



ST. TAMMANY PARISH

MICHAEL B. COOPER
PARISH PRESIDENT

December 11, 2023

Please find the following addendum to the below-mentioned BID.

Addendum No.: 2

Bid#: 23-44-2

Project Name: Lower W-15 Area Drainage Improvements Phase III

Bid Due Date: December 14, 2023

GENERAL INFORMATION:

1. GR-01 Section 1.04, Part 4 of the specifications has been updated, "4. Installation of temporary drainage structures as required to perform the Work. All temporary drainage structures shall be removed prior to de-mobilization. Any disturbances incurred by the removal of temporary drainage structures shall be repaired at no additional cost to the Owner.
2. Technical Specs Section 12 has been updated (attached)
3. General Notes on C-0.2 has been updated (attached)

QUESTIONS & ANSWERS:

- Question 1. The Measurement and Payment section under the Rip Rap technical specs states, "...shall be measured by the Cubic Yard." However, the Bid Schedule indicates rip rap will be measured by square yard. Will Owner please clarify measurement for rip rap.
- Answer 1. Rip rap shall be 30Lb, 18" thick and measured by the Square Yard. This has been revised for clarification on the Plans and Specifications, respectively. Specification for Item 711-01-03020 Rip Rap Section 4.02 "Payment" has been updated, "A. Payment will be made at the Contract unit price per Square Yard for both Rip Rap & Geotextile Fabric."
- Question 2. Is on-site burning of cleared and grubbed material permitted?
- Answer 2. No, due to proximity to interstate and hospital.
- Question 3. Is chipping permitted in the clearing and grubbing areas?
- Answer 3. Yes, provided chip piles do not alter final lines and grades. Wood chips may be utilized to spread on the maintenance access road as long as final grade is in accordance with the plans. Specification for Item 203-01-00101 General Excavation Part 1.01 C. has been updated, "C. The grading & mulching of the 15' wide maintenance access road



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adjacent to the proposed diversion canal shall be considered incidental to the Work. Wood chips may be utilized as mulch for this access road. The road shall be fine graded following construction per the Plans.”

Question 4. Please confirm all necessary permits have been obtained by the Owner.

Answer 4 Yes.

Question 5. Will Engineer please provide coordinates of clearing and grubbing areas, on-site disposal area, and dredging limits on the Contract Plans?

Answer 5. Coordinates for clearing and grubbing as well as on-site disposal area & dredging limits will be provided to the successful bidder in AutoCAD or point coordinate format.

Question 6 How many acres of hydroseeding are expected?

Answer6. The anticipated area of required hydroseeding is 3.1 acres which includes the diversion canal as well as the disturbed portions of the existing access road and onsite disposal area. This item is paid per LB of seed utilized. Only the required portion of seed will be utilized for the base bid portion of the work if Add Alt. #1 is not selected. The necessary seed quantity can be finalized with the successful bidder at the pre-construction conference prior to commencement of work, depending on the result of the bid.

Question 7. What type of mulch/seed/fertilizer is required per acre?

Answer 7. Reference Seeding Notes on Sheet C-0.2. Seeding shall be per Table 717-01 in DOTD LSSRB. 93 LB was calculated in anticipation of planting between the months of March-September for Type A Seed, “Hulled Bermuda” at a rate of 30 LB/acre. Specification for item 717-01-00100 Seeding Part 3 Execution has been updated to include, “Reference LSSRB Table 717-01 for required seed type respective to time of planting.”

Table 717-1
Seeding

| Type | Seed Mixtures ¹ | lbs/acre | Soil Area ² | Planting Dates |
|----------------|------------------------------|----------|------------------------|----------------------|
| A | Hulled Bermuda | 30 | 1,2,3,4,5 | Mar-Sep |
| B | Hulled Bermuda | 20 | 1,2,3,5 | Feb-Mar |
| | Crimson Clover ³ | 25 | | |
| C | Kentucky 31 Fescue | 25 | 1,2,3,4,5 | Sep-Feb |
| | Unhulled Bermuda | 20 | | |
| D | Unhulled Bermuda | 20 | 1,2,3,4,5 | Sep-Feb |
| | Crimson Clover ³ | 40 | | |
| E | Pensacola Bahia ⁴ | 25 | 1,2,3,5 | Mar-Sep |
| F | Ball Clover | 25 | 1,2,3,4,5 | Feb-Mar |
| | Unhulled Bermuda | 20 | | |
| G | Vetch (Common) | 40 | 1,2,3,4,5 | Sep-Oct |
| | Unhulled Bermuda | 20 | | |
| H ⁵ | Browntop Millet | 6 | 1,2,3,4,5 | Mar-Jul |
| | Hulled Bermuda | 20 | | |
| | Pensacola Bahia | 15 | | |
| I | Annual Rye | 30 | 1,2,3,4,5 | Sep-Jan ⁶ |

¹ Only Hulled Bermuda or Unhulled Bermuda shall be planted in rest areas.

² See 717.03.

³ Inoculated prior to planting with proper bacterial culture.

⁴ Type E shall be used only upon the approval of the Roadside Development Specialist.

⁵ This planting mixture is to be used in the Kisatchie National Forest areas only.

⁶ Annual Rye grass shall not be planted before September 20. Annual Rye grass may be planted as late as January 15 if climatic conditions and soil temperatures will allow germination.



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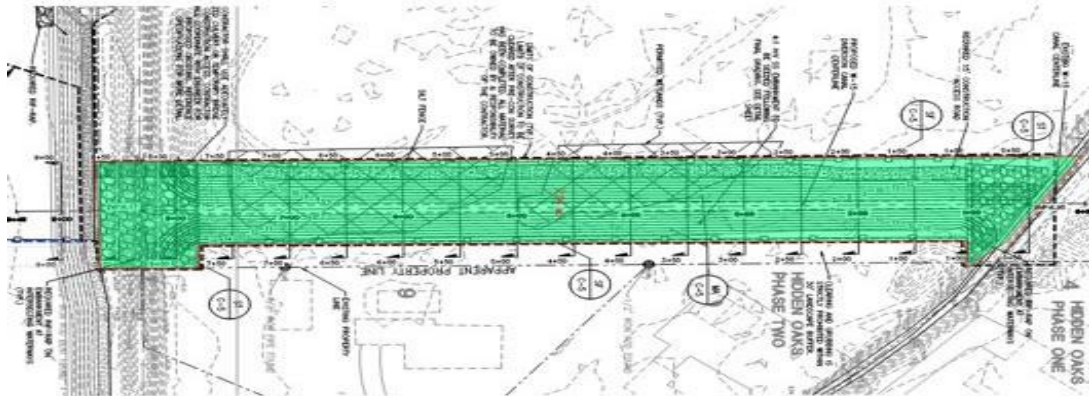
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- Question 8. What “shall the Contractor ensure” under the Scope section of the Temporary Construction Entrance technical specs?
Answer 8. Typo, this has been removed from the specification.
- Question 9. Is silt fencing with wood stakes permitted?
Answer 9. Yes. Specification for Temporary Silt Fence Item 204-06-00101 & 00102 has been updated, “Silt fencing shall comply with LSSRB 1018.15.1.2 Self-Supported Silt Fencing: Self-supported silt fencing shall consist of an approved geotextile fabric suitably attached to posts of either wood or steel installed in accordance with plan details. Geotextile fabric shall comply with LSSRB Section 1019, Class G.”
- Question 10. The Measurement and Payment section under the General Excavation/Dredging technical specs (Part B) states, “...shall be measured by the Cubic Yard as produced by the pre-construction vs. progress (As-Built) survey comparison.” and “...Average End Area method is not acceptable for measurement or payment of Bid Alternate #1.” What method for calculating volumes under Ref No.: 203-01-00102 will be utilized?
Answer 10. Average end area may be utilized by the contractor for tracking volume during construction until the survey can be completed. However, payment will be made based on the AutoCAD or approved equal computer software via surface-to-surface volume comparison by comparing the contractor’s pre-construction vs. progress (as-built) survey.
- Question 11. Are there any known obstructions in the clearing and grubbing area?
Answer 11. We are not aware of any unnatural obstructions within the clearing and grubbing limits.
- Question 12. What is the acreage of the clearing and grubbing area?
Answer 12. Approximately 2.1 AC are estimated to require clearing within the limits of construction for the construction of the proposed diversion canal.



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Question 13. Regarding the required 15' of construction access road along W-15 drainage canal, will the Contractor need to construct the labeled access road on the Contract Plans? If so, what line item does it fall under?

Answer 13. This 15' access road along the proposed diversion canal is for contractor's access during construction and maintenance of the diversion canal by STP following construction. Mulching or wood chips shall be laid on the road and it shall be graded at the end of construction per the Plans and shall be considered incidental to the work. Any disturbance to the existing access road around the French Branch pond is the responsibility of the contractor and shall also be considered incidental to the work. Specification for Item 203-01-00101 & 00102 has been updated to include, "The grading & mulching of the 15' wide maintenance access road adjacent to the proposed diversion canal shall be considered incidental to the Work. Wood chips may be utilized as mulch for this access road. The road shall be fine graded following construction per the Plans."



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Question 14. Due to the primary scope of work for the **Lower W-15 Drainage Improvement Phase III** project, is the contractor's license for Earthwork, Drainage, and Levees acceptable? This licensing is a sub-classification of the Heavy Construction license.

