if necessary (refer to TS-200.8.7). The Dredge Pipeline Corridor shall be memorialized, via video recording, prior to Mobilization of equipment or installation of any dredge pipeline. The Pre-Construction Dredge Pipeline Corridor and Equipment Access Corridor Surveys shall be submitted and approved by the Engineer prior to Mobilization in accordance with SP-4. Details of the survey shall be included in the Work Plan.

For those portions of the Equipment Access Corridor located within adjacent waterways (refer to Sheet 22 and 23 of the Plans), the Contractor shall adhere to the survey requirements specified in TS-200.8.8.

- 200.8.5.1 Submerged Aquatic Vegetation (SAV) Crossings: For the portions of the Dredge Pipeline Corridor and Equipment Access Corridor located within five hundred feet (500') of the Lake Pontchartrain shoreline, perpendicular transects to the centerline of the corridors shall be surveyed at one hundred-foot (100') intervals, and shall extend two hundred fifty feet (250') on either

side of the centerline, as shown on the construction survey layout on the Plans. Bottom elevations and coordinates shall be recorded along the centerline of the corridors at twenty-five-foot (25') intervals, all points of inflection, and changes in elevation greater than one-half-foot (0.5'). Bottom elevations and coordinates shall be recorded along the perpendicular transects at twenty-five-foot (25') intervals and changes in elevation greater than one-half-foot (0.5').

- 200.8.5.1 Shoreline Crossing of Lake Pontchartrain: For the portions of the Dredge Pipeline Corridor and Equipment Access Corridor crossing the shoreline of Lake Pontchartrain, perpendicular transects to the centerline of the corridors shall be surveyed at twenty-five-foot (25') intervals, and shall extend fifty feet (50') on either side of the centerline, as shown on the construction survey layout on the Plans. Bottom elevations and coordinates shall be recorded along the centerline of the corridors at ten-foot (10') intervals, all points of inflection, and changes in elevation greater than one-half-foot (0.5'). Bottom elevations and coordinates shall be recorded along the perpendicular transects at ten-foot (10') intervals and changes in elevation greater than one-half-foot (0.5'). Surveys of the shoreline crossings shall be performed on foot to the greatest extent possible to minimize impacts to the shoreline. The Contractor may submit alternative survey methods to minimize impacts.
- 200.8.6 Staging Area(s): A topographic/bathymetric and magnetometer survey of the Staging Area(s) shall be performed in a one-hundred-foot (100') grid pattern at the Contractor-proposed Staging Area(s) approved by the Engineer. Elevations shall be recorded every twenty-five feet (25'), and at changes in elevation greater than one-half (0.5) foot. The grid spacing of this survey may be modified at the discretion of the Engineer. The staging area shall be memorialized, via video recording, prior to mobilization of equipment.
- 200.8.7 Booster Pump(s): A topographic/bathymetric and magnetometer survey shall be performed in a twenty-five-foot (25') grid pattern at the Contractor-proposed booster pump locations approved by the Engineer. Elevations shall be recorded every twenty-five (25) feet, and at changes in elevation greater than one-half (0.5) foot. The booster pump location(s) shall be memorialized, via video recording, prior to mobilization of equipment.
- 200.8.8 Adjacent Waterways: A bathymetric and magnetometer survey shall be performed along each of the waterways shown on the Construction Survey Layout on the Plans, prior to commencement of hydraulic dredging operations. The Contractor shall survey these waterways using multi-beam bathymetry, swath bathymetry, or side scan sonar methodology. If it is determined that water depths are too shallow to allow for bathymetric methods to be employed, topographic methods such as RTK may be substituted with prior approval from the Engineer. Surveys of each waterway shall consist of two (2) parallel transects spaced ten feet (10') apart. Bottom elevations and coordinates shall be recorded along the waterways at ten-foot (10') intervals, all points of inflection, and changes in elevation greater than one-half-foot (0.5').
- 200.8.8.1 Required Turbidity Curtain: A topographic/bathymetric and magnetometer survey of the Required Turbidity Curtain (TS-400.5.4.1) location shall be performed in a 50-foot (50') grid pattern as shown on the Plans. Elevations

shall be recorded every twenty-five feet (25') and at changes in elevation greater than one-half foot (0.5').

- 200.8.9 Earthen Containment Dikes: A topographic/bathymetric and magnetometer survey shall be performed along the centerline alignment and perpendicular transects of the Earthen Containment Dikes and their respective borrow areas as shown on the Plans. Cross sections shall be surveyed every two-hundred fifty feet (250') perpendicular to the Earthen Containment Dike centerline and at each point of inflection. The cross sections shall include the inside toe and crest, outside crest and toe, and the inside toe of the Earthen Containment Dike Borrow Area(s) and extend one hundred and fifty feet (150') beyond the toes of the Earthen Containment Dike, perpendicular, in both directions. Along the centerline and cross sections, ground elevations and coordinates shall be recorded at twenty-five (25) foot intervals, change in grade greater than one-half (0.5) foot, and at all points of inflection. The projected quantities for the Earthen Containment Dikes shall be calculated based on this survey and the Earthen Containment Dike dimensions shown in the Plans. Stationing shall be established along the centerline alignment of the Earthen Containment Dikes.

The Earthen Containment Dike Pre-Construction Survey shall be submitted and approved by the Engineer prior to the start of Earthen Containment Dike Stake Out (TS-200.8.9.1). The Contractor may submit the Earthen Containment Dike Pre-Construction surveys by Marsh Creation Area for Acceptance. Details of the survey shall be included in the Work Plan. If the Engineer realigns any portion of the Earthen Containment Dike and associated borrow area(s), the Contractor shall survey the realigned portion of the Earthen Containment Dike and associated borrow area(s) and recalculate projected quantities at no cost to the Owner. Surveys of the realigned portions shall be submitted and approved prior to the start of the Earthen Containment Dike Stake Out.

- 200.8.9.1 Earthen Containment Dike Stakeout: For the construction layout, the Earthen Containment Dike footprint (inside toe and crest, outside crest and toe) and the inside toes of the internal and external (if applicable) Earthen Containment Dike Borrow Area(s) (the toe(s) nearer the Earthen Containment Dike) shall be surveyed and staked out every two hundred fifty feet (250') (at a maximum) and at each point of inflection shown in the Plans. The ground elevation and coordinates shall be recorded at each location. The Earthen Containment Dike Stake Out survey shall be approved by the Engineer prior to the start of Earthen Containment Dike construction. Stakes shall remain in place throughout construction of the Earthen Containment Dikes.
- 200.8.10 Marsh Creation Borrow Area: A bathymetric and magnetometer survey shall be performed in the Marsh Creation Borrow Area. The bathymetric survey shall be performed using single beam with dual frequencies or multi-beam. The proposed method shall be included in the Work Plan. Transects be spaced one hundred feet (100') apart and extend one hundred feet (100') past the boundary of the Marsh Creation Borrow Area as shown on the Plans. Ground elevations and coordinates shall be recorded at every twenty-five feet (25'). The projected quantity of available borrow shall be calculated based on this survey and the design dimensions shown on the Plans.

The Contractor shall create a Marsh Creation Borrow Area Pre-Construction Surface by utilizing a software program such as AutoCAD Civil3D or other software approved by the Engineer. Only those transects shown on the Plans and these Specifications shall be used for the generation of the Pre-Construction Surface. No other transect lines will be considered for generation of the Pre-Construction Surface unless otherwise approved by the Engineer. The Contractor shall provide their Pre-Construction Surface to the Owner. The Owner will independently verify the Pre-Construction Surface. The Owner reserves the right to establish the Pre-Construction Surface based upon the Owner's generation of the Pre-Construction Surface if differences cannot be resolved.

The Marsh Creation Borrow Area Pre-Construction Survey and Surface shall be submitted to and approved by the Engineer prior to the commencement of hydraulic dredging in accordance with SP-4. Details of the survey shall be included in the Work Plan.

- 200.8.11 Marsh Creation Areas: A topographic/bathymetric and magnetometer survey shall be performed within the Marsh Creation Areas. Transects shall be consistent with the Construction Survey Layout shown on the Plans. Ground elevations and coordinates shall be recorded at twenty-five-foot (25') intervals and changes in elevation greater than one-half-foot (0.5'). **So that interior Earthen Containment Dike Borrow Areas are captured in this survey, the Contractor shall not begin the Pre-Construction Marsh Creation Area Surveys until the constructed Earthen Containment Dike for the respective Marsh Creation Area has been Accepted by the Engineer as per TS-300.10.**

The Contractor shall create a Marsh Creation Area Pre-Construction Surface for each Marsh Creation Area by utilizing a software program such as AutoCAD Civil3D or other software approved by the Engineer. Only those transects shown on the Plans and these Specifications shall be used for the generation of the Pre-Construction Surface. No other transect lines will be considered for generation of the Pre-Construction Surface unless otherwise approved by the Engineer. The Contractor shall provide their Pre-Construction Surfaces to the Owner.

The Marsh Creation Area Pre-Construction Survey and Surfaces shall be submitted and approved by the Engineer prior to commencement of hydraulic dredging in accordance with SP-4. The Contractor may submit the Marsh Creation Area Pre-Construction surveys by Marsh Creation Area for partial Acceptance. Details of this survey shall be included in the Work Plan.

- 200.8.12 Grade Stakes: Grade Stakes shall be installed and surveyed by the Contractor at locations necessary to monitor dredge fill elevations during construction of the Marsh Creation Areas (refer to TS-201). Horizontal and vertical coordinates shall be determined for all Grade Stakes immediately after installation. The identification number, existing ground elevation, coordinates, and top of grade stake elevation shall be recorded and submitted to the Engineer after all Grade Stakes have been installed in the Marsh Creation Areas to conform to proper placement of the Grade Stakes. Grade Stakes installed more than seven (7) days prior to the commencement of hydraulic dredging and marsh fill placement shall be resurveyed. Grade Stakes that are damaged or removed during the Work shall be immediately reinstalled and resurveyed (refer to TS-250.5). The locations of the Grade Stakes shall be proposed

by the Contractor and submitted in the Work Plan for approval by the Engineer.

- 200.8.13 Settlement Plates: Each Settlement Plate shall be surveyed immediately after installation in the Marsh Creation Areas. The identification number, existing ground elevation, coordinates, and elevation of the top of pipe shall be recorded. This survey shall be repeated every thirty (30) days until hydraulic dredging begins and within three (3) days prior to commencement of hydraulic dredging operations.
- 200.8.14 Dewatering Weirs: The existing topography of the dewatering weirs and outfall areas shall be surveyed. Transects shall extend along the centerline of each conduit for each dewatering weir to fifty feet (50') beyond the entrance and one hundred feet (100') beyond the outfall. Ground elevations and coordinates shall be recorded at 10-foot (10') intervals along the transects.
- 200.9 Process Surveys: The Process Surveys shall be used to verify partial payments, determine Acceptance for completed portions of the Work, monitor that the specified geometry and elevation of the Earthen Containment Dikes are maintained, and to adjust quantities of the bid items as deemed necessary by the Engineer. The Engineer reserves the right to require the Contractor to cease construction activities if Process Survey(s) are not submitted in accordance with the timelines established in TS-200.9. The Contractor shall not resume construction activities until submittal of the requested Process Survey(s) and notification to resume by the Engineer. The Owner shall not be responsible for downtime costs, field office overhead, or any other costs to the Contractor associated with the stoppage of construction activities.

