

**ADDENDUM 02 TO THE  
CONTRACT DOCUMENTS**

**FOR**

**NRDA CAILLOU LAKE HEADLANDS  
(TE-100)**

**TERREBONNE PARISH, LOUISIANA**



**LOUISIANA COASTAL PROTECTION  
AND RESTORATION AUTHORITY**

**AUGUST 25, 2015**

**ADDENDUM 02 TO BID DOCUMENTS  
NRDA CAILLOU LAKE HEADLANDS  
(TE-100)**

**The clarifications and revisions in this addendum supersede the requirements in the Bid Documents dated May 2015. The Successful bidder will be issued a complete revised set of plans and specifications.**

**1. QUESTIONS SUBMITTED BY THE CONTRACTORS**

- 1.1 Question: Bid Form Ref. No. 4A & 4B, the unit of measure for Marsh fill is linear feet, please correct this to cubic yards.

Answer: Please refer to the revised LOUISIANA UNIFORM PUBLIC WORK BID FORM in Addendum No. 01. The correct unit of measure is cubic yards.

- 1.2 Question: GP 57 page 25 Contractors guarantee states the work shall be guaranteed to survive for a minimum period of 1 year after final acceptance. Historically this guarantee does not apply to dredge projects. Please confirm.

Answer: The Contractor Guarantee listed in GP-57 is not applicable to the restoration features of this Project.

- 1.3 Question: What is the estimated pit to fill for the Beach and Dune fill?

Answer: All geotechnical information for both borrow areas is presented in Appendix G of the Bid Documents.

- 1.4 Question: What is the available volume in Borrow area WH3A?

Answer: The Design Professional's volume estimate of 2,000,000 cubic yards (includes overdredge) is based on design level surveys of the borrow area and are only indicative of the conditions at the borrow area at the time of the survey.

- 1.5 Question: What is the available volume in Borrow area SS88?

Answer: The Design Professional's volume estimate of 16,000,000 cubic yards (includes overdredge) is based on design level surveys of the borrow area and are only indicative of the conditions at the borrow area at the time of the survey.

- 1.6 Question: Please clarify that dredge fill for bid item 4B, Marsh fill-SS88, may be dredged from anywhere in borrow area SS88, not only from SS88 borrow area segment defined by coordinate points S88-24 through S88-29 from top of cut elevation -25 ft to -27 ft.

Answer: If the Bidder elects to bid the Ship Shoal Borrow Area 88 for construction of the marsh fill template, marsh fill material may come from anywhere within the permitted limits of the Ship Shoal Borrow Area 88. The borrow area segment defined by coordinate points S88-24 through S88-27 and S88-29 and from cut elevation -25 ft to -27 ft NAVD88 is reserved for utilization as marsh fill material only and may not be placed in the beach/dune fill template.

- 1.7 Question: Will the containment dikes be accepted if the slopes are steeper than the design template in the plans?

Answer: All **required** dikes shall be constructed in accordance with the plans and specifications. Optional dikes, if utilized, shall not exceed elevations, slopes, or limits defined in the Bid Documents.

- 1.8 Question: TS-13.3, page 96, Marsh containment dikes, please remove or reduce the mandatory (30) thirty day waiting period between completed lifts along segments of the marsh containment dikes. This significantly impacts the ability to complete the construction of the containment dikes in a continuous order.

Answer: All **required** dikes shall be constructed in accordance with the plans and specifications. Optional dikes, if utilized, shall not exceed elevations, slopes, or limits defined in the Bid Documents.

- 1.9 Question: TS-8.7.1 Borrow Area Sequence, as discussed in the pre-bid meeting, if only (2) two feet of disturbance (over depth) is allowed below the dredge template, by design the contractor will not be capable of meeting the required 90% removed threshold. Please allow for an additional (3) three feet of disturbance.

Answer: The Bidder should refer to Items 2.5 and 2.6 of this Addendum for changes to the Specifications.

- 1.10 Question: The Specifications state that pre and post construction surveys of the Borrow Areas and Conveyance Corridors shall be acquired using interferometric swath or multi beam bathymetric methods. The requirement appears to be taken directly from the Lease Agreement between BOEMRE and CPRA. Is it possible to remove the requirement for Multi beam surveys from the “Whiskey 3A Borrow Area” and the “Whiskey 3A Conveyance Corridor” since these areas are not in Federal Waters and not subject to BOEMRE jurisdiction?