Answer 14. "Earthwork, Drainage and Levees" is a sub classification of "Highway, Street, and Bridge Construction." Per the C-0 Cover Sheet on the Plans, the permitted project classifications are "Heavy Construction OR Highway, Street, & Bridge Construction." Earthwork, Drainage, and Levees Licensure is an acceptable classification for this project.

ATTACHMENTS:

1. General Notes C-0.2.pdf
2. Technical Specs Section 12.pdf

End of Addendum # 2

GENERAL NOTES:

- CONSTRUCTION SHALL COMPLY WITH ALL GOVERNING CODES & BE CONSTRUCTED TO THE SAME.
- ALL METHODS AND CONSTRUCTION OPERATIONS SHALL MEET MINIMUM REQUIREMENTS OF THE LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION. THE 2018 EDITION OF THE LOUISIANA DOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, AS AMENDED BY THE PROJECT SPECIFICATIONS, SHALL GOVERN ON THE PROJECT PRIOR TO ANY WORK BEING STARTED AT THE SITE.
- TOPOGRAPHIC INFORMATION WAS TAKEN FROM A TOPOGRAPHIC SURVEY PROVIDED BY DUPLANTIS DESIGN GROUP, INC. DATED 05/24/2023. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR & SUBMIT IT TO THE OWNER FOR REVIEW.
- HORIZONTAL AND VERTICAL CONTROL POINTS HAVE BEEN ESTABLISHED IN THE FIELD BY THE SURVEYOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION LAYOUT USING CONTROL POINTS TO BE PROVIDED BY THE SURVEYOR IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. TEMPORARY BENCHMARKS WILL BE PROVIDED TO THE CONTRACTOR PRIOR TO CONSTRUCTION.
- HORIZONTAL DATA ARE IN FEET AND REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD83), LOUISIANA SOUTH ZONE. ELEVATIONS ARE IN FEET AND REFER TO NORTH AMERICAN VERTICAL DATUM (NAVD83), GEOID 12B.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITIES & NOTIFYING THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR MUST CALL LOUISIANA ONE CALL AND ALL APPROPRIATE UTILITY COMPANIES AT LEAST THREE DAYS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. PROOF OF NOTIFICATION SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO INITIATION OF CONSTRUCTION.
- LOCATION OF EXISTING UTILITIES, IF ANY, MAY NOT HAVE BEEN IDENTIFIED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE THE LOCATIONS OF ALL EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, WHETHER OR NOT THEY ARE SHOWN ON THE DRAWINGS, AND TAKE NECESSARY PRECAUTIONS TO AVOID DISRUPTIONS IN SERVICE. PRIOR TO REMOVING EXISTING UTILITIES, THE CONTRACTOR SHALL VERIFY THAT THE UTILITY IS NO LONGER IN SERVICE.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURBS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING EQUIPMENT AND OPERATION/MAINTENANCE FOR DEWATERING AS NECESSARY DURING CONSTRUCTION CONTRACT PERIOD. THE COST OF DEWATERING SHALL BE CONSIDERED TO BE INCIDENTAL. CONTRACTOR SHALL MAKE PROVISIONS FOR WORKING IN WET CONDITIONS DURING CHANNEL GRADING AND DREDGING ACTIVITIES.
- THE LINES AND GRADES SHOWN ON THE PLANS MAY BE MODIFIED BY THE ENGINEER IN THE FIELD IF CONDITIONS JUSTIFY SUCH A VARIATION. THE CONTRACTOR SHALL NOT BE ENTITLED TO AN EXTRA PAYMENT OTHER THAN WATERWEAR INCREASE IN CONSTRUCTION QUANTITIES IS INVOLVED. THE CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY OF THE COMPLETED WORK SIGNED AND SEALED BY A LAND SURVEYOR LICENSED BY THE STATE OF LOUISIANA. PROPOSED GRADE ELEVATIONS MUST BE CONSTRUCTED WITHIN 0.5 FEET OF PLAN GRADE. THE CONTRACTOR SHALL CORRECT ANY WORK NOT MEETING THE REQUIRED TOLERANCE AND CORRECTED WORK SHALL BE RE-SURVEYED UNTIL THE REQUIRED TOLERANCE IS MET. REWORK AND RESURVEY SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL PREPARE AND SUBMIT FOR REVIEW A TRAFFIC CONTROL PLAN DOCUMENTING PROPOSED INGRESS / EGRESS ROUTES, PROPOSED HAUL ROUTES, AND TRAFFIC CONTROL MEASURES INCLUDING BUT NOT LIMITED TO SIGNAGE, LIGHTING, PERSONNEL, FLAGGING, AND OTHER METHODS. CONSTRUCTION TRAFFIC CONTROL SIGNS, BARRICADES, WARNING LIGHTS, FLAGMAN, DEVICES AND METHODS, SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SHALL COMPLY WITH THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT "TRAFFIC CONTROL DEVICES MANUAL" UNLESS OTHERWISE DIRECTED IN THE FIELD.
- CONTRACTOR SHALL FURNISH TEMPORARY SANITARY FACILITIES AT THE SITE FOR THE NEEDS OF ALL CONSTRUCTION WORKERS AND OTHERS PERFORMING WORK OR FURNISHING SERVICES ON THE PROJECT. SANITARY FACILITIES SHALL BE OF REASONABLE CAPACITY, PROPERLY MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD, AND OBSURED FROM PUBLIC VIEW TO THE GREATEST PRACTICAL EXTENT. IF TOILETS OF THE CHEMICALLY TREATED TYPE ARE USED, AT LEAST ONE TOILET WILL BE FURNISHED FOR EACH 20 WORKERS. CONTRACTOR SHALL ENFORCE THE USE OF SUCH SANITARY FACILITIES BY ALL PERSONNEL AT THE SITE.
- NOISE CONTROL - CONTRACTOR SHALL TAKE MEASURES TO AVOID UNNECESSARY NOISE APPROPRIATE FOR THE AMBIENT SOUND LEVELS IN THE AREA DURING WORKING HOURS. ALL CONSTRUCTION MACHINERY & VEHICLES SHALL BE EQUIPPED WITH PRACTICAL SOUND MUFFLING DEVICES, AND OPERATED IN A MANNER TO CAUSE THE LEAST NOISE, CONSISTENT WITH EFFICIENT PERFORMANCE OF THE WORK.
- DUST CONTROL - CONTRACTOR SHALL PREVENT UNNECESSARY DUST. EACH SURFACE SUBJECT TO DUSTING SHALL BE KEPT MOIST WITH WATER OR BY APPLICATION OF CHEMICAL DUST SUPPRESSANT. DUSTY MATERIALS IN PILES OR IN TRANSIT SHALL BE COVERED TO PREVENT BLOWING.
- CONTRACTOR SHALL NOT RESTRICT DRAINAGE FLOW DURING RAINSTORMS, EXCEPT AS REQUIRED FOR EROSION AND SEDIMENT CONTROL.
- CONTRACTOR SHALL VISIT THE SITE OF WORK AND FAMILIARIZE HIMSELF WITH THE CONDITIONS RELATING TO THE CONSTRUCTION SO THAT HE MAY FULLY UNDERSTAND THE FACILITIES, DIFFICULTIES AND INSTRUCTIONS THAT HE WILL ENCOUNTER WHILE PERFORMING THE WORK UNDER THIS PROJECT PRIOR TO SUBMITTING HIS BID.
- ALL WORK AROUND HIGH VOLTAGE POWER LINES SHALL BE IN ACCORDANCE WITH OSHA AND ALL LOCAL ELECTRICAL UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO CLECO, WASHINGTON ST. TAMMANY ELECTRIC COOP, ENTERGY, ETC. LOCATIONS OF POWER LINES OR OTHER OVERHEAD UTILITIES SHOWN ON THE PLANS MAY NOT BE COMPREHENSIVE. CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATION TO IDENTIFY OVERHEAD UTILITIES THAT MAY CONFLICT WITH THE WORK. A MINIMUM CLEARANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN EQUIPMENT AND OVERHEAD UTILITIES.
- THE CONTRACTOR, AT HIS OWN EXPENSE, MAY MAKE ADDITIONAL SURVEYS BEYOND THE SURVEY SCOPE AS REQUIRED BY THE SPECIFICATIONS AND SOIL INVESTIGATIONS AS HE DEEMS NECESSARY TO DETERMINE CONDITIONS THAT WILL AFFECT THE PERFORMANCE OF THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR THE INTEGRITY OF THE SLOPES AND ADJOINING AREAS OF THE CANAL, ROADWAYS, WEIR, AND WORK AREA.
- THE CONTRACTOR IS ENTIRELY RESPONSIBLE FOR PROTECTION OF EXCAVATION AGAINST CAVING OR SETTLING. HE SHALL PROTECT THE SIDES OF THE EXCAVATION BY SHEETING AND BRACING OR OTHER SHORING AS MAY BE NECESSARY.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO PAVEMENTS, BUILDINGS, HOUSES, FENCES, AND OTHER PROPERTY CAUSED BY HIS WORK ACTIVITIES INCLUDING EXCAVATION, GRADING, ACCESS, OR OTHER.
- ALL EQUIPMENT OR MATERIALS HAULED TO OR FROM THE PROJECT SITE WILL BE BY A ROUTE APPROVED OR DESIGNATED BY ST. TAMMANY PARISH PRIOR TO THE START OF CONSTRUCTION AND IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN.
- ALL TREES WITHIN THE GRADING LIMITS ARE TO BE REMOVED UNLESS OTHERWISE DIRECTED BY ENGINEER. ALL TREES GREATER THAN 8" DIAMETER WITHIN GRADING LIMITS SHALL BE FLAGGED AND APPROVED FOR REMOVAL BY ENGINEER. TREES GREATER THAN OR EQUAL TO 8" DIAMETER THAT ARE REMOVED BY CONTRACTOR WITHIN WRITTEN APPROVAL FROM ENGINEER SHALL BE REPLACED SHALL BE SUBJECT TO LIQUIDATED DAMAGES OF \$1,000 FOR EACH TREE.
- CONTRACTOR SHALL VIDEO DOCUMENT THE CONDITION OF THE CONSTRUCTION ACCESS ROUTES INCLUDING CONDITION OF PRIVATE PROPERTY, EXISTING TENET POND ACCESS ROAD AND PUBLIC ROADWAYS PRIOR TO INITIATION OF CONSTRUCTION. VIDEO DOCUMENTATION SHALL CAPTURE THE CONDITION OF PAVING, DRIVEWAYS, VEGETATION, ETC.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO ADJACENT PROPERTY OR STRUCTURES AS A RESULT OF TREE-CUTTING AND ALL OTHER EARTHWORK OPERATIONS.
- ALL EXCAVATED MATERIAL NOT USED OR USABLE FOR CONSTRUCTION ELSEWHERE IN THIS JOB SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE HAULED OFF SITE AND DISPOSED OF LEGALLY AND PROPERLY. NO MATERIAL SHALL BE DISPOSED OF IN A FLOODPLAIN OR FLOOD ZONE WHICH WILL AFFECT OR REDUCE THE FLOODPLAIN STORAGE. DISPOSAL OF SAID MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL NOTIFY PARISH PRIOR TO BEGINNING EXCAVATION OF LOCATION OF MATERIAL TO BE DISPOSED.
- CONTRACTOR SHALL MAINTAIN NORMAL HOURS OF OPERATION DUE TO PROXIMITY OF RESIDENTIAL AREA. NORMAL HOURS OF OPERATION ARE FROM 8:00 AM TO 5:00 PM MONDAY THROUGH FRIDAY AND FROM 9:00 AM TO 5:00 PM ON SATURDAY AND SUNDAY. WEEKEND WORK ALLOWED ONLY IF APPROVED BY THE PARISH PROJECT MANAGER AT LEAST 72 HOURS IN ADVANCE.
- CONTRACTOR MAY UTILIZE 1 OF 2 ROUTES FOR ACCESS TO CONSTRUCT THE NEW IMPROVEMENTS:
 - CONTRACTOR MAY ACCESS DIRECTLY FROM SERVICE RD AND USE ACCESS ROAD ALONG REINE CANAL AND CROSS CONCRETE WEIR. ANY DAMAGES TO CONCRETE WEIR SHALL BE REPAIRED OR COMPLETELY REPLACED.
 - CONTRACTOR MAY ACCESS DIRECTLY FROM SERVICE RD AND USE ACCESS ROAD THAT WRAPS AROUND POND. CONTRACTOR MAY TEMPORARILY REGRADE LOW WATER CROSSING FOR ACCESS. ANY DAMAGES TO LOW WATER CROSSING SHALL BE REPAIRED.
- IF THE CONTRACTOR DESIRES AN ALTERNATE ACCESS ROUTE TO THE ROUTE SHOWN IN THE PLANS, THE REQUEST SHALL BE MADE PRIOR TO THE INITIATION OF THE CONSTRUCTION. ENGINEER WILL REVIEW & EVALUATE IF ALTERNATE ROUTE IS ACCEPTABLE. NO ADDITIONAL PAYMENT WILL BE MADE FOR COSTS INCURRED DUE TO UTILIZATION OF ALTERNATE ACCESS ROUTE.