The Process Surveys shall show the constructed bid items in plan and profile using elevations, coordinates, lines, and grades. The Process Surveys shall be consistent with the Pre-Construction Surveys (as noted), any modifications to these surveys as stated herein, and shall include the following items:

- 200.9.1 Quantities: The Process Survey shall show the constructed quantities for each bid item. The calculation methodology used to determine the quantities shall be consistent with the Pre-Construction Surveys.
- 200.9.2 Dredge Pipeline Corridor: Any submerged dredge pipeline installed within the Dredge Pipeline Corridor shall be routinely monitored with side scan sonar, multi-beam bathymetry, or swath bathymetry for movement, breakage, and/or leaks resulting in scour or sediment discharge on the water bottom. If it is determined water depths are too shallow to allow for bathymetric methods to be employed, topographic methods such as RTK may be substituted with prior approval from the Engineer. The surveys shall be repeatable and compared to prior surveys for any alignment, stability, and integrity issues.

An initial survey shall be conducted following the installation of the dredge pipeline within the Dredge Pipeline Corridor. The initial survey shall consist of two (2) transects located ten feet (10') parallel from each side of the dredge pipeline centerline. The initial survey shall be submitted to, and approved by, the Engineer prior to the commencement of hydraulic dredging. The dredge pipeline shall then be resurveyed weekly, consistent with the initial survey, to determine if there are any leaks in the submerged line. If a leak, scour, or elevated area is detected, the area in the immediate vicinity shall be surveyed at a grid spacing of no more than fifty feet

(50'). The survey lines shall extend a minimum of one hundred feet (100') from the edge of the elevated area. The results of the gridded survey may be used to calculate the volume of material contained in the elevated area, which may be deducted from the cut volume for payment purposes. Additional inspection surveys shall be conducted immediately upon detection of any loss of pressure indicative of leaks, the passage of a major storm, evidence of pipeline disturbance by other activities (fishing or oyster vessels, etc.), and/or visual evidence of sediment loss (e.g. sediment plume). The Engineer may also request surveys of any adjacent waterways (refer to TS-200.9.3) if any of the aforementioned conditions in this specification are met. Inspection survey reports with quality control analysis shall be submitted to the Engineer for concurrence within five (5) calendar days of completion of each survey.

If, prior to Project completion and final demobilization, the dredge plant and supporting equipment (e.g. booster pumps) are temporarily or arbitrarily demobilized from the Work Area for more than fourteen (14) consecutive calendar days, a monitoring survey of the sediment pipeline shall be conducted within twenty-one (21) calendar days of the temporary or arbitrary demobilization and monthly thereafter. The Owner reserves the right to require additional surveys in the wake of a severe storm event at no cost to the Owner.

- 200.9.3 Adjacent Waterways: The Engineer reserves the right to require the Contractor to perform a bathymetric/topographic survey of any adjacent waterway at any given time to determine if there are any elevated areas as a result of dredging activities (e.g. dewatering of the Marsh Creation Areas, leaking of the dredge pipeline, etc.). These surveys shall be performed consistent with the Pre-Construction Survey (TS-200.8.8).

If an elevated area is detected during these surveys, the area in the immediate vicinity shall be surveyed at a grid spacing of no more than fifty feet (50'). The survey lines shall extend a minimum of one-hundred feet (100') from the edge of the elevated area or to the bank of the adjacent waterway. The results of the gridded survey may be used to calculate the volume of material contained in the elevated area, which the Contractor may be required (at the direction of the Engineer) to remove at no cost to the Owner. Survey reports with quality control analysis shall be submitted to the Engineer for concurrence within five (5) calendar days of completion of each survey.

- 200.9.4 Earthen Containment Dikes: The topography of the Earthen Containment Dikes and associated borrow areas shall be surveyed after being fully constructed and fourteen (14) days prior to placement of the hydraulic dredge fill material into the respective Marsh Creation Area. This survey shall be consistent with the Pre-Construction Survey (TS-200.8.9). The total length (in feet), in-place fill quantity (cubic yards), and excavated borrow quantity (cubic yards) for the dikes around each Marsh Creation Area shall also be calculated and shown on the Process Survey drawings.

After the Earthen Containment Dike is Accepted by the Engineer and until Acceptance of all Marsh Creation Areas, the Contractor shall resurvey the five (5) or six (6) points described in TS-200.8.9 (inside toe and crest, outside toe and crest, and the inside toe(s) of the Earthen Containment Dike Borrow Area) every fourteen (14) days. These points shall be surveyed every two hundred fifty-feet (250') along the centerline, consistent with the Pre-Construction Survey cross sections. The

Engineer may require additional cross sections (locations chosen by the Engineer) or centerline surveys to be performed based on results of the bi-weekly surveys or visual inspections.

- 200.9.4.1 External Borrow Area Exhaustion Survey: Earthen Containment Dike external borrow areas that have been excavated to the maximum lines, grades, and elevations shown on the Plans shall be surveyed prior to the Contractor receiving approval from the Engineer to utilize interior borrow areas for the affected reach. A bathymetric survey shall be performed within the exhausted external borrow area, consisting of a centerline survey and cross sections every two hundred fifty feet (250') along the centerline alignment. Ground elevations and coordinates shall be recorded every 25 feet (25') along all transects. Cross sections shall extend from the outside toe of the Earthen Containment Dike to twenty-five feet (25') beyond the extents of the external borrow area.
- 200.9.5 Marsh Creation Borrow Area: The Contractor shall delineate the specific cut sequence within the Marsh Creation Borrow Area. This cut sequence shall be surveyed to determine pay quantities for Hydraulic Dredging and Marsh Creation (TS-305). The Process Survey of the Marsh Creation Borrow Area should denote (acreage and volume) which portions of the cut sequence were placed in each respective Marsh Creation Area(s) (refer to TS-400.8).
- A bathymetric survey shall be performed, consistent with the Pre-Construction survey, after completion of each slurry lift. If the Contractor remobilizes to any portion of the Marsh Creation Borrow Area which has been previously dredged, that portion shall be resurveyed before and after it is re-dredged. The Process Surveys shall be consistent with the Pre-Construction Survey.
- 200.9.6 Marsh Creation Areas: A topographic survey of the Marsh Creation Area shall be performed consistent with the Pre-Construction Survey after the Acceptance of the Marsh Creation Borrow Area Process Survey as per TS-400.4.7 and TS-400.7. This survey shall be performed at least ten (10) days after each lift has been placed and prior to placement of any additional lifts.
- 200.9.6.1 Dredge Pipeline Outfall: The location for the dredge pipeline outfall shall be surveyed after being positioned or repositioned within the Marsh Creation Area. Horizontal coordinates of the outfall shall be reported on the Daily Progress Report (see TS-400.4.2).
- 200.9.6.2 Slurry Head Wave: The location of the advancing slurry head wave shall be surveyed daily during fill placement into the Marsh Creation Areas. Horizontal coordinates shall be recorded at one-hundred-foot (100') interval along the edge of the head wave. This survey shall be included in the Daily Progress Report.
- 200.9.7 Grade Stakes: Dredge slurry and water surface elevations shall be recorded to the nearest tenth of a foot (0.1') twice daily (AM and PM), based on a visual inspection of the Grade Stakes, and submitted in the Daily Progress Reports once hydraulic dredging has begun (see TS-250.4). Twice daily readings shall continue through Acceptance of all Marsh Creation Areas. Additionally, the Contractor shall resurvey

the grade stakes weekly in accordance with TS-200.8.12 to maintain the accuracy of the visual inspections (see TS-250.5). The bi-weekly grade stake accuracy surveys shall be submitted in the Daily Progress Report, as they are completed. Additional check surveys may be required if the Engineer observes that a grade stake has been damaged or displaced.

200.9.8 Settlement Plates: The marsh fill elevation and top of pipe for all Settlement Plates shall be surveyed at the following intervals:

- Every five (5) days during fill placement prior to Acceptance of the respective Marsh Creation Area, and;
- Within three (3) days of Acceptance of the respective Marsh Creation Area.

200.9.9 Dewatering Weirs: The following attributes of the dewatering weirs shall be surveyed:

200.9.9.1 After Installation:

- Invert elevation of the weir entrance and pipe outfall;
- Diameter of the discharge pipes, and;
- Total wetted perimeter (length) of the weir entrance.

200.9.9.2 During Placement of Marsh Fill: The slurry elevation at the entrance to each weir within each Marsh Creation Area that marsh fill is being placed shall be surveyed and recorded on the Daily Progress Report.

200.9.10 Post-Process Surveys: The Engineer may require the Contractor to re-survey the Earthen Containment Dike and the associated borrow area(s) if any of the following conditions are met:

- The Earthen Containment Dikes are reworked due to material being placed above or below the specified tolerances;
- Maintenance is performed on the Earthen Containment Dikes after Acceptance.
- The time between Acceptance of the Earthen Containment Dikes and beginning of fill placement into the respective Marsh Creation Area is sixty (60) calendar days or longer.

The Contractor shall submit updated in-place and excavated borrow quantities for all Post-Process Surveys.

200.10 As-Built Survey: The As-Built Survey shall be used to verify final payments and Acceptance for all Work. Accepted Process Surveys may be included as part of the As-Built Survey, as stated in the following sections. The As-Built Survey shall show all constructed bid items in plan and profile using elevations, coordinates, lines, and grades consistent with the Process Surveys. The As-Built Survey shall be consistent with the Pre-

Construction and Process Surveys, any modifications to these surveys, and shall include the following items:

- 200.10.1 Quantities: The As-Built Surveys shall show the constructed quantities for each constructed bid item.
- 200.10.2 Dredge Pipeline Corridors and Equipment Access Corridors: The topography/bathymetry of the Dredge Pipeline Corridors and Equipment Access Corridors shall be resurveyed consistent with the Pre-Construction Survey (TS-200.8.5) prior to demobilization and after all dredge pipeline has been removed. Those portions of the corridors which have been reworked due to exceedance of the specified tolerances, upper or lower, shall be resurveyed for Acceptance.
- 200.10.3 Staging Area(s): The topography/bathymetry of the staging area(s) (if applicable) shall be resurveyed consistent with the Pre-Construction Survey (TS-200.8.6) after all Equipment has been demobilized and all staging area(s) have been restored to pre-project conditions.
- 200.10.4 Booster Pump: The booster pump location(s) (if applicable) shall be resurveyed consistent with the Pre-Construction Survey (TS-200.8.7) prior to demobilization once all booster pump location(s) have been restored to pre-project conditions.
- 200.10.5 Adjacent Waterways: The bathymetry/topography of all adjacent waterways shall be resurveyed consistent with the Pre-Construction Survey (TS-200.8.8) prior to demobilization, to determine if there are any elevated areas within adjacent waterways as a result of dredging activities (e.g. dewatering of the Marsh Creation Areas, leaking of the dredge pipeline, etc.). If an elevated area is detected during these surveys, the area in the immediate vicinity shall be surveyed in accordance with TS-200.9.3.
- 200.10.6 Earthen Containment Dikes: The As-Built survey for the Earthen Containment Dike shall be composed of the most recently accepted Process Survey. Any portions of the Earthen Containment Dike that have been reworked since the last accepted Process Survey due to exceedance of the specified tolerances, upper or lower, shall be resurveyed consistent with the Pre-Construction Survey (TS-200.8.9) in order to gain Acceptance. The final length (in feet), in-place volume (cubic yards), and excavated borrow volume (cubic yards) for the Earthen Containment Dikes shall be calculated and shown.
- 200.10.7 Degradation/Gapping of Earthen Containment Dike Survey: Upon completion of Earthen Containment Dike gapping (as specified in TS-300.9) or degrading (TS-305), the Contractor shall survey the centerline profile of the degraded/gapped portions of Earthen Containment Dike with three (3) perpendicular cross-sections equally spaced along the centerline profile within the degraded section(s) extending fifty (50) feet from the centerline on both sides with horizontal and vertical positions recorded every five feet (5') and at changes in topography greater than one-half foot (0.5'). The centerline profile shall extend at least twenty-five feet (25') past the degraded/gapped section of the Earthen Containment Dike on each side with horizontal and vertical positions recorded every five feet (5') and at changes in topography greater than one-half foot (0.5').