Answer: No changes to the requirements shall be made.

- 1.11 Question: The Specifications state that the Submerged Sediment Pipeline shall be monitored with Side-Scan Sonar or Multi-beam bathymetry for movement, breaks, or leakage on a monthly basis. This requirement also appears to be taken directly from the Lease agreement between BOEMRE and CPRA. Is it possible to limit these monthly surveys to only the portions of the Sediment Pipeline installed in Federal Waters of the US?

Answer: No changes to the requirements shall be made.

- 1.12 Question: The Specifications state that all pipelines located within 150 feet of any project alignment be probed for depth and their locations marked. It is very difficult to find and probe pipelines in water depths greater than 15' in an open sea environment. Is it possible to modify the specification so that pipelines found at bottom elevations lower than -15.0' be marked based on the location verification by magnetometer survey instead of having to probe the pipeline?

Answer: The Bidder should refer to Items 2.1 and 2.3 of this Addendum for changes to the Specifications.

- 1.13 Question: Reference Bid Form Items No. 4A & 4B. During the Pre-Bid conference, it was explained that the two separate bid items for Marsh Fill, varied based on borrow source (ie: Whiskey 3A or Ship Shoal 88). It was further explained that the differing bid quantity was due to the assumed dig to fill ratios of the respective sites. For comparison purposes, please provide either the calculated fill volume for the beach and marsh and/or your assumed dig to fill ratios.

Answer: All geotechnical information for both borrow areas is presented in Appendix G of the Bid Documents.

- 1.14 Question: Reference Plan Sheet No. 5-7. Please advise if any material from Ship Shoal Borrow Area is available to be utilized as marsh fill, or if this quantity is limited to the two foot layer of material in the south-western most cut from elevation -25.0' to -27.0' NAVD88.

Answer: The Bidder should refer to Item 1.6 of this Addendum.

- 1.15 Question: Please provide survey data for the fill areas and the borrow areas in XYZ format.

Answer: Survey Data – Included with this Addendum is the following XYZ survey data collected by the Design Professional during the design and permitting of the Project. The survey does not reflect current conditions. The Bidders are directed to the Contract Documents including but not limited to GP-2 BID REQUIREMENTS and SP-4 SITE EXAMINATION for the requirements prior to submitting a bid. The data are available for download at: [ftp://ftp.coastal.la.gov/TE-100/Survey\\_Data](ftp://ftp.coastal.la.gov/TE-100/Survey_Data).

- 1.16 Question: Will beach fill be evaluated on a compensating slope basis?

Answer: No.

- 1.17 Question: Reference Part III Technical Specifications TS-8.7 Borrow Area Cut Sequence. With regard to borrow areas, specifically Ship Shoal 88, does the owner intend to be this restrictive to dredging contractor's digging plan? There are requirements indicating that only N-S & W-E dredging azimuths are acceptable; however, the site is divided in diagonal max depth sections. If dredging cuts are

restricted within a particular max depth sections, as well as limited azimuths, this will yield short, unproductive cuts requiring frequent cut changes. We request dredging contractors be allowed to utilize the site as they see best to achieve maximum productions, including size and direction of cuts, while meeting the intent to properly manage the borrow site.

Answer: The Bidder should refer to Items 2.5 and 2.6 of this Addendum.

- 1.18 Question: Due to operational constraints of this dredge equipment type, we feel that 90% removal of material per cut will not be achievable with only a 1.0 ft disturbance limit. Please consider reducing the required cut removal to 75%.

Answer: The Bidder should refer to Items 2.5 and 2.6 of this Addendum.

- 1.19 Question: Survey transects for the fill are extremely long at 3,000' beyond baseline. To what extent horizontally and vertically would survey variability be considered for a deduction to pay quantity?

Answer: The Bidder should refer to Items 2.7 and 2.8 of this Addendum.

- 1.20 Question: To insure adequate time for review of the anticipated upcoming amendment following the pre-bid conference, as well as review of replies to contractor queries, we respectfully request an extension to the bid date of two weeks.

Answer: The Bidder should refer to Item 2.0 of Addendum No. 01.

- 1.21 Question: I want to know if 2" galvanized staples can also be used to attach the sand fencing to the post?

Answer: No changes to the requirements shall be made.