CHANNEL EXCAVATION NOTES:

- CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR, AND EQUIPMENT TO NECESSARY TO CLEAR, EXCAVATE, AND STABILIZE THE W-15 DIVERSION CANAL WITHIN THE LIMITS AND TO THE LINES AND GRADES SHOWN ON THESE PLANS.
- PRIOR TO MOBILIZATION, CONTRACTOR SHALL PREPARE AND SUBMIT A WRITTEN WORK PLAN TO DOCUMENT THE CONTRACTOR'S PROPOSED PLAN OF ACTION TO CONDUCT CHANNEL CLEARING, EXCAVATION, HAULING, DISPOSAL, GRADING, STABILIZATION, AND PLANTING INCLUDING BUT NOT LIMITED TO:
 - PROGRESS SCHEDULE AS REQUIRED BY ST. TAMMANY PARISH GOVERNMENT GENERAL CONDITIONS;
 - LIST OF PERSONNEL INCLUDING CONTACT INFORMATION AND PROJECT ROLE, MATERIALS, SUBCONTRACTORS, FABRICATORS, TYPES OF EQUIPMENT, AND EQUIPMENT STAGING AREAS THE CONTRACTOR PROPOSED TO USE FOR CONSTRUCTION;
 - ONSITE AND OFFSITE HAUL ROUTES FOR ANY AND ALL MATERIAL PRODUCED FROM THE WORK INCLUDING VEGETATION, DEBRIS, SOIL, AND DREDGED MATERIAL;
 - SHOP DRAWINGS, TEST RESULTS, AND SAMPLE SUBMITTALS;
 - SURVEY LAYOUT AND TAKEOUT ALL REQUIRED SURVEYS.
- CONTRACTOR SHALL ESTABLISH SURVEY CONTROL AND CONDUCT A PRE-CONSTRUCTION SURVEY PRIOR TO MOBILIZING TO THE PROJECT SITE. PRE-CONSTRUCTION SURVEY WILL BE CONDUCTED ALONG CROSS SECTIONS AS SHOWN IN SHEETS C-4.0 THROUGH C-4.1 AT NO LESS THAN 100 FOOT INTERVALS. ALTERNATIVELY, CONTRACTOR MAY CHOOSE TO ACCEPT THE SURVEY INCLUDED WITH THESE PLANS. NO CONSTRUCTION ACTIVITIES SHALL COMMENCE UNTIL THE PRE-CONSTRUCTION SURVEY IS ACCEPTED BY THE ENGINEER. REFERENCE TECHNICAL SPECIFICATIONS FOR SURVEY & CONSTRUCTION LAYOUT REQUIREMENTS. PRE-CONSTRUCTION SURVEY MUST BE COMPLETED & APPROVED BY ENGINEER PRIOR TO INITIATION OF CLEARING AND GRADING OPERATIONS.
- CONTRACTOR SHALL ESTABLISH LIMITS OF CONSTRUCTION BASED ON THESE PLANS AND ASSOCIATED CAD FILES TO BE PROVIDED BY ENGINEER. TEMPORARY SILT FENCING SHALL BE ERECTED AT LIMITS OF CONSTRUCTION WHERE REQUIRED IN THE PLANS.
- CONTRACTOR SHALL ESTABLISH A PROJECT BASELINE AS AN OFFSET FROM PROPOSED CHANNEL CENTERLINE.
- CLEARING SHALL INCLUDE ALL AREAS DISTURBED BY GRADING OPERATIONS ASSOCIATED WITH CHANNEL WIDENING. CONTRACTOR SHALL LIMIT DISTURBANCE OF EXISTING SOILS UNTIL SUCH TIME AS GRADING OF CHANNEL BANKS AND STABILIZATION WITH EROSION CONTROL MATTING WILL OCCUR. SEE SITE LAYOUT AND GRADING PLANS FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UNDISTURBED AREAS, ALL PROPERTY CORNERS, & REPLACING ALL PINS ELIMINATED OR DAMAGED DURING CONSTRUCTION. ANY AND ALL PROPERTY CORNERS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A LOUISIANA LICENSED SURVEYOR.
- ALL MATERIAL REMOVED FROM THE PROJECT SITE (SOIL, VEGETATION, TRASH, CONCRETE, DEBRIS) SHALL BE HAULED OFFSITE AND DISPOSED OF IN A LAWFUL MANNER.
- INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES INCLUDING TEMPORARY AND PERMANENT EROSION CONTROL MATTING AND SEEDING IN ACCORDANCE WITH SPECIFICATIONS.
- PAYMENT FOR EXCAVATION SHALL BE BASED ON PROGRESS SURVEYS OF CHANNEL CROSS SECTIONS AT 100 FOOT INTERVALS. VOLUMES SHALL BE CALCULATED AS THE DIFFERENCE BETWEEN EXISTING SURVEYS AND THE PROGRESS SURVEYS USING THE AVERAGE END AREA METHOD.
- PROGRESS SURVEYS SHALL BE SUBMITTED WITH EACH PAYMENT APPLICATION TO JUSTIFY QUANTITIES. ENGINEER SHALL REVIEW AND DIRECT ADDITIONAL EXCAVATION AS REQUIRED TO ACHIEVE PROPOSED SECTIONS SHOWN ON SHEETS C-4.0 THROUGH C-4.1. CONTRACTOR SHALL RESURVEY WHERE ADDITIONAL EXCAVATION IS REQUIRED.
- FINAL PROGRESS SURVEYS SHALL BE CONVERTED INTO OVERALL AS-BUILT SURVEYS PRIOR TO FINAL PAYMENT.