- 200.10.8 Marsh Creation Borrow Area: The accepted Process Surveys performed in the Marsh Creation Borrow Area (refer to TS-200.8.10) shall be compiled and included in the As-Built drawings. The final excavated volume (cubic yards) shall be calculated and shown.
- 200.10.9 Marsh Creation Areas: The As-Built Survey shall incorporate the approved and accepted Process Surveys for all of the Marsh Creation Areas. The Contractor shall develop drawings, which include the cross sections, plan views, elevations, quantities, and volumes from the Process Surveys. The dates, elevations, and volumes for each process survey shall be superimposed onto the corresponding marsh fill areas on the plan views. Any portions of the Marsh Creation Area which have been reworked due to exceedance of the specified fill elevation tolerances, upper or lower, shall be resurveyed for Acceptance.
- 200.10.10 Settlement Plates: The Settlement Plates shall be resurveyed upon Acceptance of the Marsh Creation Areas. The identification number, existing ground elevation, coordinates, and elevation of the top of pipe shall be recorded.
- 200.10.11 Grade Stakes: The Grade Stakes shall be resurveyed upon Acceptance of the Marsh Creation Areas. The identification number, slurry elevation, top of water elevation, coordinates, and elevation of the top of Grade Stake shall be recorded.
- 200.11 Deliverables: The Contractor shall submit survey data and drawings to the Engineer for review and Acceptance in accordance with SP-4. The Owner may stop the associated portions of the Work if the surveys are not submitted by the specified date. The Contractor shall not submit a Claim for an adjustment to either the Contract Time or Price on any bid item for failure to submit the surveys by the specified date.
- 200.11.1 Survey Data: Survey data shall be provided in Microsoft Excel, or approved equal, on a USB flash drive or a web-based file transfer site. Survey data shall be presented as follows:
- 200.11.1.1 Bathymetric and topographic survey data shall be provided in .csv format and include separate columns for the transect/alignment number, point number, point description, northing coordinate, easting coordinate, and elevation. Bathymetric survey data shall include bar check results, survey scroll or BIN file, and corrections for tidal fluctuations and vessel pitch, roll, and heave.
 - 200.11.1.2 Magnetometer detections shall be provided in .csv format and include the transect/alignment number, shot point number, northing coordinate, easting coordinate, sensor height, signature type, amplitude, and duration. Elevations and depth of cover shall be provided for all pipelines and magnetic detections higher than fifty (50) gammas. Descriptions shall also be provided for the probable causes of all magnetic detections higher than fifty (50) gammas. For all pipeline probings, probing point number, northing coordinate, easting coordinate, top of pipe elevations and depth of cover shall also be provided in .csv format.
 - 200.11.1.3 The elevation data for the Settlement Plates shall be provided in .csv format and line graphs which show marsh fill and top of riser pipe elevations versus time.

- 200.11.1.4 Digital copy of field notes for each survey submittal in PDF.
- 200.11.1.5 As-Built Survey data shall also be submitted in accordance with the CPRA Louisiana Sand Resources Database (LASARD) Standard Operating Procedures, which can be obtained from the following link:
<https://cims.coastal.la.gov/RecordDetail.aspx?Root=0&sid=12362>
- 200.11.2 Survey Drawings: Survey drawings shall be provided in the latest version of AutoCAD and Adobe Acrobat (PDF) on a USB flash drive or a web-based file transfer site. All survey drawings shall conform to CPRA drafting standards and be presented as follows:
 - 200.11.2.1 All sheets shall include the project name, number and seal of a professional engineer or surveyor licensed in the State of Louisiana;
 - 200.11.2.2 The location of all secondary survey monuments and temporary benchmarks shall appear in plan view with table or call out showing horizontal and vertical coordinates;
 - 200.11.2.3 Survey transects, spot elevations, and +/-1.0 foot contours shall be shown in plan view. Transects shall also be shown in profile and include mean high and mean low water levels;
 - 200.11.2.4 Magnetic anomalies and infrastructure (pipelines, utilities, etc.) shall be shown in plan view. Infrastructure shall also be shown in profile;
 - 200.11.2.5 All plan views shall be overlaid onto the most recent geo-rectified Digital Orthophoto Quarter Quadrangle aerial color photographs;
 - 200.11.2.6 Revisions such as field or change orders shall be noted, shown in red and be easily distinguishable from the original design.
- 200.12 Acceptance: The Contractor shall submit a request for Acceptance after completion of the Pre-Construction, Process, and As-Built Surveys. The Engineer shall determine Acceptance of this Work based on these surveys and conformance to the Plans and Specifications. The Engineer shall be afforded fourteen (14) working days from the date of receipt to review and determine Acceptance of each survey.
 - 200.12.1 Pre-Construction Survey: The Contractor may mobilize equipment prior to Acceptance of Equipment Access Corridor/Dredge Pipeline Corridor Pre-Construction Surveys, but shall not begin construction of any Work item until the associated Pre-Construction survey as required in Section TS-200.8 has been Accepted.
 - 200.12.2 Process Surveys: Payment for bid items shall not be made until Acceptance of the associated Process Surveys. Those portions of the Work which are required to be re-worked, repaired or replaced due to non-compliance with the Plans and these Specifications shall be resurveyed for Acceptance.
 - 200.12.3 As-Built Survey: A draft of the As-Built Survey shall be submitted to the Engineer for review prior to the Final Inspection as per SP-4. A final version of the As-Built

Survey shall be submitted to the Engineer for Acceptance after the Final Inspection as per SP-4. Final payment for this bid item will not be received until the As-Built Surveys have gained Acceptance from the Engineer.

- 200.13 Ratio of Effort/Payment: Forty percent (40%) of the Contract cost for this bid item will be paid to the Contractor upon Acceptance of the Pre-Construction Surveys, less the Marsh Creation Area Surveys and the Marsh Creation Borrow Area Survey. Forty percent (40%) will be paid to the Contractor upon Acceptance of all Process Surveys and the Marsh Creation Area and Marsh Creation Borrow Area Pre-Construction Surveys. The remaining twenty percent (20%) will be paid to the Contractor upon Acceptance of the complete As-Built Survey. The Contractor may propose a revised Ratio of Effort subject to review and approval by the Engineer prior to initiating any surveys.
- 200.14 Measurement and Payment: The Contractor shall submit Applications for Payment after gaining Acceptance. Payment shall be made at the Contract lump sum price for Bid Item No. 2, "Surveys (TS-200)". Payment shall constitute full compensation for furnishing the material, labor, Equipment and other incidentals related to this item of the Work.
- 200.14.1 Alternate Bid No. 1: If Alternate Bid No. 1 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 14 "Surveys – MCA-3 (TS-200)".
- 200.14.2 Alternate Bid No. 2: If Alternate Bid No. 2 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 22 "Surveys – MCA-5 (TS-200)".

TS-201 DAILY BIRD ABATEMENT

- 201.1 Scope: The Contractor shall furnish all of the labor, and Equipment, and Materials necessary to monitor and abate all nesting birds within the Work Areas (less the Dredge Pipeline Corridors, Equipment Access Corridors, and Marsh Creation Borrow Area) and within a 1000' (one-thousand foot) buffer. If no birds are found to be present, no abatement measures are required. The Contractor and Subcontractors shall comply with all requirements under the terms and conditions set out in permits or certifications, including but not limited to and USACE 404 and Section 10 permits, Coastal Use Permit (CUP) by Louisiana Department of Natural Resources (LDNR), Water Quality Certification from Louisiana Department of Environmental Quality (LA DEQ). Additionally, the Contractor shall comply with the provisions in applicable State and Federal laws and regulations, including but not limited to the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, Fish and Wildlife Coordination Act (FWCA), and/or any conditions established by the Louisiana Department of Wildlife and Fisheries (LDWF) and the United States Fish and Wildlife Services (USFWS).
- 201.2 Nesting Bird Abatement Plan: The Contractor shall include in the Work Plan the names and qualifications of the biologists along with proposed monitoring and abatement actions planned within authorized Work Areas. The Nesting Bird Abatement Plan (NBAP) shall be included in the required Work Plan submittal to the Engineer for review and approval prior to the commencement of Work. The NBAP will include a plan of work, personnel, required Materials, work crew coordination activities, and reporting formats for any required monitoring and abatement activities. The Contractor shall meet with the Engineer before the commencement of Work to coordinate and discuss the protocols for monitoring and abatement.
- 201.3 Survey and Abatement Periods: The nesting period for bird species varies, however, February 15th through September 15th is a conservative timeframe for consideration. There is the potential for nocturnal species; therefore, it is recommended that some or all abatement activities could take place twenty-four (24) hours a day, seven (7) days a week if necessary and allowed. It is advised that passive and/or active abatement techniques be deployed before the onset of the nesting season regardless of whether any active bird use is observed.
- 201.4 Nesting Bird Surveys: To minimize impacts to birds, the Contractor shall employ a qualified biologist to allow for accurate identification of birds encountered during the execution of Work under this Contract. The qualified biologist shall survey the Work Areas (less the Dredge Pipeline Corridor and Marsh Creation Borrow Area) and a within a 1000' (one-thousand foot) buffer zone from the aforementioned Work Areas to determine signs of breeding or nesting activities from birds as necessary. The Contractor shall carefully mark and stake the boundaries of the Work Areas and the buffer zone. Survey stakes and flagging utilized for marking this boundary shall consist of sufficient length to remain a minimum of two feet (2') above mean water level. The Contractor shall include the proposed materials for the markers in the Nesting Bird Abatement Plan for approval by the Engineer. The Contractor shall maintain the markers in good order for the duration of construction. All markers shall be removed from the Project Site and properly disposed by the Contractor prior to demobilization.

Evidence of forthcoming nesting such as territory defense, courtship behavior, or nest building by any bird species shall be noted. GPS coordinates and a brief description of the

location, number, and type of birds involved in the nesting activity shall be recorded. The Contractor shall also use this information to determine if and when nesting bird surveys should be performed and abatement actions should be implemented.

- 201.5 Abatement Methods for Birds: Abatement methods are recommended to prevent nesting activities. The Contractor shall use the nesting survey information to determine and implement approved abatement actions within the work and buffer areas.

All abatement techniques/methods should be coordinated with the Engineer prior to use. To increase the effectiveness of the efforts, a combination of abatement measures should be employed. Additionally, the types of abatement measures, as well as their spatial and temporal deployment, should be changed frequently to reduce the chances that birds become habituated to the abatement measures.