## **2. REVISIONS TO THE GENERAL PROVISIONS, SPECIAL PROVISIONS, AND TECHNICAL SPECIFICATIONS**

Provision/Specification language inclusion and/or revision are shown in italics.

- 2.1 SP-23 LANDOWNER, OIL AND GAS FACILITY OPERATORS, AND PIPELINE COMPANY REQUIREMENTS – The second paragraph of the Specification has been revised as follows:

The Contractor shall notify all utility operators and pipeline companies at least seventy-two (72) hours in advance of any Work at the Headland Restoration Area and at least four (4) weeks in advance of any Work at the borrow areas or within the conveyance corridors. *All pipelines located within 150 feet of the containment dike alignments, primary/secondary containment dike borrow channel alignments, access channels, and beach/dune and marsh fill areas shall be probed by the Contractor for depth and their locations marked prior to excavation, dredging, and installation of the sediment pipeline,*

*for the duration of construction activities. No excavation shall be permitted within 50 feet of any pipeline in the vicinity of the beach separation and marsh containment dikes or any fill area. The Contractor shall notify all pipeline companies or current pipeline right-of-way permit holders near the borrow areas, borrow channels, and access channels at least four (4) weeks in advance of any dredging or excavation so that the pipeline companies or right-of-way permit holders may take precautions to mark its pipeline segments if they choose to do so. No dredging or bottom disturbing activities (including anchoring or spudding) may take place within 1,000 feet of any existing pipeline near the Ship Shoal Block 88 Borrow Area or within 500 feet of any existing pipeline near the Whiskey 3A Borrow Area. Refer to GP-25 for utility coordination compliance.*

2.2 TS-7 CHARACTER OF BORROW SEDIMENT, 7.2.1 Ship Shoal Block 88 Borrow Area - The entire Specification shall be replaced with the following:

*Assessment of the Ship Shoal Block 88 Borrow Area indicates beach/dune compatible sediment comprised predominantly of fine sand. The Contractor is required to examine the geophysical and geotechnical data included in Appendix G. If the Bidder elects to bid the Ship Shoal Borrow Area 88 for construction of the marsh fill template, marsh fill material may come from anywhere within the permitted limits of the Ship Shoal Borrow Area 88. The borrow area segment defined by coordinate points S88-24 through S88-27 and S88-29 and from cut elevation -25 ft to -27 ft NAVD88 is reserved for utilization as marsh fill material only and may not be placed in the beach/dune fill template. Also the Contractor is advised that during the surveys, numerous minor magnetic and acoustic anomalies were recorded. Borrow area boundaries were refined to avoid major anomalies but such debris should be expected.*

2.3 TS-6 SURVEYING, 6.4 Pre-Construction Surveys, 6.4.8 Pipeline Locations - The entire Specification shall be replaced with the following:

*All pipelines located within 150 feet of the containment dike alignments, primary/secondary containment dike borrow channel alignments, access channels, and beach/dune and marsh fill areas shall be probed by the Contractor for depth and their locations marked prior to excavation, dredging, and installation of the sediment pipeline, for the duration of construction activities. A buffer distance of 50 feet from any pipeline, utility, or obstruction within the Work Area shall also be staked prior to excavation by the Contractor. No hydraulic dredging as well as no bottom disturbing activities (including anchoring and spudding) may take place within 1,000 feet of any existing pipeline near the Ship Shoal Block 88 Borrow Area or within 500 feet of any existing pipeline near the Whiskey 3A Borrow Area. The Northern and Easting locations of **each** probing attempt whether or not a pipeline is detected shall be recorded in a table. For each probe positive finding a description of the findings that include the length of the probing apparatus, water elevation, depth of cover, and water bottom elevations shall be recorded in a table and provided with the survey deliverables.*

- 2.4 TS-7 CHARACTER OF BORROW SEDIMENT, 7.2.2 Whiskey 3A Borrow Area - The entire Specification shall be replaced with the following:

*Assessment of the Whiskey 3A Borrow Area indicates marsh compatible sediment comprised of fine sand, silts, and clays. The Contractor is required to examine the geophysical and geotechnical data included in Appendix G. Also the Contractor is advised that during the surveys, numerous minor magnetic and acoustic anomalies were recorded. Borrow area boundaries were refined to avoid major anomalies but such debris should be expected.*