CALL LOUISIANA ONE CALL - 1-800-272-3020
 LOUISIANA STATE LAW, SECTION R.S.40:1749.15, REQUIRES EXCAVATORS AND DEMOLISHERS TO NOTIFY A REGIONAL NOTIFICATION CENTER BY TELEPHONE 48 HOURS IN ADVANCE OF ANY EXCAVATION OR DEMOLITION ACTIVITY. THE OWNERS/OPERATORS OF ANY UNDERGROUND FACILITY MUST THEN MARK THE AREA OR PROVIDE INFORMATION THAT WILL ENABLE AN EXCAVATOR OR DEMOLISHER TO DETERMINE THE LOCATION OF UNDERGROUND FACILITIES.

EROSION CONTROL NOTES:

- CONTRACTOR SHALL SUBMIT A CONSTRUCTION SEQUENCING PLAN. THE CONSTRUCTION PHASING PLAN SHALL INCLUDE ALL ACTIVITIES REQUIRED TO COMPLETE THE PROJECT AS SHOWN IN THE PLANS.
- AS SHOWN IN THE "SOIL EROSION / SEDIMENTATION CONTROL OPERATION TIME SCHEDULE," THE PROJECT SEQUENCE SHALL GENERALLY FOLLOW THE PROPOSED ACTIVITIES SHOWN IN THE SOIL EROSION / SEDIMENTATION CONTROL OPERATION TIME SCHEDULE. CONTRACTOR SHALL SUBMIT SOIL EROSION / SEDIMENTATION CONTROL OPERATION TIME SCHEDULE AS PART OF THE WORK PLAN.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS AND STATUTES RELATING TO THE PREVENTION AND ABATEMENT OF POLLUTION IN PERFORMANCE OF THE CONTRACT. THE CONTRACTOR SHALL CONDUCT THE WORK IN A MANNER THAT WILL NOT CAUSE DAMAGING CONCENTRATIONS OF SILT OR POLLUTION TO WATER. THE CONTRACTOR SHALL PREVENT FUELS, OILS, BITUMINOUS MATERIALS, CHEMICALS, SEWAGE, OR OTHER HARMFUL CONTAMINANTS FROM ENTERING THE LAND OR WATER.
- THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THIS PROJECT IS TO BE CONSIDERED A PART OF THE CONTRACT DOCUMENTS FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO THE SWPPP AND INSTALLATION OF ALL EROSION AND SEDIMENTS CONTROL MEASURES INDICATED IN THE SWPPP.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING THE NOI & SHALL PROVIDE ST. TAMMANY PARISH ENGINEERING WITH ANF PRIOR TO BEGINNING CONSTRUCTION.
- ALL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY USING A TRUCK WASH FACILITY TO BE PROVIDED BY THE CONTRACTOR.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO PUBLIC ROADS (INCLUDING T.G.C.E. AGGREGATE AND CONSTRUCTION MUD) SHALL BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY MEANS OF SWEEPING, FLUSHING OR FLUIDITY OF PAVEMENT WILL NOT BE ALLOWED.
- TEMPORARY CULVERTS ARE TO BE INSTALLED AND MAINTAINED TO ENSURE POSITIVE DRAINAGE WHERE CONSTRUCTION ENTRANCES TRAVERSE DRAINAGE PATHS.
- MAINTENANCE IS SUBSIDIARY TO EROSION CONTROL ITEMS LISTED IN THE BID FORM.
- CHANNEL SLOPES REACHING FINAL GRADE SHALL NOT REMAIN EXPOSED TO RAIN FOR MORE THAN 3 DAYS. CLEARING ACTIVITIES ON CHANNEL SLOPES SHALL LIMIT DISTURBING SOIL AND ROOT STRUCTURES TO THE DEGREE PRACTICAL. PLACEMENT OF EROSION CONTROL MATTING SHALL OCCUR WITHIN 3 DAYS OF SLOPES ACHIEVING DESIRED GRADE.
- CONTRACTOR SHALL LIMIT CHANNEL SLOPES EXPOSED THROUGH GRADING ACTIVITIES TO LESS THAN 200 FEET AT ALL TIMES.

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

| CONSTRUCTION SEQUENCE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| PRE-CONSTRUCTION SURVEY | | | | | | | | | | | | | | | | | | | |
| INITIAL CONTROLS | | | | | | | | | | | | | | | | | | | |
| TEMPORARY CONSTRUCTION ENTRANCE | | | | | | | | | | | | | | | | | | | |
| TEMPORARY CONTROL MEASURES / FENCING | | | | | | | | | | | | | | | | | | | |
| SILT FENCING | | | | | | | | | | | | | | | | | | | |
| CLEARING/GRUBBING* | | | | | | | | | | | | | | | | | | | |
| GRADING, DREDGING, AND SLOPE STABILIZATION | | | | | | | | | | | | | | | | | | | |
| STA. 1+00 TO 2+00 | | | | | | | | | | | | | | | | | | | |
| STA. 2+00 TO 3+00 | | | | | | | | | | | | | | | | | | | |
| STA. 3+00 TO 4+00 | | | | | | | | | | | | | | | | | | | |
| STA. 4+00 TO 5+00 | | | | | | | | | | | | | | | | | | | |
| STA. 5+00 TO 6+00 | | | | | | | | | | | | | | | | | | | |
| STA. 6+00 TO 7+00 | | | | | | | | | | | | | | | | | | | |
| STA. 7+00 TO 8+00 | | | | | | | | | | | | | | | | | | | |
| STA. 8+00 TO 9+00 | | | | | | | | | | | | | | | | | | | |
| AS-BUILT SURVEY | | | | | | | | | | | | | | | | | | | |

* LIMIT CLEARING TO THAT REQUIRED TO REMOVE VEGETATION. MINIMIZE DISTURBANCE TO SOIL DURING CLEARING.

- CONTRACTOR SHALL UPDATE THE TABLE BY SHADING OR DATING THE APPLICABLE ACTIVITIES AS PROJECT PROGRESSES.
- TIME SCHEDULE MUST COINCIDE WITH SEQUENCE OF CONSTRUCTION.

**SCHEDULE OF BID ITEMS
W-15 DIVERSION CANAL**

| Line Number | Item Number | Item Description-BASE BID | Quantity | Unit of Measure |
|-------------|--------------|--|----------|-----------------|
| 1 | 201-01-00100 | CLEARING AND GRUBBING | 1 | LS |
| 2 | 202-01-00100 | REMOVAL OF STRUCTURES AND OBSTRUCTIONS | 1 | LS |
| 3 | 203-01-00101 | GENERAL EXCAVATION/DREDGING | 8365 | CY |
| 4 | 204-06-00101 | TEMPORARY SILT FENCE | 1680 | LF |
| 5 | 204-07-00100 | TEMPORARY CONSTRUCTION ENTRANCE | 2 | EA |
| 6 | 711-02-00300 | RIP RAP (30LB, 18" Thick) | 2327 | SY |
| 7 | 711-04-00100 | GEOTEXTILE FABRIC | 2200 | SY |
| 8 | 717-01-00100 | SEEDING | 93 | LB |
| 9 | 720-01-01000 | EROSION CONTROL SYSTEM (SLOPE PROTECTION) (TYPE A) | 15075 | SY |
| 10 | 727-01-00100 | MOBILIZATION | 1 | LS |
| 11 | GR-02.1 | CONSTRUCTION SURVEY AND LAYOUT (HAUL OFFSITE) | 1 | LS |
| 12 | 713-01-00100 | TEMPORARY SIGNS AND BARRICADES | 1 | LS |

| Line Number | Item Number | Item Description-ALTERNATE #1 | Quantity | Unit of Measure |
|-------------|--------------|--|----------|-----------------|
| 13 | 203-01-00102 | GENERAL EXCAVATION/DREDGING | 4000 | CY |
| 14 | 204-06-00102 | TEMPORARY SILT FENCE | 1,868 | LF |
| 15 | GR-02.2 | CONSTRUCTION SURVEY AND LAYOUT (ONSITE DISPOSAL) | 1 | LS |

SEEDING NOTES:

- CONTRACTOR SHALL PREPARE A PLANTING PLAN IN COORDINATION WITH A QUALIFIED BOTANIST WITH A MINIMUM OF 10 YEARS EXPERIENCE PLANTING NATIVE GRASSES FOR EROSION CONTROL AND HABITAT RESTORATION. PLANTING SHALL DESCRIBE THE STEPS NECESSARY TO ACHIEVE A SATISFACTORY STAND OF NATIVE VEGETATION THAT CONSIST OF THE SPECIES LISTED IN TABLE 1, SPECIES LIST. SEED SELECTION AND SEEDING METHODS SHALL BE BASED ON THE VARIOUS ZONES ALONG THE CONSTRUCTED CHANNEL. TWO ZONES SHALL BE ESTABLISHED BASED ON THE ELEVATION AND POTENTIAL FOR INUNDATION TO INCLUDE: ZONE 1 (CHANNEL SIDE SLOPES LOWER) DEFINED AS WATERS EDGE TO 2 FEET ABOVE WATERS EDGE AND ZONE 2 (UPPER SIDE SLOPES / UPLAND DISTURBED AREAS) DEFINED AS ALL ELEVATIONS ABOVE ZONE 1.
- INSTALLATION OF SEEDS SHALL COMMENCE AS SOON AS POSSIBLE AFTER ACHIEVING FINAL GRADE. SEED SHALL BE INSTALLED ON SCARIFIED, BARE GROUND PREPARED IN ACCORDANCE SECTION 715, TOPSOIL, AND SECTION 717, SEEDING OF THE LOUISIANA DOT STANDARDS AND SPECIFICATIONS FOR ROADS AND BRIDGES, 2016 EDITION. HYDROSEEDING SHALL NOT BE ALLOWED UNLESS RECOMMENDED BY SUPPLIER OF NATIVE GRASS SEEDS IN WRITING. AFTER SEEDING, PLACE MULCH IN ACCORDANCE WITH SECTION 716, VEGETATIVE AND FIBER MULCH AND IMMEDIATELY COVER CHANNEL SIDE SLOPES WITH EROSION CONTROL MATTING TYPE A. FALL AND WINTER PLANTING SHALL UTILIZE ANNUAL RYE GRASS (LOLIUM MULTIFLORUM) AS A COVER CROP AT A RATE OF 30 LBS/ACRE. NO OTHER COVER CROPS WILL BE ALLOWED UNLESS RECOMMENDED BY CONTRACTOR'S QUALIFIED BOTANIST AND APPROVED BY ENGINEER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ACHIEVING A SATISFACTORY STAND OF VEGETATION COVERING A MINIMUM OF 80% OF THE PROJECT SITE WITHIN 3 MONTHS OF COMPLETION OF GRADING ACTIVITIES. IF MINIMUM COVER REQUIREMENTS ARE NOT MET, CONTRACTOR SHALL PREPARE THE SOIL, RESEED, AND MONITOR THE SITE IN THREE MONTHS. THIS PROCESS SHALL BE REPEATED UNTIL SUCH TIME AS A SATISFACTORY STAND OF VEGETATION IS ACHIEVED. FOLLOWING THE FIRST GROWING SEASON, A MINIMUM OF 5 SPECIES OF NATIVE GRASSES SHALL BE PRESENT WHICH SHALL BE DOCUMENTED BY A FIELD REPORT PREPARED BY A QUALIFIED BIOLOGIST TO DOCUMENT THE PRESENCE OF NATIVE SPECIES. IF THE MINIMUM NUMBER OF SPECIES ARE NOT PRESENT, CONTRACTOR SHALL PREPARE AND IMPLEMENT A PLAN TO ACHIEVE THE REQUIRED PERFORMANCE MEASURES.
- ZONE 1 SHALL CONTAIN THE FOLLOWING SPECIES AND SHALL BE SEED AT A RATE OF 20 LBS / ACRE OR AS RECOMMENDED BY THE SUPPLIER. SPECIES COMPOSITION AND PERCENTAGES MAY VARY FROM THE LIST IDENTIFIED BELOW AS RECOMMENDED BY THE QUALIFIED BOTANIST. ALL SPECIES SHALL BE CONDUCTIVE TO GROWTH IN THE SOIL AND CLIMATIC CONDITIONS PRESENT AT THE PROJECT SITE.

LIST 1: SPECIES COMPOSITION AND PERCENTAGES FOR CHANNEL SIDE SLOPES AND OTHER DISTURBED AREAS (ALL ELEVATIONS HIGHER THAN 4 FOOT ABOVE NORMAL WATERS EDGE)

- Anthoanella rufa 30%
- Clethra aromatica 15%
- Helianthus angustifolia 15%
- Panicum anceps 10%
- Carphophorus pseudolalis 5%
- Eragrostis refracta 5%
- Coreopsis linifolia 5%
- Tridens ambiguus 2%
- Andropogon mohrii 2%
- Chrysopsis graminifolia 2%
- Digitaria filiformis var. villosa 2%
- Schizachyrium scoparium 2%
- Andropogon ternarius 2%
- Andropogon gyrans <1%
- Buchnera americana <1%
- Paspalum precox <1%
- Labellia appendiculata <1%
- Bigelewia nudata >1%
- Cenchrus ciliaris <1%
- Eryngium integrifolia <1%
- Rhexia filiformis <1%
- Dichanthellum aciculare <1%
- Elychalis sp <1%
- Eriocaulon decangulare <1%
- Xyris sp. <1%
- Liatris pycnostachya <1%
- Fuliria squarrosa <1%
- Rynchospora curticulata <1%
- Stenochloa hians <1%
- Andropogon glomeratus <1%
- Andropogon virginicus <1%
- Aster dumosus <1%
- Panicum virgatum < .5%

- ZONE 2 SHALL CONTAIN THE FOLLOWING SPECIES AND SHALL BE SEED AT A RATE OF 20 LBS / ACRE OR AS RECOMMENDED BY THE SUPPLIER, MEADOWMAKERS (OR APPROVED EQUAL). SPECIES COMPOSITION AND PERCENTAGES MAY VARY FROM THE LIST IDENTIFIED BELOW AS RECOMMENDED BY THE QUALIFIED BOTANIST. ALL SPECIES SHALL BE OF LOCAL GENOTYPES AND SHALL BE CONDUCTIVE TO GROWTH IN THE SOIL AND CLIMATIC CONDITIONS PRESENT AT THE PROJECT SITE.

LIST 2: SPECIES COMPOSITION AND PERCENTAGES FOR CHANNEL SIDE SLOPES LOWER (ALL ELEVATIONS LOWER THAN 4 FEET ABOVE NORMAL WATERS EDGE)

- 35.0% Carex vulpinoidea, PA Ecotype (Fox Sedge, PA Ecotype)
- 20.0% Carex lurida, PA Ecotype (Lurid (Shallow) Sedge, PA Ecotype)
- 12.8% Carex lupulina, PA Ecotype (Hop Sedge, PA Ecotype)
- 8.0% Carex scaparia, PA Ecotype (Blunt Broom Sedge, PA Ecotype)
- 4.0% Sparganium eurycarpum, PA Ecotype (Giant Bur Reed, PA Ecotype)
- 4.0% Verbena hastata, PA Ecotype (Blue Vervain, PA Ecotype)
- 3.0% Juncus effusus (Soft Rush)
- 2.5% Sparganium americanum (Eastern Bur Reed)
- 1.0% Asclepias incarnata, PA Ecotype (Swamp Milkweed, PA Ecotype)
- 1.0% Glyceria canadensis, PA Ecotype (Rattlesnake Grass, PA Ecotype)
- 1.0% Iris versicolor, PA Ecotype (Blueflag, PA Ecotype)
- 1.0% Onoclea sensibilis (Sensitive Fern)
- 1.0% Scirpus cyperinus, PA Ecotype (Woolgrass, PA Ecotype)
- 0.5% Alisma subcordatum (A plantago-aquatica), PA Ecotype (Mud Plantain (Water Plantain), PA Ecotype)
- 0.5% Aster puniceus (Symphyotrichum puniceum), PA Ecotype (Purplestem Aster, PA Ecotype)
- 0.5% Aster umbellatus (Doellingeria umbellata), PA Ecotype (Flat Topped White Aster, PA Ecotype)
- 0.5% Carex crinita, PA Ecotype (Fringed (Nodding) Sedge, PA Ecotype)
- 0.5% Eupatorium fistulosum, PA Ecotype (Joe Pye Weed, PA Ecotype)
- 0.5% Eupatorium perfoliatum, PA Ecotype (Boneset, PA Ecotype)
- 0.5% Helenium autumnale, PA Ecotype (Common Sneezeweed, PA Ecotype)
- 0.5% Ludwigia alternifolia, PA Ecotype (Seedbox, PA Ecotype)
- 0.5% Mimulus ringens, PA Ecotype (Square Stemmed Monkeyflower, PA Ecotype)
- 0.5% Scirpus validus (Schoenoplectus tabernaemontani), PA Ecotype (Softstem Bulrush, PA Ecotype)
- 0.5% Solidago odora (Oligoneuron ?), OH Ecotype (Ridgell's Goldenrod, OH Ecotype)
- 0.2% Chelone glabra, PA Ecotype (Turtlehead, PA Ecotype)

| REVISION | BY |
|---------------------------|-----|
| ADDENDUM 01 12/11/2023 | CMR |

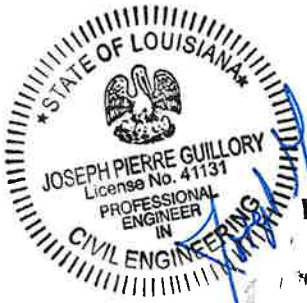
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SIGNATURE: _____ DATE: 12/11/2023

LOWER W-15 AREA
DRAINAGE IMPROVEMENT CANAL
PH. III DIVERSION CANAL
SLIDELL, LA
ST. TAMMANY PARISH
GOVERNMENT
MANDEVILLE, LA

| |
|------------------------------------|
| DRAWN CMR |
| CHECKED JPG |
| ISSUED DATE 10/23/2023 |
| ISSUED FOR BID |
| PROJECT NO. 20-826 |
| FILE 20-826 C-0.1 GENERAL NOTES |
| SHEET |
| C-0.2 |



SECTION 12
W-15 DIVERSION CANAL TECHNICAL SPECIFICATIONS

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DIVISION 01 – GENERAL REQUIREMENTS
GR-01 SUMMARY OF WORK

PART 1 GENERAL

1.01 APPLICATION

- A. The General Contractor and all Subcontractors shall familiarize themselves with the Bidding Requirements and Division 01 – General Requirements, Division 02 – Standard Items, and shall comply with all parts of these documents pertinent to the Work.