Passive measures such as scare eye balloons or predator decoys may deter birds from nesting. In the event that initiation of nesting birds is discovered, then the Engineer shall be contacted and abatement measures should be altered to include more active methods such as continual human presence. More aggressive methods of hazing (i.e. cannons, flares, etc.) could also be used if necessary. Timing, persistence, organization, and diversity of abatement measures are crucial in deterring birds from establishing active nests. All abatement measures should be conducted by qualified biologists who are familiar with the proposed abatement methods.

In the event that an egg is spotted, the Engineer should be contacted immediately. The required buffer area around the nest shall be established and all activities within the buffer area, including abatement, must cease.

Bird abatement is the Contractor's responsibility. Failure to deter birds from nesting may result in construction delays and may impact execution of the work. Delays or costs incurred to avoid nesting birds shall be born by the Contractor and shall not be the basis for a claim against the Owner. Delays or costs may include altering construction activities, relocating construction to other areas of the project site, or abandoning construction and completion of portions of the project.

- 201.6 Identification of Nesting Activities: In the event that the Contractor discovers the initiation of bird nesting or discovers an egg within survey/abatement area, then the Engineer should be contacted immediately, required nest avoidance areas shall be established, and more aggressive survey and abatement measures should be deployed outside the nest avoidance area within the remaining survey/abatement area.

If nesting occurs within survey/abatement area, the Contractor shall maintain a crew and visitor notification system that includes the nest avoidance areas and approved travel corridors. Notifications should clearly indicate the current status of nest encroachment buffers/avoidance areas, any marking schemes, and any other information needed to insure Work continues without disturbance to nesting birds. Observations of any nest(s) by the qualified biologist, maintenance of nest buffers, and notification systems shall remain in place until the nesting activities have ceased.

The Contractor should evaluate impacts to construction activities, if applicable, and inform the Engineer of plans to adjust construction activities based on recommendations of the biologist. For situations that may require temporary adjustments, the Contractor can make

a recommendation of what potential encroachment is needed to ensure the birds are not disturbed or harassed from their nest, but still allows the continuation of Work. Justification should be documented and sent to the Engineer as soon as possible.

201.7 Deliverables: The Contractor shall submit the following Daily Bird Abatement deliverables to the Engineer as part of the Daily Progress Report:

201.7.1 Daily Bird Abatement Reports: Daily Bird Abatement reports for all activities at the Project Site including, but is not limited to, bird surveys, nest locations, weather conditions, abatement activities, manpower, Equipment, abatement techniques, etc. In addition, photographs and GPS coordinates shall be provided for each identified nest. Maps should include, but are not limited to, identified bird nests, aerial extent of abatement activities, required buffer of identified bird nests, location of pre-nesting activities, GPS coordinates of bird nests or other pertinent features, etc. Daily Bird Abatement reports shall be submitted by 12:00 PM the following day for each day that Daily Bird Abatement takes place.

201.7.2 Nesting Season Log: An excel spreadsheet with nest location coordinates, species, individual nest ID, dates of nest discovery, dates of nest examinations including the last date checked, and nest fate shall be provided at the end of each nesting season.

201.8 Acceptance: The Contractor shall submit the required daily deliverables as per TS-201.7 each day to the Engineer for Acceptance. Acceptance shall be determined based upon compliance with the aforementioned requirements.

201.9 Measurement and Payment: Payment for Daily Bird Abatement shall be made at the Contract unit price per Day for Bid Item No. 3, "Daily Bird Abatement (TS-201)". Price and payment shall constitute full compensation for furnishing all labor, Equipment, Materials, and other incidentals related to this item of work.

201.9.1 Alternate Bid No. 1: If Alternate Bid No. 1 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 15 "Daily Bird Abatement – MCA-3 (TS-201)".

201.9.2 Alternate Bid No. 2: If Alternate Bid No. 2 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 23 "Daily Bird Abatement – MCA-5 (TS-201)".

TS-250 GRADE STAKES

250.1 Scope: Grade Stakes shall be installed within the Marsh Creation Areas in order to monitor the elevation of fill during placement. The Contractor shall furnish all of the materials, labor, and Equipment necessary to construct, install, maintain, and inspect the Grade Stakes in accordance with the Plans and these Specifications.

250.2 Materials: Each gauge sign shall be fixed to, and supported by, one (1) four-inch (4") by four-inch (4") untreated pine stake of sufficient length to be embedded a minimum of eight feet (8') below existing grade. The top of the gauge sign shall be fastened flush with the top of the lumber using three (3) #8 galvanized or zinc-coated wood screws and washers. Holes shall be drilled through the lumber and gauge sign before the fasteners are installed.

The gauge sign shall be composed of sheeting applied to a rigid substrate of four-inch (4") by twelve-hundredths-inch (0.120") by seventy-eight-inch (78") fiberglass reinforced thermoset polyester laminate using a pressure sensitive urethane adhesive. The sheeting shall be reflective, white in color, and made from Avery Dennison T1500, or approved equal. The substrate shall be gray in color, dielectric, non-conductive, acrylic, UV stabilized, and possess a tensile strength which exceeds five-thousandths of an inch (0.005") aluminum.

The elevation range from 0.0 feet (NAVD88, Geoid 12B) to one foot (1') below the maximum constructed marsh fill elevation shall be represented on the gauge sign using green transparent ink. From one foot (1') below the maximum constructed marsh fill elevation to the maximum constructed marsh fill elevation, the gauge sign shall be represented in yellow transparent ink. The background color for the remainder of the gauge sign (above the maximum constructed marsh elevation) shall be red transparent ink. Border lines shall be applied at each tolerance elevation using one-eighth-inch (1/8") thick black ink. Ink shall be Avery 7TS or approved equal.

Maximum elevations for each Marsh Creation Area are shown on the Plans. If the optional lift of the Earthen Containment Dike is not constructed for a given Marsh Creation Area (refer to TS-300.5.3.1), the elevations depicted on the gauge sign shall be one foot (1') lower, with ink coloring adjusted accordingly.

- 250.3 Installation: Grade Stakes shall be installed prior to placement of the dredge fill material in the Marsh Creation Areas in a vertical position embedded at least eight feet (8') below the existing grade within the Marsh Creation Areas. Proposed Grade Stake locations shall be included in the Work Plan and approved by the Engineer prior to installation. The Grade Stakes shall be inspected per TS-200.8.12 no more than seven (7) days prior to dredge fill material placement.
- 250.4 Daily Inspections: Grade Stakes shall be inspected twice daily, per TS-200.9.7. The results of all inspections shall be included in the Daily Progress Reports. The inspections may be witnessed by the Engineer or Resident Project Representative.
- 250.5 Maintenance: The Grade Stakes shall be surveyed weekly, per TS-200.9.7, and maintained by the Contractor until Acceptance of the Marsh Creation Areas. This survey shall include top elevation, recorded distance from the top of the stake to the dredge slurry (tape down distance), the stake identification number, and position coordinates for each grade stake. Grade Stakes shall be repaired or replaced if badly damaged or if their plumb angle varies by more than fifteen (15) degrees from vertical.
- 250.6 Removal: The Grade Stakes shall be removed after Acceptance of all Marsh Creation Areas. The Grade Stakes shall either be removed in their entirety or cut off at marsh grade. Impacts to the Marsh Creation Areas shall be minimized during removal of the grade stakes.
- 250.7 Acceptance: After installation, the installed grade stake survey shall be submitted to the Engineer for Acceptance. Grade Stakes not Accepted shall be replaced, resurveyed, and Accepted by the Engineer prior to placement of dredge fill material into the respective Marsh Creation Area.
- 250.8 Ratio of Effort: Ninety percent (90%) of the Contract cost for these bid item will be paid

to the Contractor upon Acceptance of the Grade Stakes. The remaining ten percent (10%) will be paid to the Contractor upon removal as per TS-250.6.

- 250.9 Measurement and Payment: Payment shall be made for the Contract unit price per each for Bid Item No. 4 “Grade Stakes (TS-250)”. Payment shall constitute full compensation for furnishing the material, labor, equipment, and other incidentals related to this item of the Work. No payment shall be made for grade stakes that are rejected or damaged and replaced due to fault or negligence by the Contractor.
- 250.9.1 Alternate Bid No. 1: If Alternate Bid No. 1 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 16 “Grade Stakes – MCA-3 (TS-250)”.
- 250.9.2 Alternate Bid No. 2: If Alternate Bid No. 2 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 24 “Grade Stakes – MCA-5 (TS-250)”.

TS-270 SETTLEMENT PLATES

- 270.1 Scope: The Contractor shall furnish all Materials, labor, and Equipment necessary to construct, install, survey, and maintain the Settlement Plates within the Marsh Creation Areas as shown on the Plans.
- 270.2 Materials:
- 270.2.1 Base Plate: The base plate for each settlement plate shall be fabricated with a six-foot (6') by six-foot (6') by one-fourth-inch (1/4") thick steel plate. A two and seven-eighths-inch (2-7/8") diameter hole shall be drilled or cut through the center of the base plate for installation of the riser pipe and stand pipe.
- 270.2.2 Riser Pipe: The riser shall be inserted two feet (2') through the hole in the center of the base plate and welded on both sides of the plate using a three-sixteenths-inch (3/16") continuous fillet. The top of the riser pipe shall be fitted with a welded steel cap. The riser pipe for each settlement plate shall be two and one-half-inch (2-1/2") nominal diameter Schedule 40 steel pipe that is ten feet (10') long.
- 270.2.3 Stand Pipes: The stand pipes shall be one and one-half-inch (1-1/2") nominal diameter Schedule 40 steel pipe that is a minimum of twenty feet (20') long.
- 270.3 Zinc Coating: After fabrication, the Settlement Plates shall be hot-dip galvanized. A zinc coating shall be applied in a manner and thickness quality conforming to ASTM A123. In any case where the zinc coating becomes damaged, the damaged area shall be regalvanized with a suitable low-melting zinc base alloy as recommended by the American Hot-Dip Galvanizers Association. One coat of a vinyl wash primer followed by a red top coat shall be applied over the zinc coat. All painting shall conform to the latest edition of the LA DOTD Standard Specification Section 811 and 1008 or approved equivalent.
- 270.4 Installation: Settlement Plates shall be installed within the limits of the Marsh Creation Areas as shown on the Plans, or as directed by the Engineer, a minimum of two (2) weeks prior to placement of dredged material. A stand pipe shall be installed prior to Settlement Plate installation. The full length of the stand pipe shall be used in order to anchor the Settlement Plate. The Contractor shall determine the appropriate installation depth of the stand pipe at each location during installation. Where installation of a stand pipe is interrupted because of an obstruction (refusal), the Contractor shall notify the Engineer and cease installation of the stand pipe. After installation of the stand pipe, the Settlement Plate shall be sleeved over the stand pipe. Leveling of the plate bed shall be accomplished by removing the minimum amount of earth necessary to produce a level foundation. Leveling of the plate bed by the addition of any material will not be permitted. The Settlement Plates shall be marked with brightly colored flagging or reflective tape.
- 270.5 Maintenance: The Contractor shall maintain all Settlement Plates until all Work is completed. Settlement Plates shall be immediately repaired or replaced and resurveyed by the Contractor at no expense to the Owner if badly damaged or if their plumb angle varies by more than fifteen (15) degrees from vertical.
- 270.6 Acceptance: The Contractor shall request Acceptance after installation of the Settlement Plates. The Engineer shall determine Acceptance based on a review of the Pre-Construction Surveys. This Acceptance does not remove the Contractor of their responsibility to

maintain the Settlement Plates as stated in TS-270.5.