- 2.5 TS-8 DREDGING, 8.7 Borrow Area Cut Sequence, 8.7.2 Ship Shoal Block 88 Borrow Area – The entire Specification shall be replaced with the following:

*Sand is a precious resource and sand resources within coastal Louisiana are limited. The Contractor shall utilize BMPs to conserve the sand resources permitted for this Project when developing and implementing their borrow area cut sequence. The following parameters shall be considered by the Contractor when developing their cut sequence.*

- a. *Excavation shall begin in a corner of the borrow area;*
- b. *Borrow area cuts shall parallel each other;*
- c. *Borrow area cuts may consist of pairs of corresponding cuts. For example, Cut 1a could be oriented towards the southwest following the azimuth of the southern boundary while Cut 1b could be oriented towards the northwest following the azimuth of the eastern boundary. This option is provided to allow dredging along different headings as wind, wave, and current patterns necessitate.*
- d. *Each borrow area cut must be completed prior to proceeding to the next cut. If pairs of cuts are sequenced, then corresponding cuts such as Cut 1a and Cut 1b, shall be completed concurrently. This shall be repeated until the design grade is achieved, or the Work is completed during the final cut.*
- e. *It is the goal of the Owner and Engineer to have 90% of the available sediment above the design dredge elevation excavated from each cut, a pair of cuts, or for an increment prior to proceeding to the subsequent cut, pair of cuts, or increment. The Contractor shall work cooperatively with the Owner and Engineer to achieve this goal. For a cut, for a pair of cuts, or for an increment to be considered complete, 80% of the available sediment **must** be removed to proceed to the subsequent cut, pair of cuts, or increment. If analysis of the progress surveys demonstrates that the requirement of 80% sediment removal in each cut has not been achieved, at the Owner's and Engineer's discretion, the Contractor may be required to re-attempt to excavate the sediment to meet the requirement of 80% sediment removal above the design dredge elevation. This requirement may not serve as the basis for a change in Contract Time or Contract Price. The Contractor will not be responsible for side-slope adjustment within the borrow area cuts along the perimeter of the borrow area.*

- f. *The segment of the borrow area defined by coordinate points S88-24 through S88-27 and S88-29 and from cut elevation -25 ft to -27 ft NAVD88 has been designated for marsh fill construction only and may not be excavated for beach fill placement.*
- g. *All dredging shall be performed in a uniform and continuous manner to avoid creating multiple holes, valleys, or ridges; and*
- h. *The permitted volume of sand exceeds the volume required to complete the beach and dune fill template. The remaining volume of sand within the borrow area will be utilized by the Owner to complete a future restoration project.*

*The cut sequence shall reflect consideration of these parameters. The Owner and Engineer will review for acceptance the Contractor's proposed cut sequence. Deviations from the above parameters may be proposed in the Contractor's Work Plan subject to review and approval by the Owner and Engineer.*

- 2.6 TS-8 DREDGING, 8.7 Borrow Area Cut Sequence, 8.7.3 Whiskey 3A Borrow Area – The entire Specification shall be replaced with the following:

*The Contractor shall utilize BMPs to conserve the mixed sediment resources permitted for this Project when developing and implementing their borrow area cut sequence. The following parameters shall be considered by the Contractor when developing their cut sequence.*

- a. *Excavation shall begin in either the northeast corner or the southwest corner of the borrow area;*
- b. *Borrow area cuts shall parallel each other;*
- c. *Borrow area cuts may consist of pairs of corresponding cuts. For example, if excavation begins in the northeast corner, Cut 1a could be oriented towards the south following the azimuth of the eastern boundary while Cut 1b could be oriented towards the west following the azimuth of the northern boundary. This option is provided to allow dredging along different headings as wind, wave, and current patterns necessitate.*
- d. *Each borrow area cut must be completed prior to proceeding to the next cut. If pairs of cuts are sequenced, then corresponding cuts such as Cut 1a and Cut 1b, shall be completed concurrently. This shall be repeated until the design grade is achieved, or the Work is completed during the final cut.*
- e. *It is the goal of the Owner and Engineer to have 90% of the available sediment above the design dredge elevation excavated from each cut, a pair of cuts, or for an increment prior to proceeding to the subsequent cut, pair of cuts, or increment. The Contractor shall work cooperatively with the Owner and Engineer to achieve this goal. For a cut, for a pair of cuts, or for an increment to be considered complete, 80% of the available sediment **must** be removed to proceed to the subsequent cut,*