1.02 PROJECT LOCATION

- A. W-15 Diversion Canal in Slidell between the W-15 Canal and connecting to the Reine Canal. Approximate coordinates for the project are 30°17'35"N and 89°44'32"W.

1.03 ACCESS

- A. The project site may be accessed off of the I-10 service road. The access road circulating the French Branch Pond may be utilized in either direction. Any modification or damage to existing features shall be repaired, replaced, or returned to the same or better condition as prior to construction as determined by the Owner. If Contractor wishes to use an alternative route, it should be requested in the Pre-Construction meeting and evaluated by the Engineer for approval.

1.04 WORK COVERED BY CONTRACT DOCUMENTS

- A. The completed Work will provide Owner with 850 linear feet of the diversion canal from the W-15 Canal to the Reine Canal. The Work includes, but is not limited to, the following items:
1. Sediment and erosion control including but not limited to mulching, temporary vegetation, sediment basin construction and maintenance, silt fence, and temporary and permanent slope protection matting.
 2. Any and all dewatering activities to facilitate construction & management of sediment during excavation and grading activities.
 3. Grading activities including but not limited to the excavation & removal of material for the construction of the diversion canal; placing excavated material where permitted in the Plans or hauling material offsite to dispose of in a lawful manner.
 4. Installation of temporary drainage structures as required to perform the Work. All temporary drainage structures shall be removed prior to demobilization. Any disturbances incurred by the removal of temporary drainage structures shall be repaired at no additional cost to the Owner.

-- END OF SECTION --

GR-02.1 & 02.2 CONSTRUCTION SURVEY AND LAYOUT

PART 1 GENERAL

1.01 DESCRIPTION OF WORK INCLUDED

- A. The Contractor will be responsible for establishing all lines and grades and staking out all work on this project. The Engineer will furnish baseline reference points and benchmarks for use by the Contractor to establish horizontal and vertical controls.
- B. The Contractor shall furnish all of the materials, labor and equipment necessary to perform the Pre-Construction and As-Built surveys of the various construction components shown in the Plans and as outlined in these Specifications. All surveys shall be performed by personnel who are approved by the Engineer and under the direct supervision of a professional surveyor licensed in the state of Louisiana. 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), Geoid 12B, U. S. Survey Feet or most recent vertical datum as approved by Engineer. Contractor shall provide the details for the survey stakeout and layout in the Work Plan.

1.02 QUALIFICATIONS

- A. Registered professional engineer or registered land surveyor of the discipline required for the specific service of the Project, licensed in the State of Louisiana and acceptable to the Owner.

1.03 SURVEY REFERENCE POINTS

- A. The base topographic and bathymetric survey used for the design of the W-15 Diversion was prepared by Duplantis Design Group, PC Survey in May 2023.
- B. Horizontal and vertical control points for the Project should be those designated on the Drawings. Contractor shall locate, verify, and protect existing survey control points prior to starting work. Contractor shall establish additional benchmarks as needed to perform pre-construction and as-built surveys.

1.04 DELIVERABLES

- A. The Preconstruction and As-Built Surveys shall be delivered to the Engineer. Three copies all surveys shall be provided on 11" X 17" paper and one digital copy provided in AutoCAD or an approved equal. All surveys shall be stamped by a professional surveyor licensed in the State of Louisiana. The As-Built Survey shall incorporate all field changes, change orders, and quantities of materials placed. All revisions shall be shown in red and be easily distinguishable from the original design.
- B. Digital copies of all survey point files shall be included with the Preconstruction and As-Built Surveys and shall contain the following information:

1. Point number
2. Northing (NAD 83 US FT)
3. Easting (NAD 83 US FT)
4. Elevation (NAVD 88 FT)

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 CONSTRUCTION LAYOUT

- A. The Contractor shall employ sufficient qualified engineering personnel experienced in layout and construction of highways and bridges to correctly establish and keep complete and comprehensive notebook records of all lines and grades necessary from initial layout to final acceptance. The Contractor will be liable for the accuracy of the initial layout and all subsequent alignment and elevations and shall, at his own expense, rebuild, repair or make good any portion of the work found to be incorrectly positioned either horizontally or vertically at any time before final acceptance. The Contractor shall notify the Engineer immediately of any apparent error in the plans.
- B. The Contractor shall number notebooks for complete and comprehensive recording of all lines and grades. These notebooks shall be provided to the Engineer and shall be properly indexed and cross-referenced by the Contractor for as-built data. The Contractor will be responsible for providing a marked-up set of prints showing as-built conditions, and an as-built survey as detailed in the As-Built Survey work item.
- C. The Engineer may, at his option, make either spot or complete checks of all construction alignment and grades to determine the correctness of the Contractor's work. However, these checks by the Engineer will not relieve the Contractor of his responsibility for constructing the work in the positions and to the elevations shown on the plans or approved revisions thereto. All measurements for determination of pay quantities will be plan dimension unless amended by field instruction.

3.02 PRE-CONSTRUCTION SURVEY

- A. The Pre-Construction Survey shall be used to verify the existing conditions at the Project Site, make modifications or adjustments to the various project features as deemed necessary by the Engineer and lay out the Work. The Preconstruction Survey shall show the existing topography and project features in plan and profile format using elevations, coordinates, contours, lines and grades. All contours shall be represented using ± 0.5 foot vertical intervals. The Pre-construction Survey shall also show the quantities of all constructed project features which are determined by a method that is approved by the Engineer, such as the average-end-area or AutoCAD.

- B. The Pre-Construction Survey shall be performed after the Pre-Construction Conference and prior to construction. The Contractor shall notify the Engineer a minimum of 48 hours prior to beginning the Pre-Construction Survey. The Pre-Construction Survey shall be submitted to the Engineer and approved prior to initiation of construction.
- C. Temporary Bench Marks (TBM): The Contractor shall install TBM(s) as necessary to perform all surveys. 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 TBM is disturbed or destroyed, the TBM shall be repaired or reinstalled by approved personnel at the expense of the contractor.
- D. The topography of the W-15 Diversion Canal, and other features to be surveyed as shown on sheet C-1.1, shall be surveyed along the transects along station shown on the Plans. In addition to the stationing shown on the Plans, Contractor shall survey existing topography at the location of the proposed diversion canal embankment top and toe in a north-south direction. Ground elevations and coordinates shall be recorded at 10 foot intervals along transects or at changes in elevation greater than 0.5 feet. Transects shall be surveyed to 20' beyond the limits of construction, or as shown on the Plans. Both tops, toes, and centerline of the adjacent Reine and W-15 Canals shall be surveyed within the limits of construction.

3.03 PROGRESS SURVEYS

- A. Bid Alternate #1: For completion or partial completion of onsite disposal, the Contractor shall execute the progress survey to obtain the balance of excavated material and submit to the Engineer for approval. The data shall be submitted via format consistent with these specifications and shall be attached with the pay application for validation by the Engineer. Invalid or incomplete survey data will warrant delay of approval to the following pay application. The Engineer shall review and approve progress survey data within seven (7) business days following submission of the data.

3.04 AS-BUILT SURVEYS

- A. The As-Built Survey shall be used for final payment of the W-15 Diversion Canal excavation and placement of spoil material within French Branch Pond and to make modifications or adjustments as deemed necessary by the Engineer. The As-Built Surveys shall show all constructed project features by overlaying the accepted Process Surveys onto the Preconstruction Survey using elevations, coordinates, contours, lines and grades. All contours shall be represented using ± 0.5 foot intervals. The As-Built Survey shall also show the quantities of all constructed project features which are determined by a method that is approved by the Engineer, such as AutoCAD.
- B. The diversion canal transects shall be surveyed in the same manner as the pre-construction survey but include the top, toe, and centerline of the constructed diversion canal along the transects shown on the Plans and capture elevation changes greater than 0.5 feet.

- C. Bid Alternate #1: The spoil placed within the French Branch Pond where specified on the plans up to elevation +7.00 NAVD88 shall be surveyed at 10 foot intervals along the transects shown on the Plans sheet C-1.1.
- D. The transects across the existing concrete weir and proposed rip-rap area shall be surveyed at 10 foot intervals along the transects shown on the Plans sheet C-1.1.
- E. Final payment will not be received until the As-Built Survey and Work have been accepted by the Engineer. The As-Built Survey shall also include the following items:
 - 1. W-15 Diversion Canal
 - a. Elevations to be taken along the same transects as the pre-con and process surveys.
 - b. As-built survey shall include identification of all project features including rip-rap, maintenance access roads, storm pipe, etc.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Measurement for payment of Base Bid Item No. GR-02.1, Construction Survey and Layout (Haul Offsite), shall be on a lump sum basis.
- B. Measurement for payment of Bid Alternate #1 Item No. GR-02.2 Construction Survey and Layout (Onsite Disposal), shall be on a lump sum basis.