270.7 Measurement and Payment: The Contractor shall submit Applications for Payment after gaining Acceptance. Payment shall be made for the Contract unit price per each for Bid Item No. 5, "Settlement Plates (TS-270)". Payment shall constitute full compensation for furnishing the material, labor, Equipment and other incidentals related to this item of the Work. No payment shall be made for Settlement Plates that are rejected or damaged due to fault or negligence by the Contractor.

270.7.1 Alternate Bid No. 1: If Alternate Bid No. 1 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 17 "Settlement Plates – MCA-3 (TS-270)".

270.7.2 Alternate Bid No. 2: If Alternate Bid No. 2 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 25 "Settlement Plates – MCA-5 (TS-270)".

TS-300 EARTHEN CONTAINMENT DIKES

- 300.1 Scope: The Contractor shall furnish all of the Material, labor and Equipment necessary to construct, maintain, and gap the Earthen Containment Dikes (ECDs) in accordance with these Specifications and in conformity to the lines, grades, elevations and tolerances shown on the Plans, or otherwise modified by the Engineer as a result of the Pre-Construction Survey. Construction sequencing of this item shall be included in the Work Plan. The Contractor shall not begin construction of the ECDs prior to Acceptance of applicable sections of the Work Plan (SP-7.5) and Acceptance of the Earthen Containment Dike Pre-Construction Survey (TS-200.8.9) and Earthen Containment Dike Stakeout (TS-200.8.9.1) for a respective Marsh Creation Area.
- 300.2 Equipment: All ECDs shall be constructed and maintained using mechanical excavation equipment. The Equipment Data Sheet in Appendix J shall be included in the Work Plan for all mechanical excavation equipment proposed to perform the Work. The mechanical excavation equipment shall be in satisfactory operating condition, capable of efficiently performing the Work, and shall be subject to inspection by the Owner or Engineer throughout the performance of the Work. Refer to TS-100.4 for all equipment requirements.
- 300.3 ECD Stake Out: The ECD and associated borrow area shall be surveyed and staked out as per TS-200.8.9. The Owner shall conduct a hold point inspection at the completion of the ECD stakeout prior to the start of construction activities. Stakes shall remain in place throughout construction of the ECDs.
- 300.4 Equipment Access and Staging Area(s): Refer to TS-100.4.1 "Equipment Access Corridor and Staging Area(s)".
- 300.5 Construction: The ECDs shall be constructed along the perimeter of all Marsh Creation Areas using in-situ borrow material that is excavated adjacent to the ECDs. The ECDs shall be constructed using either an internal borrow source (within the Marsh Creation Area), an external borrow source (outside of the Marsh Creation Area), or a combination of thereof (refer to TS-300.5.1 and TS-300.5.2). The ECDs and associated borrow areas shall be surveyed and staked in accordance with TS-200.8.9 and TS-200.8.9.1 prior to construction. The borrow material shall not be excavated within the minimum offset distance from the toe of the ECDs as shown on the Plans. Material shall not be excavated from the borrow areas below the maximum cut elevation shown on the Plans.
- 300.5.1 Exterior Borrow: The ECD reaches listed below shall be constructed with exterior borrow as the primary borrow source, as shown on the Plans.
- Marsh Creation Area 1: PI M1-3 to M1-9
 - Marsh Creation Area 2: PI M2-6 to M2-9
 - Marsh Creation Area 3: PI M3-2 to M3-6
 - Marsh Creation Area 4: PI M4-2 to M4-4A and PI M4-8 to M4-9
 - Marsh Creation Area 5: PI M5-4 to M5-7

- Marsh Creation Area 6: PI M6-1 to M6-6 and PI M6-18 to M6-1
- Marsh Creation Area 7: PI M7-1 to M7-2A and PI M7-8 to M7-14

A secondary, internal borrow area has been delineated as shown on the Plans, but shall not be utilized until the primary (external) borrow area has been exhausted, unless otherwise directed by the Engineer. Upon exhaustion of the external borrow area, the Contractor shall survey the exhausted external borrow area in accordance with TS-200.9.4.1. The Contractor shall submit the results of this survey to the Engineer for Approval prior to excavation in the secondary, internal borrow area.

300.5.2 Interior Borrow: The ECD reaches listed below shall only be constructed with interior borrow sources as shown on the Plans:

- Marsh Creation Area 1: PI M1-1 to M1-3 and M1-9 to M1-1
- Marsh Creation Area 2: PI M2-1 to M2-6 and M2-9 to M2-1
- Marsh Creation Area 3: PI M3-1 to M3-2 and PI M3-6 to M3-1
- Marsh Creation Area 4: PI M4-1 to M4-2, PI M4-4A to M4-8, and PI M4-9 to M4-1
- Marsh Creation Area 5: PI M5-1 to M5-4 and PI M5-7 to M5-1
- Marsh Creation Area 6: PI M6-6 to M6-18
- Marsh Creation Area 7: PI M7-2A to M7-8 and PI M7-14 to M7-1

300.5.3 Crest Elevation Tolerance: The vertical elevation tolerance for the crest height of the ECDs shall be minus one-half (-0.5) foot. The Contractor shall provide for a minimum freeboard of one foot (1.0') from the projected marsh fill elevation to the crest elevation of the ECD that shall be maintained until the Acceptance of the respective Marsh Creation Areas.

300.5.3.1 Optional Lift: The Contractor may elect to construct the optional lift in accordance with the geometries and tolerances shown on the Plans. The Contractor shall notify the Engineer of intent to construct the optional lift in writing (or included in the Work Plan). The Contractor shall not submit a Claim for an adjustment to either the Contract Time or Price on any bid item for election to construct the optional lift.

300.5.4 Earthen Containment Dike Re-Alignment: The Engineer reserves the right to realign any portion of the ECD alignment based on the Pre-Construction Surveys. Modifications to the ECD alignment shall be authorized and compiled by the Engineer and shall be submitted to the Contractor no later than fourteen (14) working days after the receipt of the approved Pre-Construction Survey data.

300.5.5 Mechanical Excavator Monitoring: The Contractor shall submit a mechanical excavator monitoring plan in the Work Plan, which shall detail the Contractor's methodology to ensure that the ECD borrow area template is not exceeded.

- 300.6 Borrow Material: The soil properties of the borrow material may vary across the Project Site. The geotechnical reports are provided in Appendix H. All unsuitable organic debris (logs, stumps, snags, etc.) greater than two inches (2") in diameter or two feet (2') in length that is encountered in the ECD borrow area shall remain and not be utilized to construct the ECDs. All unsuitable inorganic debris (tires, scrap, etc.) greater than five (5) pounds that is encountered in the ECD borrow areas shall be disposed off-site in an approved waste disposal facility.
- 300.7 Existing Infrastructure: The Contractor shall not anchor, spud, or excavate within seventy-five feet (75') of pipelines, wellheads, or other existing infrastructure, unless noted otherwise on the Plans. The ECDs shall be constructed in a manner such that results in no impacts to existing infrastructure.
- 300.7.1 Existing Infrastructure Protective Measures: Refer to SP-10 "Landowner, Pipeline Owner/Operator, Utility, and Existing Infrastructure Requirements".
- 300.8 Maintenance: The specified geometry and elevation of the ECDs shall be maintained by the Contractor throughout construction of the Marsh Creation Areas and until Acceptance of a respective Marsh Creation Areas at no expense to the Owner. Maintenance of the ECDs shall be required for nonconformance based on inspections or Process Surveys. Should a breach, overtopping, or failure of any of the ECDs occur before all Marsh Creation Areas gain Acceptance, the Contractor shall immediately notify the Engineer, cease filling of the Marsh Creation Area(s) and initiate repairs to the ECD. The Contractor shall not resume dredging within the impacted Marsh Creation Area until repairs have been made and approved by the Engineer. Additionally, the Owner shall not be responsible for downtime costs, field office overhead, or any other costs to the Contractor associated with the stoppage of hydraulic dredging operations. The Contractor shall include a detailed procedure and communication protocol for the repair and reporting of ECD breaches in the Work Plan. All external spills of fill or ECD material from the Marsh Creation Areas shall be immediately returned to the Marsh Creation Areas by the Contractor at no additional pay. Additionally, the Contractor shall be responsible for the restoration of all damages to adjacent wetlands, water bodies, or SAV associated with ECD breaches, overtopping, or unregulated releases.
- 300.9 Gapping of Earthen Containment Dikes: Upon Acceptance of a respective Marsh Creation Area, the Owner may require up to a maximum of ten percent (10%) of the total linear footage of ECDs be gapped. This may include sections of Earthen Containment Dike that are to be degraded (refer to TS-305). Gaps shall be constructed by degrading the ECD to an elevation of -1.0 feet (NAVD88, Geoid 12B). The Contractor shall submit proposed locations and widths/depths for gapping of the ECD for approval by the Engineer. Gapping of the ECDs may be performed concurrently with degrading of the ECDs (TS-305).

Spoil material from the gapping of the ECDs shall be spread evenly within the footprint of the associated internal borrow area, such that the surveyed elevation shall be within one-half foot (0.5') measured from the highest to the lowest elevation based on the Degradation/Gapping of Earthen Containment Dike Survey (TS-200.10.7) with the highest elevation not exceeding the maximum constructed fill elevation as shown on the Plans. For reaches of ECD where internal borrow was not utilized, spoil material from the ECD gapping shall be spread evenly within the footprint of the associated Marsh Creation Area beginning at a distance twenty-five feet (25') or more from the ECD. Upon completion of the ECD gapping, the Contractor shall survey the gapped areas as described in TS-

200.10.7.

- 300.10 Acceptance: ECDs shall gain Acceptance after the Process Surveys show compliance with the lines, grades, elevations, and tolerances shown on the Plans and are Accepted by the Engineer. The Engineer may require the addition or removal of material that is excavated or placed beyond the specified tolerances at no additional cost to the Owner. Acceptance of the ECDs may be requested with the monthly payment application corresponding to the linear footage of ECD constructed. Acceptance by the Engineer does not relieve the Contractor of their responsibility to maintain the ECDs until Acceptance of the respective Marsh Creation Area.
- 300.11 Ratio of Effort/Payment: Eighty percent (80%) of the Contract cost for this bid item shall be paid to the Contractor after Acceptance of the ECDs. The remaining twenty percent (20%) will be paid to the Contractor after Acceptance of each respective Marsh Creation Area and the As-Built Survey of the gapped and degraded sections of ECDs specified in TS-300.9 and TS-200.10.7, respectively.
- 300.12 Measurement and Payment: Payment for these ECDs shall be made at the Contract unit price per linear foot for Bid Item No. 6, "Earthen Containment Dikes (TS-300)". Payment shall constitute full compensation for furnishing the labor, Equipment, and other incidentals related to these items of the Work. The Contractor may request partial payment on a monthly basis based on the linear footage of Accepted ECD constructed.
- 300.12.1 Alternate Bid No. 1: If Alternate Bid No. 1 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 18 "Earthen Containment Dikes – MCA-3 (TS-300)".
- 300.12.2 Alternate Bid No. 2: If Alternate Bid No. 2 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 26 "Earthen Containment Dikes – MCA-5 (TS-300)".