*pair of cuts, or increment. If analysis of the progress surveys demonstrates that the requirement of 80% sediment removal in each cut has not been achieved, at the Owner's and Engineer's discretion, the Contractor may be required to re-attempt to excavate the sediment to meet the requirement of 80% sediment removal above the design dredge elevation. This requirement may not serve as the basis for a change in Contract Time or Contract Price. The Contractor will not be responsible for side-slope adjustment within the borrow area cuts along the perimeter of the borrow area.*

- f. All dredging shall be performed in a uniform and continuous manner to avoid creating multiple holes, valleys, or ridges; and*
- g. The permitted volume of sand exceeds the volume required to complete the beach and dune fill template. The remaining volume of sand within the borrow area will be utilized by the Owner to complete a future restoration project.*

*The cut sequence shall reflect consideration of these parameters. The Owner and Engineer will review for acceptance the Contractor's proposed cut sequence. Deviations from the above parameters may be proposed in the Contractor's Work Plan subject to review and approval by the Owner and Engineer.*

- 2.7 TS-11 BEACH AND DUNE FILL, 11.7 Measurement, Payment, and Acceptance, 11.7.4 Acceptance of Beach and Dune Fill – The entire Specification shall be replaced with the following:

*Segments of beach fill with elevations below the **minimum elevation of +4.2 ft NAVD88** and segments of dune fill with elevations below the **minimum elevation of +6.4 ft NAVD88** will not be accepted. Additional beach or dune fill must be placed into these areas and re-surveyed before acceptance will be considered. Once the beach and dune fill payment surveys are accepted by the Engineer they will be considered post-construction surveys of the beach and dune fill for inclusion in the final survey drawings. No payment will be made for sediment above the beach fill platform **maximum tolerance elevation of +4.7 ft NAVD88**. No payment will be made for sediment above the dune fill **maximum tolerance elevation of +6.9 ft NAVD88**. The beach and dune fill payment surveys shall be utilized to compute the volume of sediment above the prescribed construction tolerances for the fill templates. The beach and dune fill payment surveys shall also be utilized to compute the volume of sediment above the vertical accuracy standards defined in TS-6.3 when compared to the pre-construction surveys. The gulfward extent of this calculation shall extend 150 feet beyond the slope construction tolerance toe of fill. At the Owner's discretion these volumes may be deducted from any money due or to become due to the Contractor. Beach and dune fill acceptance sections shall be 750 feet in continuous length.*

- 2.8 TS-12 MARSH FILL, 12.5 Measurement, Payment, and Acceptance, 12.5.4 Acceptance of Marsh Fill – The entire Specification shall be replaced with the following:

*Segments of marsh fill with elevations below the **minimum elevation of +2.4 ft NAVD88** will not be accepted. Additional marsh fill must be pumped into these areas after the twenty-eight (28) day waiting period and re-surveyed before acceptance will be considered. If the marsh fill does not meet the minimum elevation requirements the area will have to be re-pumped and undergo an additional twenty-eight (28) day waiting period without any additional placement of fill sediment before payment surveys will be administered again. For construction of the marsh fill using sediment from the Ship Shoal Block 88 Borrow Area, the required twenty-eight (28) day waiting period is waived. Once marsh fill payment surveys are accepted they will be considered post-construction surveys of the marsh fill for inclusion in the final survey drawings. Although the Contractor will be allowed to overfill marsh fill areas exceeding the **maximum tolerance elevation of +2.9 ft NAVD88**, no payment will be made for sediment above the prescribed tolerances. At the Owner's discretion, any sediment placed above the prescribed tolerances shall be calculated on a cubic yard basis and deducted from any money due or to become due to the Contractor. Marsh fill acceptance sections shall be 750 feet in continuous length.*

*If the marsh fill is constructed using Ship Shoal Block 88 sediments, the marsh fill payment surveys shall also be utilized to compute the volume of sediment above the vertical accuracy standards defined in TS-6.3 when compared to the pre-construction surveys. The bayward extent of this calculation shall extend 150 feet beyond the slope construction tolerance toe of fill. At the Owner's discretion this volume may be deducted from any money due or to become due to the Contractor.*

**END OF ADDENDUM 02**