4.02 PAYMENT

- A. Payment for Bid Item No GR-02.1, Construction Survey and Layout, shall be made at the contract lump sum price. Forty percent (40%) of the lump sum price for Surveying will be paid to the Contractor upon completion of the Pre-construction Survey. The remaining sixty percent (60%) will be paid to the Contractor upon approval of the As-built Survey by the Engineer. Payment shall constitute full compensation for personnel, equipment, supplies, and other incidentals related to this item of work.
- B. Payment for Bid Item No GR-02.2, Construction Survey and Layout (Onsite Disposal), shall be made at the contract lump sum price. Forty percent (40%) of the lump sum price for Surveying will be paid to the Contractor upon completion of the Pre-construction Survey. The remaining sixty percent (60%) will be paid to the Contractor upon approval of the As-built Survey by the Engineer. Payment shall constitute full compensation for personnel, equipment, supplies, and other incidentals related to this item of work.
 - 1. No partial payment will be made for progress surveys.

-- END OF SECTION --

GR-03 SUBMITTAL PROCEDURES

PART 1 GENERAL

1.01 DESCRIPTION

- A. Engineering data covering all equipment and fabricated materials to be furnished under this contract shall be submitted to the Engineer for review after the contractor verifies all applicable field measurements, quantities, dimensions, performance criteria, etc. This data shall include drawings and descriptive information in sufficient detail to show the kind, size, arrangement, and operation of component materials and devices; the external operation of connections, piping diagrams; performance characteristics and capacities; and dimensions and clearances needed for installation and correlation with other materials and equipment. If manufacturer's standard drawings are submitted, modify and delete information which is not applicable to the Work. The Engineer will not be required to review incomplete submittals.
- B. All submittals, regardless of origin, shall be stamped with the approval of Contractor and identified with the name and number of this contract, Contractor's name, date, and references to applicable specification paragraphs and Contract Drawings. By approving Submittals, Contractor represents that he has determined and verified all materials, field measurements and field construction criteria related thereto and that he has checked and coordinated the information within the submittal with the requirements of the Work. Each submittal shall indicate the intended use of the item in the Work. When catalog pages are submitted, applicable items shall be clearly identified. The current revision, issue number, and date shall be indicated on all drawings and other descriptive data. Submittals shall reference sheet and/or section numbers of the Contract Documents to which they relate.
- C. All deviations from the Contract Documents shall be specifically and clearly identified on each submittal and shall be tabulated in Contractor's letter of transmittal. Such submittals shall, as pertinent to the deviation, indicate essential details of all changes proposed by Contractor (including modifications to other facilities that may be a result of the deviation) and all required piping and wiring diagrams.
- D. Contractor shall accept full responsibility for the completeness of each submission, and, in the case of a resubmission, shall verify that all exceptions previously noted by Engineer have been taken into account. In the event that more than one resubmission is required because of failure of Contractor to account for exceptions previously noted, Contractor shall reimburse Owner for the charges of Engineer for review of the additional resubmission.

- E. Any need for more than one resubmission, or any other delay in obtaining Engineer's review of submittals, will not entitle Contractor to extension of the Contract Time unless delay of the Work is directly caused by a change in the Work authorized by a Change Order or by failure of Engineer to return any submittal within 28 calendar days after its receipt in the Engineer's office.
- F. Engineer's review of drawings and data submitted by Contractor will cover only general conformity to the Contract Documents. Engineer's review does not indicate a thorough review of all dimensions, quantities, and details of the material, equipment, device, or item shown. Engineer's review of submittals shall not relieve Contractor from responsibility for errors, omissions, or deviations, nor responsibility for compliance with the Contract Documents.
- G. Six (6) copies of each drawing and necessary data shall be submitted to Engineer. Engineer will not accept submittals from anyone but Contractor. Submittals shall be consecutively numbered in direct sequence of submittal and without division by subcontracts or trades. Resubmittals shall bear the number of the first submittal followed by a letter (A, B, etc.,) to indicate the sequence of the resubmittal.
- H. When the drawings and data are returned marked REJECTED or REVISE AND RESUBMIT, the corrections shall be made as required, as noted thereon, and as indicated by Engineer and corrected copies shall be resubmitted. Commence no portion of work requiring submittals until submittal has been approved by Engineer.
- I. When corrected copies are resubmitted, Contractor shall, in writing, direct specific attention to all revisions and shall list separately any revisions made other than those called for by Engineer on previous submissions. Resubmittals shall be clearly and obviously labeled as such.
- J. When the drawings and data are returned marked REVIEWED or REVIEWED AS NOTED, no additional copies need be furnished. Contractor is responsible for distributing copies to his subcontractors and material suppliers.

1.02 SAMPLES

- A. Samples shall be of sufficient size and quantity to:
 - 1. Clearly illustrate the functional characteristics of the product with integrally related parts and attachment devices.
 - 2. Clearly illustrate the full range of color texture, and pattern.
 - 3. Serve as a sample for testing.
- B. Label each sample with identification required for transmittal letter.

1.03 SCHEDULE OF MAJOR EQUIPMENT

- A. The Proposal Form may include a list of the major items of Equipment to be furnished and installed on this project. Each Bidder shall state in the space

provided in the Proposal Form the name of the manufacturer of the equipment he proposes to use. Only one manufacturer shall be listed for each item. The successful bidder shall be bound to furnish the particular equipment listed in his proposal and no substitutions will be permitted unless the substitution meets the requirements of the contract and is specifically approved in writing by the Owner.

- B. Where manufacturers of this major equipment are mentioned in the specifications followed by the words "or approved equal" any substitution equipment shall be submitted for the Engineer's review. Performance specifications where no manufacturer is mentioned do not require prior review. Structural, electrical and mechanical changes to suit the equipment bid will be the responsibility of, and paid for by, the Contractor.

1.04 EQUIPMENT CONFIGURATIONS

- A. The indicated sizes of equipment shown on the plans and specified herein represent sizes that were used for the design. In the event the Contractor, supplier, or manufacturer changes the size of the equipment, the changes to the adjacent equipment, piping, or required additional wiring in order to provide for adaptation of equipment to the project shall be coordinated by the Contractor and shall be called to the attention of the Engineer at the time of the affected submittal. Any expense incurred in changing equipment sizes shall be borne by the Contractor.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 AGREEMENT IN PRODUCTION OF SUBMITTALS

- A. Contractor agrees that Shop Drawing Submittals processed by the Engineer are not Change Orders; that the purpose of Shop Drawing Submittals by the Contractor is to demonstrate to the Engineer that the Contractor understands the design concept, that he demonstrates his understanding by indicating which equipment and material he intends to furnish and install and by detailing the fabrication and installation methods he intends to use. Contractor further agrees that if deviations, discrepancies, or conflicts between Shop Drawing Submittals and the contract documents in the form of design drawings and specifications are discovered either prior to or after Shop Drawing Submittals are processed by the Engineer, the design drawings and specifications shall control and shall be followed.

PART 4 – MEASUREMENT AND PAYMENT

- A. No separate measurement and payment shall be made for this Section. The work specified herein shall be considered incidental to other items of Work, the cost of which shall be incorporated therein.

-- END OF SECTION --

DIVISION 02- STANDARD ITEMS
ITEM 201-01-00100 CLEARING AND GRUBBING

PART 1 – GENERAL

1.01 SCOPE

- A. Clear, grub, and remove vegetation and debris except such items that are designated to remain or to be removed under other pay items. Cut trees, logs, brush, stumps and debris; excavate and remove stumps, roots, submerged logs, snags, and other vegetative or objectionable material; dispose removed material in accordance with LSSRB 202.02; and clean the area within the limits of construction.
- B. Clearing shall be performed within the limits of the construction for the proposed diversion canal area. No clearing or grubbing is allowed within the 30' landscape buffer on the east side of the proposed diversion canal as shown on the Plans.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 CLEARING AND GRUBBING

- A. Any clearing within the project limits required to construct the proposed improvements as shown in the Plans including but not limited to: tree removal, shrub removal, debris removal, etc.
- B. Clearing shall not commence until the pre-construction survey is completed and approved by the Engineer unless otherwise notified by the Owner or Engineer.

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Measurement for Bid Item No. 201-01-00100, Clearing and Grubbing, shall be measured by the Lump Sum.

4.02 PAYMENT

- B. Payment for Bid Item No. 201-01-00100, Clearing and Grubbing, shall be made at the Contract Lump Sum unit price. Payment shall constitute labor, equipment, outside services, and other incidentals related to this item of Work.

-- END OF SECTION --

ITEM 202-01-00100 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

PART 1 – GENERAL

1.01 SCOPE

- A. Item involves any relocation of utilities and including but not limited to telecommunication pedestals, guide wires, utility poles, etc. and shall be coordinated with the respective utility provider prior to commencement of construction.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 EXECUTION

- A. Any structures, utilities, or miscellaneous obstructions shall be removed or relocated in a permitted, lawful manner. If utility relocation is necessary, the Contractor shall be responsible for coordination with the respective utility provider.

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Measurement for Bid Item No. 202-01-00100, Removal of Structures and Obstructions shall be on a Lump Sum basis.

4.02 PAYMENT

- B. Payment for Bid Item No. 202-01-00100, Removal of Structures and Obstructions shall be made on a Lump Sum basis. Payment shall constitute labor, equipment, outside services, and other incidentals related to this item of Work.