TS-305 EARTHEN CONTAINMENT DIKE DEGRADATION

- 305.1 Scope: The Contractor shall furnish all of the Materials, labor, and Equipment necessary to degrade portions of the Earthen Containment Dikes (ECD) within each Marsh Creation Area in accordance with these specifications and in conformity to the lines, grades, elevations, and tolerances shown on the Plans. Those portions of ECD shown on the Plans shall be degraded after Acceptance of each Marsh Creation Area.
- 305.2 Equipment: All ECDs shall be degraded using mechanical excavation equipment only. The Equipment Data Sheet in Appendix J shall be included in the Work Plan for all mechanical excavation equipment proposed to perform the Work. The mechanical excavation equipment shall be in satisfactory operating condition, capable of efficiently performing the Work, and shall be subject to inspection by the Owner or Engineer throughout the performance of the Work. Refer to TS-100.4 for all equipment requirements.
- 305.3 Equipment Access and Staging Area(s): Refer to TS-100.4.1 “Equipment Access Corridor and Staging Area(s)”.
- 305.4 Construction: Upon Acceptance of a respective Marsh Creation Area and the Contractor’s proposed gapping plan (TS-300.9), ECDs shall be degraded to the adjacent constructed marsh fill elevation within each Marsh Creation Area. Spoil material from the ECD degradation shall be spread evenly within the footprint of the associated internal borrow area. For reaches of ECD where internal borrow was not utilized, spoil material shall be spread evenly within the footprint of the associated Marsh Creation Area beginning at a distance twenty-five feet (25’) or more from the ECD.
- 305.5 Tolerances: The tolerance for the degraded ECD shall be minus six inches (-6.0”) along the finished grade. Spoil material placement shall be within one-half foot (0.5’) measured from the highest to the lowest elevation based on the Degradation/Gapping of Earthen Containment Dike Survey (TS-200.10.7) with the highest elevation not exceeding the maximum constructed fill elevation as shown on the Plans.
- 305.6 Acceptance: The Contractor shall submit a request for Acceptance after degradation and an As-Built survey of the degraded ECD sections in each respective Marsh Creation Area (TS-200.10.7). Acceptance shall be determined from the Process Surveys and compliance with the lines, grades, elevations, and tolerances shown on the Plans. The Engineer may require addition or removal of material that is excavated or placed beyond the specified tolerances at no additional cost to the Owner.
- 305.7 Measurement and Payment: Payment for ECD degrading shall be made at the Contract unit price per linear foot for Bid Item No. 7, “Earthen Containment Dike Degradation (TS-305)”. Payment shall constitute full compensation for furnishing the labor, Equipment, and other incidentals related to these items of the Work. The Contractor may request partial payment on a monthly basis based on the linear footage of degraded ECD.
- 305.7.1 Alternate Bid No. 1: If Alternate Bid No. 1 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 19 “Earthen Containment Dike Degradation – MCA-3 (TS-305)”.

305.7.2 Alternate Bid No. 2: If Alternate Bid No. 2 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 27 “Earthen Containment Dike Degradation – MCA-5 (TS-305)”.

TS-400 HYDRAULIC DREDGING AND MARSH CREATION

- 400.1 Scope: The Contractor shall furnish all of the Materials, labor, and Equipment necessary to hydraulically dredge the Marsh Creation Borrow Area and place the material into the Marsh Creation Areas in accordance with these specifications and in conformity to the lines, grades, elevations and tolerances shown on the Plans, or as directed by the Engineer. The borrow material shall be dredged, pumped, and placed in such a manner to ensure that negative impacts are avoided or minimized to the maximum extent possible. This section shall include the operation and maintenance of the hydraulic dredge and booster pump(s), if required. The Contractor shall not begin Hydraulic Dredging and Fill Placement prior to approval of applicable sections of the Work Plan (SP-7.6, SP-7.7 and SP-7.8), the Marsh Creation Area Pre-Construction Survey (for a respective Marsh Creation Area), the Marsh Creation Borrow Area Pre-Construction Surveys (TS-200.8.10 and TS-200.8.11), and the Adjacent Waterways Pre-Construction Surveys (TS-200.8.8).
- 400.2 Equipment: The dredge equipment and attendant plant shall be in satisfactory operating condition, capable of efficiently performing the Work as set forth in the Plans and these Specifications, and shall be subject to inspection by the Owner or Engineer prior to beginning the Work and at all times during construction. The Hydraulic Dredge Data Sheet, including a complete description of the equipment the Contractor intends to use for dredging (size, horsepower, anticipated hourly production rate, anticipated specific gravity of slurry, draft, etc.) must also be completed and submitted with the Work Plan. The Hydraulic Dredge Data Sheet may be found in Appendix I. A Dredging Plan shall also be included in the Work Plan for approval by the Engineer. An example Dredging Plan is provided in Appendix L. The Equipment Data Sheet in Appendix J shall be submitted in the Work Plan for all other equipment proposed to perform the Work other than the hydraulic dredge.
- 400.3 Hydraulic Dredging: The Contractor shall dredge the Marsh Creation Borrow Area using the hydraulic dredge and transfer the dredged material to the Marsh Creation Areas. Construction sequencing for borrow area dredging and fill placement shall be included in the Work Plan.
- 400.3.1 Hydraulic Dredging Window: The Contractor shall only perform hydraulic dredging during the months of April through October due to the presence of Gulf Sturgeon. Refer to SP-12 "Threatened and Endangered Species". All other Work may be performed.
- 400.3.2 Borrow Material: The Marsh Creation Borrow Area's geotechnical information can be found in Appendix H. Geotechnical analysis of the Marsh Creation Borrow Area indicates the presence of shallow Pleistocene materials. Additional materials such as shells, logs, stumps, snags, tires, scrap, and other debris may be encountered within the specified limits of dredging. If any of these materials are encountered, the Engineer will determine if they shall be dispersed within the Project Site or removed and properly disposed of by the Contractor. No additional payment for dispersed or removed material shall be made.
- 400.3.3 Production Rate and Specific Gravity: The production rate of the hydraulic dredge shall be defined as cubic yards of borrow material cut per hour. The Contractor shall include the anticipated production rate in the Hydraulic Dredge Data Sheet, which shall be submitted in the Work Plan. The Contractor shall operate at or below the

production rate specified in the Hydraulic Dredge Data Sheet at all times unless approved by the Engineer. The average production rate shall be determined daily and included in the Daily Progress Report. The production rate shall be maintained at all times such that one foot (1.0') of freeboard is maintained between the top of the slurry and the crest of the ECDs, and the crest elevation of the ECDs are not exceeded by the slurry. The Engineer may require a reduction or stoppage in the hydraulic dredge production. The Owner shall not be responsible for any costs to the Contractor associated with a reduction or stoppage in the hydraulic dredge production.

The Contractor shall also maintain the dredge slurry at the highest specific gravity (density) possible such that at least one foot (1.0') of freeboard is maintained between the top of the slurry and crest of the ECDs, and the crest elevation of the ECDs are not exceeded by the slurry. The anticipated dredge slurry specific gravity shall be included on the Hydraulic Dredge Data Sheet which shall be submitted in the Work Plan. The average slurry specific gravity shall be determined daily and included in the Daily Progress Report.

400.3.4 Dredging Limits: Dredging shall only occur within the limits of the Marsh Creation Borrow Area as shown on the Plans. The Contractor shall immediately notify the Engineer if an infraction of the Marsh Creation Borrow Area limits does occur. No payment shall be made for any material dredged beyond the Marsh Creation Borrow Area limits of borrow. The Contractor will also be required to pay any costs, fines, or other expenses related to dredging outside of the borrow limits or permit violations resulting from Contractor negligence at no additional cost to the Owner. If the Contractor does not pay costs, fines, or other expenses related to dredging outside of the borrow limits and/or permit limits, the Owner will deduct said costs, fines, and expenses from payment due to the Contractor. Additionally, said costs, fines, and expenses may be recovered from the Contractor's bond for payment.

400.3.5 Dredge Location Control: The Contractor is required to utilize a Differential Global Positioning System (DGPS) to accurately and continuously track and record the position and depth of the dredge and cutter head while dredging the Marsh Creation Borrow Area. The position of the dredge and cutter head shall be recorded in Louisiana South State Plane Coordinate System, NAD 1983 with an accuracy of six feet (6'). The Engineer and/or Resident Project Representative shall be allowed to board the dredge and observe dredging operations, including access to the bridge. The Contractor is required to calibrate the DGPS equipment as per manufacturer's specifications. Proof of calibration shall be submitted to the Owner and Engineer.

The Contractor is also required to have a dredging depth indicator capable of gauging the depth being dredged at all times for each piece and type of dredging plant being utilized. The instrument shall be of electronic recorder type. The indicators shall be in plain view of Operators and the Resident Project Representative and be adjusted to the reference datum, NAVD88 Geoid 12B-Epoch 2010.00. The Contractor shall use surveying equipment and methodology specified in TS-200 to achieve this vertical datum. The position data and calibration record shall be included in the Daily Progress Reports. The proposed type of positioning equipment and proposed tide correction methods and measurements shall be included in the Work Plan. All dredges and other auxiliary service vessels shall be equipped with bridge-to-bridge radio telephones capable of operating from the main

control station and capable of transmitting and receiving on the frequencies required for the exchange of navigational information and maximum safety of operations.

- 400.3.6 Borrow Area Cut Sequence: The Dredging Plan (refer to Appendix L) shall include a proposed Borrow Area Cut Sequence Plan which shall delineate each area (acreage), volume, and cut depth of the Marsh Creation Borrow Area that are to be dredged and placed within each Marsh Creation Area (refer to TS-400.4.5 for cut volume requirements). Each portion of the Marsh Creation Borrow Area Cut Sequence shall be enumerated and prefaced with the corresponding Marsh Creation Area in which that apportioned dredged material will be placed. The contract quantity for each Marsh Creation Area shall be shown in plan and tabular format on the Pre-Construction Survey, Process Surveys of the Marsh Creation Borrow Area and Marsh Creation Areas, the Contractor's Daily Reports, and on the As-Built Surveys.

The Contractor shall propose the methodology and equipment for determining the actual delineations of changes in cut during dredging operations (i.e. when dredged material placement changes from one Marsh Creation Area to another). Horizontal and vertical coordinates, as well as the time when fill placement changes from one Marsh Creation Area to another, shall be denoted on the Daily Report. Dredging should progress in a sequence to best optimize the Marsh Creation Borrow Area. No dredging shall be performed beyond what is depicted on the Plans. The Contractor may not remobilize and dredge those portions of the Marsh Creation Borrow Area that have been previously dredged.

The Engineer may require the Contractor submit a revised version of the Borrow Area Cut Sequence Plan after performance of the Marsh Creation Borrow Area and/or Marsh Creation Area Pre-Construction Surveys. The Contractor may request to revise the Borrow Area Cut Sequence Plan during dredging operations, pending approval by the Engineer.

- 400.3.7 Anchor Limits: The Contractor may only anchor within the limits of the Marsh Creation Borrow Area, as shown on the Plans.
- 400.3.8 Existing Infrastructure: No hydraulic excavation, spudding, or anchoring may take place within five hundred feet (500') of any existing pipeline, submerged transmission line, utility, or existing infrastructure. Refer to SP-10 for additional requirements and contact information.
- 400.3.9 Dredge Pipeline Maintenance: The Contractor shall maintain a stable and non-leaking dredge pipeline at all times during dredging and placement of fill. If a leak does occur, dredging shall cease, the Engineer shall be notified, and the leak shall be surveyed as per TS-200.9.2, and the leak shall be repaired. If requested by the Engineer, the Contractor will transport the Engineer or Resident Project Representative to the location of the leak for a visual inspection. The Engineer may require the Contractor to remove all material deposited as a result of a pipeline leak at no cost to the Owner.

- 400.4 Marsh Creation: The Contractor shall convey the material dredged from the Marsh Creation Borrow Area into the Marsh Creation Areas.

- 400.4.1 Dredged Material Placement: Dredge material placement shall only occur after the Acceptance of the Earthen Containment Dike (TS-300.10) and Acceptance of the Marsh Creation Area Pre-Construction Survey (TS-200.8.11) for each respective Marsh Creation Area.

The production rate and slurry specific gravity shall be regulated to ensure that the marsh fill elevations do not exceed the maximum elevation shown on the Plans, the integrity of the ECDs are maintained, and no slurry material is discharged from the Marsh Creation Areas. The Contractor shall take all precautions necessary to prevent dredge material from flowing into adjacent properties and onto areas outside the construction limits. Any material that is deposited other than as indicated on the Plans or as approved by the Engineer may be required, by the Engineer, to be removed and deposited in approved areas at the Contractor's expense. Excess runoff of dredged material onto adjacent marshes shall be prevented by maintaining a sufficient distance from the discharge pipe to the Earthen Containment Dikes or through controlling discharge flow rates and material placement. The Contractor shall cease dredging operations if dredge material breaches or overtops the Earthen Containment Dike in accordance with TS-300.8 and SP-24. The Contractor shall be responsible for the restoration of all damages to adjacent wetlands, water bodies, and SAV resulting from marsh creation activities (refer to TS-400.5).

- 400.4.2 Slurry Lift: A slurry lift shall consist of placement of dredge slurry into each Marsh Creation Area up to a maximum elevation of one foot (1.0') below the crest elevation of the constructed Earthen Containment Dikes. Multiple slurry lifts may be placed in each Marsh Creation Area in order to attain the Contract Quantity for marsh fill. During the placement of the first lift, only existing water in each Marsh Creation Area shall be discharged until slurry head wave approaches the dewatering weirs at which time the weirs shall be closed (refer to TS-200.9.6.2). During the placement of all subsequent lifts, no slurry or water shall be discharged from the Marsh Creation Area through the dewatering weirs. The Contractor shall coordinate with the Owner or the Owner's representative a minimum of one (1) day in advance of weir closure for the initial lift of each Marsh Creation Area to ensure Owner representation is present on site.

- 400.4.3 Lift Retention Time: The slurry in each Marsh Creation Area shall remain in retention for a minimum of fourteen (14) days before adding subsequent slurry lifts. Additional slurry shall not be placed into the Marsh Creation Area during this retention time. No water or slurry shall be discharged through the dewatering weirs for the first seven (7) days of the lift retention time. After a minimum of seven (7) days from the start of the retention time, water decanted from the slurry may be discharged through the dewatering weirs. The Engineer reserves the right to increase the minimum retention time dependent on the quality of water decanted from the slurry. Water quality samples shall be taken at the discretion of the Engineer. The start and end dates for every lift in each Marsh Creation Area shall be provided in the Daily Progress Reports.

- 400.4.4 Dredge Pipeline Outfalls: Each outfall location of the dredge pipeline shall be placed a minimum of one-hundred feet (100') away from the Settlement Plates and the Earthen Containment Dikes such that their integrity is maintained during fill placement. The Contractor shall configure the dredge pipeline outfall in such a manner to promote high area coverage and uniform conveyance of the slurry within

each Marsh Creation Area.

The Contractor shall submit a proposed dredge pipeline outfall management plan in the Work Plan to ensure uniform placement of the marsh fill and minimize mounding of marsh fill within each Marsh Creation Area. The plan shall include, but is not limited to, proposed pipeline outfall locations and proposed methods and equipment for remediating areas that do not meet the tolerances specified in TS-400.4.6. The dredge pipeline outfall location shall be determined each day as per TS-200.9.6.1 and included in the Daily Progress Report. The Engineer reserves the right to require the Contractor to move the dredge pipeline outfall location to ensure uniform placement within a Marsh Creation Area, which may require a stoppage in hydraulic dredging operations. The Owner shall not be responsible for downtime, field office overhead, or any other costs to the Contractor associated with stoppage of hydraulic dredging operations in order to move the dredge pipeline outfall.

400.4.5 Volume: The Contractor shall dredge a specified volume of marsh creation fill material into each Marsh Creation Area. The required cut volumes for each MCA are as follows:

400.4.5.1 MCA-1: 175,500 cubic yards

400.4.5.2 MCA-2: 192,400 cubic yards

400.4.5.3 MCA-3: 113,200 cubic yards (Alternate Bid No. 1)

400.4.5.4 MCA-4: 473,700 cubic yards

400.4.5.5 MCA-5: 227,500 cubic yards (Alternate Bid No. 2)

400.4.5.6 MCA-6: 360,200 cubic yards

400.4.5.7 MCA-7: 593,000 cubic yards

The required cut volumes may change as a result of the Marsh Creation Area Pre-Construction Surveys, as directed by the Engineer.

400.4.6 Tolerances: The fill elevation shall not exceed the maximum elevation shown on the Plans at any point during fill placement. In order to gain Acceptance (as stated in TS-400.7), the measured fill elevation shall be within one foot (1.0') measured from the highest to the lowest elevation based on the Marsh Creation Area Process surveys (TS-200.9.6) with the highest elevation not exceeding the maximum elevation as shown on the Plans. The slurry shall be uniformly placed within each Marsh Creation Area up to a maximum of one-hundred and one percent (101%) of the Contract Quantity for marsh fill.

400.4.7 Fill Sequencing: Slurry shall be placed into only one Marsh Creation Area at any given time. In conjunction with the Borrow Area Cut Sequence Plan (TS-400.3.6), the fill sequence for all of the Marsh Creation Areas shall be determined by the Contractor and provided in the Work Plan. All Proposed modifications to the fill sequence shall require prior approval from the Engineer. Once the Contractor has placed a lift within a respective Marsh Creation Area (refer to TS-400.4.5), the

Contractor shall notify the Engineer and conduct and submit a process survey of the Marsh Creation Borrow Area in accordance with TS-200.9.5, prior to dredging and placing any material into another Marsh Creation Area. This process survey of the Marsh Creation Borrow Area shall be conducted for all areas of cut associated with the respective Marsh Creation Area.

Once the Contractor has placed the Contract Quantity in a respective Marsh Creation Area (refer to TS-400.4.5), the Contractor shall notify the Engineer and conduct a process survey of the Marsh Creation Borrow Area in accordance with TS-200.9.5, prior to dredging and placing any material into another Marsh Creation Area. This process survey of the Marsh Creation Borrow Area shall be conducted for all areas of cut associated with the respective Marsh Creation Area. If the Engineer determines that a Marsh Creation Area does not meet the specified Contract Quantity and more dredge material is needed, the Engineer will notify the Contractor in writing.

Upon the Engineer's Acceptance of the Marsh Creation Borrow Area Process Survey, but no less than fifteen (15) days upon completion of filling the respective Marsh Creation Area, the Contractor shall start the Process Survey of the Marsh Creation Area (refer to TS-200.9.6). The Contractor shall submit the Marsh Creation Area Process Survey for Acceptance of the Respective Marsh Creation Area. If the Engineer determines that the tolerances specified in TS-400.4.6 have been exceeded, payment will be deducted based on the volume placed above the tolerances.

- 400.4.8 Right to Vary: The Owner reserves the right to vary the width and grade of the Marsh Creation Areas from the lines and grades shown on the Plans or observed at the Project Site in order to establish a uniform Marsh Creation Area. The Marsh Creation Area cross sections shown on the Plans are for the purpose of estimating the amount of dredged material needed and will be used by the Engineer in making any change in the lines and grades. Quantities are estimates based on surveys conducted in 2019-2020 and 2021. Refer to SP-19 "Adjustment of Quantities and Unit Price".
- 400.5 Turbidity Control: The Contractor shall furnish all of the labor, Equipment, and Materials necessary to monitor turbidity and install turbidity curtains along adjacent waterways as needed, or as directed by the Engineer, in order to reduce material loss into adjacent waterways and Lake Pontchartrain. The Contractors shall propose turbidity control monitoring, materials, and methods as part of the Work Plan.
 - 400.5.1 Monitoring: The Contractor shall submit a Turbidity Monitoring and Response Plan as part of the Work Plan, which details the methodology and personnel for monitoring and responding to turbidity during construction.
 - 400.5.2 Materials: The turbidity curtain must be classified as Type II, and shall meet the following specifications. Manufacturer's Specifications of the proposed turbidity curtains shall be provided in the Work Plan.
 - 400.5.2.1 Fabric: The curtain fabric shall consist of a minimum of 18 oz/yd² polyvinyl chloride (PVC) or approved equivalent. The maximum section length shall be 100 feet. Skirt depth should allow for a one-foot (1') gap between skirt bottom and water bottom at mean tide level (MTL).

- 400.5.2.2 Floatation: Floatation devices shall be flexible, buoyant units contained in an individual floatation sleeve or collar attached to the curtain, and shall consist of a minimum six inch (6") foam.
- 400.5.2.3 Tension Lines and Ballasts: Tension lines shall be fabricated into the top and bottom of all turbidity curtains. Top tension lines shall consist of at minimum 5/16-inch galvanized steel cable (minimum 9,800 lb. breaking strength). Bottom tension lines shall consist of a minimum 5/16-inch galvanized steel chain (minimum 7,600 lb. breaking strength). The bottom tension line shall be of sufficient weight to serve as a ballast to hold the curtain in a vertical position.
- 400.5.2.4 Connectors: Sections should be connected by grommets and stainless steel locking pins. The Contractor may propose alternate connection methods in the Work Plan.
- 400.5.2.5 Anchors: Additional anchorage shall be provided as necessary. Bottom anchors shall be used to hold the turbidity curtain in the same position relative to the bottom of the waterway or waterbody without interfering with the function of the curtain. Weighted anchors shall be attached to the curtain floatation device via an anchor line. Anchorage intervals and weight shall be provided in the Work Plan.
- 400.5.3 Shipment and Storage: Turbidity curtains shall be adequately protected from damage during shipment and storage. Curtains shall be labelled or tagged with the manufacturer's name, product identification, dimensions, and date of manufacture.
- 400.5.4 Installation: Turbidity curtains shall be installed along adjacent waterways as needed or as directed by the Engineer in order to reduce material loss into adjacent waterways and Lake Pontchartrain. All turbidity curtains shall be installed according to manufacturer recommendations. Following installation, turbidity curtains shall be inspected daily and repaired if necessary. The turbidity curtains shall be marked and lighted in accordance with TS-150. Proposed modifications to the placement of the turbidity curtains shall be submitted in the Work Plan for approval by the Engineer.
- 400.5.4.1 Required Turbidity Curtain Installation: The Contractor is required to install a turbidity curtain near the western boundary of the No Work Zone located north of MCA-2 (N 667,680.05, E 3,693,266.59) prior to commencement of dredging operations. Refer to Sheet 6 of the Plans. The exact location of the turbidity curtain shall be proposed in the Work Plan for approval by the Engineer.
- 400.5.5 Threatened and Endangered Species: The Contractor shall to adhere to all requirements specified in SP-12 pertaining to the use of turbidity control measures. All turbidity curtains shall be regularly monitored to avoid protected species entrapment.
- 400.5.6 Removal: The turbidity curtains shall be removed after Acceptance of all Marsh Creation Areas or at the written direction of the Engineer.

- 400.5.7 Measurement and Payment: Payment for turbidity curtains shall be included in the Contract Lump Sum price for Bid Item No. 1 “Mobilization and Demobilization (TS-100)”. Payment shall constitute full compensation for furnishing the labor, Equipment, Materials, and other incidentals related to this item of work.
- 400.6 Restoration of Damages to Wetlands, Adjacent Waterbodies, and SAV: The Contractor will be responsible for the restoration of any damages caused by unnecessary and/or careless operation during construction. Restoration may include the placement of additional dredged material to project elevations within the areas of damage at the expense of the Contractor and will be performed at the discretion and direction of the Engineer. Restoration may also include removal of excess material to pre-project conditions at the discretion and direction of the Engineer. All equipment access routes used within the Marsh Creation Areas shall be repaired by pumping additional material into the area to natural marsh elevation.
- 400.7 Acceptance: The Contractor shall notify the Engineer once the target cut volume for the respective Marsh Creation Area has been dredged. Marsh Creation Borrow Area Process Surveys shall be used to determine if the target volume specified in TS-400.4.5 has been met. Once the Engineer determines that the target volume has been dredged, the Marsh Creation Area Process Survey shall be used to determine if the respective Marsh Creation Area is within the tolerances specified in TS-400.4.6. The Contractor shall submit a request for Acceptance of the respective Marsh Creation Area with the submittal of the Marsh Creation Area Process Survey. The respective Marsh Creation area must be within the specified tolerances to be Accepted. All Marsh Creation Area Surveys shall be witnessed by the Engineer or Resident Project Representative. If the Marsh Creation Area is above the specified maximum elevation or the difference between the highest and lowest elevation is greater than one foot (1.0’), payment will be deducted based on the volume placed above the tolerances or additional fill material may be required as determined by the Engineer. The average elevation of each Marsh Creation Area shall be denoted on the respective Process Survey.
- 400.8 Measurement and Payment: Payment shall be made at the contract unit price per cubic yard (dredged from the Marsh Creation Borrow Area/Payment on the Cut) for the following:
- Bid Item No. 8 “Hydraulic Dredging and Marsh Creation – MCA-1 (TS-400);
 - Bid Item No. 9 “Hydraulic Dredging and Marsh Creation – MCA-2 (TS-400);
 - Bid Item No. 10 “Hydraulic Dredging and Marsh Creation – MCA-4 (TS-400);
 - Bid Item No. 11 “Hydraulic Dredging and Marsh Creation – MCA-6 (TS-400);
 - Bid Item No. 12 “Hydraulic Dredging and Marsh Creation – MCA-7 (TS-400).

Payment shall constitute full compensation for furnishing the material, labor, equipment, and other incidentals related to this item of the Work. Payment will be based on the comparison of the Marsh Creation Borrow Area Pre-Construction and Process/As-Built Surveys. The Engineer will verify the pay quantities provided by the Contractor based on the Pre-Construction and Process/As-Built surveys conducted by the Contractor and Accepted by the Engineer.

The Contractor shall provide their volume calculations and Marsh Creation Borrow Area Process Survey surface along with their application for payment to the Engineer. The Engineer will independently verify the volume calculation and Process Survey surface. The Engineer's and Contractor's volume calculations shall be within five percent (5%). If the volume calculations are not within five percent (5%), payment will not be recommended until the differences are resolved. The Owner reserves the right to establish final payment quantities based on the Engineer's computations of volumes dredged. The Owner also reserves the right to conduct an independent Marsh Creation Borrow Area survey to verify the Contractor's survey. The Owner's survey will be used for payment if, in the Engineer's opinion, a significant difference is found between the Contractor's and the Owner's survey.

The quantity of material placed above the tolerances stated in TS-400.4.6, may be deducted from payment per cubic yard at the Contract unit price. The volume of material placed above the tolerances and/or outside the Marsh Creation Areas will be calculated by the Engineer.

The Contractor may request partial payment, monthly, based on the cubic yards dredged from the Marsh Creation Borrow Area. This volume shall be determined by the Accepted Marsh Creation Borrow Area Process Surveys.

- 400.8.1 Alternate Bid No. 1: If Alternate Bid No. 1 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 20 "Hydraulic Dredging and Marsh Creation – MCA-3 (TS-400)".
- 400.8.2 Alternate Bid No. 2: If Alternate Bid No. 2 is awarded, payment shall be made at the contract lump sum price for Bid Item No. 28 "Hydraulic Dredging and Marsh Creation – MCA-5 (TS-400)".

TS-510 WEIRS

510.1 **Scope:** The Contractor shall furnish all of the labor, Equipment, and Materials necessary to fabricate, install, monitor, and manage weirs in the Marsh Creation Areas. The weirs shall be operated to ensure that water decantation, solids detention, and effluent quality are maximized. The Contractor shall include proposed dewatering locations, methodology, and sequencing in the Work Plan, which shall be submitted to the Engineer for approval prior to installation.

510.2 **Fabrication:** Weirs shall be fabricated in accordance with these Specifications. Any proposed modifications shall be submitted in the Work Plan for approval by the Engineer.

510.2.1.1 **Primary Weir Materials:** Primary weirs shall be rectangular, metal-framed inlets or half-cylindrical corrugated metal pipes. Wooden slats shall be slotted horizontally into the inlets to control the invert elevation. The wooden slats shall be sized such that the invert elevation can be adjusted in increments of six inches (6"), with the ability to completely shut off discharge through the structure, if required. The top elevation (NAVD88) of each slat shall be permanently marked to allow for unobscured observations. No plastic sheeting (such as Visqueen) will be allowed as part of a dewatering structure.

510.2.1.2 **Primary Weir Wetted Perimeter:** The total weir length (wetted perimeter) for all Primary Weirs shall comply with the following minimum values during construction:

Dredge Pipe Diameter (in.)	Minimum Total Weir Length (ft.)
24	150
27	175
30	200

510.2.1.3 **Secondary Weirs:** Secondary weirs shall be steel pipe having a maximum diameter of thirty inches (30") and sufficient length to penetrate through the ECD. The pipe shall be slotted twelve inches (12") deep within 6 inches (6") of the end of the pipe. The slot shall be sufficient width to allow for two-inch (2") thick lumber slats to be installed to adjust the invert elevation in increments of six inches (6"). The Contractor may submit proposed alternative Secondary Weirs in the Work Plan for Approval by the Engineer.

510.3 **Installation:** Primary and Secondary Weirs shall be installed and operable prior to placement of slurry into each Marsh Creation Area. Secondary weirs shall be installed as deemed necessary by the Contractor. All weirs shall be installed within the Earthen Containment Dikes in areas not immediately adjacent to existing tidal creeks or Lake Pontchartrain to reduce the likelihood of discharge into those waterways. Decanted water shall only be allowed to discharge from the Marsh Creation Areas through the weirs.

510.3.1 **Drainage Trench:** The Contractor shall maintain a continuous drainage path of ponded water from the Marsh Creation Area to the Primary Weirs only during dredging operations. The drainage path shall be constructed and maintained by mechanical excavation. The proposed geometry of the drainage trench shall be

provided in the Work Plan and approved by the Engineer.

- 510.3.2 Secondary Weir Obvert: The obvert of the Secondary Weirs shall be set at elevation one foot (1') below the crest elevation of the Earthen Containment Dike (maximum slurry elevation). The Contractor may propose alternate obvert elevations in the Work Plan.
- 510.3.3 Filter: Clogging of the weirs by organics and debris shall be prevented at the entrance through the installation of a weir filter. The weir filter shall consist of a contiguous set of cattle gates, fences, etc. The weir filter shall surround the full perimeter of the entrance to the weir inlet at a minimum offset distance of ten feet (10') from the inlet.
- 510.4 Operation, Monitoring, and Maintenance: The weirs shall be operated, monitored, and adjusted to control the release of the water decanted from the slurry. All adverse consequences during dredging operations that are caused by failure to monitor, operate, and maintain the weirs shall be rectified by the Contractor, with approval by, or at the direction of, the Engineer, at no cost to the Owner.
- 510.4.1 Primary Weir Operation: The Primary Weirs shall be operated with the invert set at one foot (1') below the crest elevation of the Earthen Containment Dike (maximum slurry elevation) during placement of fill material. The invert elevation of the Primary Weirs shall only be lowered to dewater the Marsh Creation Areas during breaches of the Earthen Containment Dikes, during extreme precipitation events, seven (7) days after the start of the minimum retention time (TS-400.4.3), or as approved by the Engineer. The Contractor may also submit a written request to the Engineer for approval to lower the invert elevation of the Primary Weirs for all other scenarios. The Engineer reserves the right to direct the Contractor to lower the invert elevation of the Primary Weirs at any given time. The wooden slats in the dewatering weirs shall be lowered in 6-inch (6") increments (with approval from the Engineer) such that only decanted water is discharged, with the ability to completely shut off discharge through the structure.
- 510.4.2 Secondary Weir Operations: All Secondary Weirs shall remain closed during placement of slurry into the Marsh Creation Areas. The invert elevation of the Secondary Weirs shall only be lowered to match the invert elevation of the Primary Weirs as dictated in TS-510.4.1. The Contractor may also submit a written request to the Engineer for approval to lower the invert elevation of the weirs for all other scenarios. The Engineer reserves the right to direct the Contractor to lower the invert elevation of the weirs at any given time. The wooden slats in the dewatering weirs shall be lowered in 6-inch (6") increments (with approval from the Engineer) such that only decanted water is discharged, with the ability to completely shut off discharge through the structure.
- 510.4.3 Improper Operations: Decanted water shall not be discharged directly into other adjacent water bodies without written request from the Contractor and approval by the Engineer. The Contractor shall be responsible for containing all unapproved releases of slurry due to improper operation of the dewatering weirs. Released slurry shall be excavated and placed back into the respective Marsh Creation Area at the expense of the Contractor.

- 510.4.4 Monitoring: All weirs shall be continuously monitored for proper operation, damage, and clogging. The invert elevation of the weir slats shall be observed and recorded on the Daily Progress Report.
- 510.4.4.1 Maintenance: Clogs and debris shall be immediately removed from the weir such that the slurry elevation and water level in the Marsh Creation Area(s) do not increase. All damages to the weirs shall be immediately repaired. The Contractor shall keep the immediate vicinity of the dewatering structure outfall free-flowing and prevent accumulation of sediment and/or debris from hindering the flow of decanted water from the Marsh Creation Areas.
- 510.5 Removal: Dewatering weirs shall be removed by the Contractor upon Acceptance of all Marsh Creation Areas.
- 510.6 Measurement and Payment: Payment for dewatering weirs shall be included in the Contract Lump Sum price for Bid Item No. 1 "Mobilization and Demobilization (TS-100)". Payment shall constitute full compensation for furnishing the labor, Equipment, Materials, and other incidentals related to this item of work.

END OF PART III – TECHNICAL SPECIFICATIONS

LINK TO DOWNLOAD SPECIFICATION APPENDICES

<https://cims.coastal.louisiana.gov/RecordDetail.aspx?Root=0&sid=26768>