-- END OF SECTION --

ITEM 203-01-00101 & 203-01-00102 GENERAL EXCAVATION/DREDGING

PART 1 – GENERAL

1.01 SCOPE

- A. The scope of work required for General Excavation involves the excavation of material for the Drainage Canal and any other miscellaneous excavation required to complete the Work as shown on the Plans.
- B. The material may either be hauled offsite as measured by Base Bid Item 203-01-00101 or disposed of onsite within the permitted area as shown on the Plans as measured by Bid Alternate #1 Item 203-01-00102.
- C. The grading & mulching of the 15' wide maintenance access road adjacent to the proposed diversion canal shall be considered incidental to the Work. Wood chips may be utilized as mulch for this access road. The road shall be fine graded following construction per the Plans.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 CANAL DREDGING & ACCESS (BASE BID AND ALTERNATE #1 BID)

- A. The excavation required to construct the diversion canal shall be sequenced to minimize the need for dewatering and allow adequate time for the embankment to be stabilized via respective erosion control measures.
- B. For site access, Contractor may enter from I-10 Service Road and the existing maintenance access road around the French Branch Pond shall be utilized. Any damage to the existing access road shall be repaired to the same or better condition prior to initiation of construction. The contractor shall record high-definition video of all local streets and private access roads, including French Branch Pond maintenance Access road, and provide the video to the Engineer in .MP4 format prior to construction.
- C. For access to the proposed diversion canal a crossing of the Reine Canal will be required. Contractor shall include proposed Reine Canal crossing plan in the Work Plan. Temporary culvert(s), temporary timber piles and bridge, or other temporary infrastructure for crossing the Reine Canal may be utilized within the limits of construction so long as the full hydraulic flow capacity of the Reine is maintained at all times.

3.02 BASE BID

- A. All material should be hauled off-site and disposed of in a permitted, lawful manner.

3.03 BID ALTERNATE #1

- A. An estimated volume of +/- 4000CY of material will be disposed of within the template shown on the plans within the existing French Branch Pond. If Bid Alt. #1 is selected, the +/- 4000CY will be considered as a deduction from the Base Bid total quantity.
- B. No material shall be placed above elevation +7.00' NAVD88 within the limits of the permitted onsite disposal area as shown on the Plans.
- C. Due to the susceptibility of the pond to wet conditions, the Contractor must complete the onsite disposal portion of work prior to hauling any material offsite. Dewatering of the pond may be permitted during onsite disposal and should be considered incidental to the Work.
- D. Upon completion of onsite disposal, Contractor shall execute a progress survey as shown on sheet C-1.1 in the Plans and as stated in these specifications to verify the balance of material that was excavated from the proposed diversion canal area and placed within the onsite disposal area so it may be measured for payment per Cubic Yard.
- E. If excessively wet weather is experienced during onsite disposal causing the inability to work within the French Branch Pond, the Contractor shall execute the progress survey to obtain the balance of excavated material and submit to the Engineer for approval. Once the progress survey is approved by Engineer, the Contractor may proceed with excavation and offsite disposal until otherwise notified by the Engineer that onsite disposal may resume.
- F. No additional Contract time will be awarded due to wet conditions during onsite disposal placement.
- G. Contractor may utilize any excavated onsite material free from deleterious materials such as stumps, roots, timber, etc. to place within the onsite disposal area.
- H. Any disturbed areas within the existing French Branch Pond shall be repaired to the same or better condition as prior to construction as deemed suitable consistent with the lines and grades of the pre-construction survey.
 - 1. Timber mats, or approved equal, may be temporarily placed within the limits of construction to minimize impact to existing site features.

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Measurement for Base Bid Item No. 203-01-00101, General Excavation/Dredging, shall be measured by the Cubic Yard as produced by the pre-construction vs. as-built survey comparison.

1. Measurement for progress payment on the Base Bid may be justified via average-end-area method. Cubic Yard measurement must be confirmed with survey data in accordance with these specifications in the as-built survey and determination of final quantity for payment will be by the Engineer based on that survey data. Any difference in quantity will be balanced based on the as-built survey for measurement of General Excavation.
- B. If Bid Alternate #1 is selected, measurement for Bid Alt. #1 Item No. 203-01-00102, General Excavation/Dredging shall be measured by the Cubic Yard as produced by the pre-construction vs. progress (or As-Built) survey comparison.
 1. Measurement for progress payment on the Bid Alternate #1 (Onsite Disposal) shall be justified with survey data in accordance with these specifications. Average End Area method is not acceptable for measurement or payment of Bid Alternate #1.
- C. If it is determined by the Engineer that material is placed above the specified elevation or outside the area specified in the Plans, the Contractor will be required to remove the excess material and be hauled off at no cost to the Owner.

4.02 PAYMENT

- A. Payment for the accepted quantities will be made at the Contract unit price per Cubic Yard, which includes furnishing equipment, labor, and materials necessary to complete the Work.

-- END OF SECTION --

ITEM 204-06-00101 & 204-06-00102 TEMPORARY SILT FENCE

PART 1 – GENERAL

1.01 SCOPE

- A. The scope of Work required for Erosion Control involves the installation of Silt Fencing for slope protection & respective seeding. This feature shall be placed in accordance with the specifications and in conformity to the lines, grades, and thickness shown on the Plans.

PART 2 – PRODUCTS

2.01 TEMPORARY SILT FENCING

- A. Temporary silt fencing shall be wire-supported or a self-supported system. Other silt fencing systems may be used when approved. Silt fencing shall comply with LSSRB 1018.15.1.2 Self-Supported Silt Fencing: Self-supported silt fencing shall consist of an approved geotextile fabric suitably attached to posts of either wood or steel installed in accordance with plan details. Geotextile fabric shall comply with LSSRB Section 1019, Class G.

PART 3 – EXECUTION

3.01 EXECUTION

- A. Furnish and construct silt retention systems at designated locations or other locations, as directed by the engineer. Posts for silt fencing shall be installed to a depth necessary to maintain the integrity of the system.

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Measurement for Base Bid Item No. 204-06-00101, Temporary Silt Fence, shall be measured by the Linear Foot.
- B. Measurement for Bid Alternate #1 Item No. 204-06-00102, Temporary Silt Fence, shall be measured by the Linear Foot.

4.02 PAYMENT

- A. Payment for Base Bid Item No. 204-06-00101 shall be made at the Contract unit price per Linear Foot.
- B. Payment for Bid Alternate #1 Item No. 204-06-00102 shall be made at the Contract unit price per Linear Foot.

-- END OF SECTION --

ITEM 204-07-00100 TEMPORARY CONSTRUCTION ENTRANCE

PART 1 – GENERAL

1.01 SCOPE

- A. The work consists of constructing and maintaining the temporary construction entrance at the I-10 Service Road access connection.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Temporary construction entrance shall consist of stone or recycled Portland cement concrete complying with gradation required in LSSRB 711.02, 2 pound class placed on geotextile fabric complying with LSSRB Section 1019, Class D.

PART 3 – EXECUTION

3.01 EXECUTION

- A. Construct temporary construction entrance as shown in the Plans. Place a geotextile fabric underliner at the locations designated for temporary construction entrances before aggregate material is placed. Place and compact aggregate material to the required thickness as directed. This work also includes additional measures required to remove mud from truck tires, such as wash racks, etc.

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Measurement for Bid Item No. 204-07-00100, Temporary Construction Entrance, shall be made on an individual basis.
- B. Geotextile fabric for the construction entrance shall be considered incidental to the Work for this item and excluded from item 711-04-00100 "Geotextile Fabric".

4.02 PAYMENT

- A. Payment for Bid Item No. 204-07-00100, Temporary Construction Entrance, shall be made on an individual basis at the Contract unit price.

-- END OF SECTION --

ITEM 711-01-03020 RIP RAP (30LB, 18" THICK)

PART 1 – GENERAL

1.01 SCOPE

- A. Furnish and place riprap in accordance with LSSRB Specifications and in conformity to the lines, grades, and thickness shown on the plans or as directed.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Reference LSSRB Section 711.02.
- B. Geotextile fabric shall comply with LSSRB 1019.01.

PART 3 – EXECUTION

3.01 EXECUTION

- A. Grade slopes or areas on which riprap is to be placed to the required section. Place riprap on the prepared slope or area in a manner which will produce a reasonably well-graded mass of stone with a minimum practicable percentage of voids. Place the entire mass of stone in conformance with the lines, grades, and thickness in one operation without displacing underlying material.
- B. Place geotextile fabric on the prepared slope or area specified in the Plans in accordance with LSSRB 203.11.3 before placement of riprap. Take care not to damage the geotextile fabric when placing riprap.

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Bid Item No. 711-01-03020, Rip Rap (30LB, 18" Thick), shall be measured by the Square Yard. No measurement or payment will be made for excavation or backfilling.
- B. Measurement for Geotextile Fabric will be covered under item 711-04-00100 "Geotextile Fabric."

4.02 PAYMENT

- A. Payment will be made at the Contract unit price per Square Yard for both Rip Rap & Geotextile Fabric.

-- END OF SECTION --

ITEM 711-04-00100 GEOTEXTILE FABRIC

PART 1 – GENERAL

1.01 SCOPE

- A. Furnish and place geotextile fabric for riprap in accordance with LSSRB Specifications and in conformity to the lines, grades, and thickness shown on the plans or as directed.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Geotextile fabric shall comply with LSSRB 1019.01.

PART 3 – EXECUTION

3.01 EXECUTION

- A. Place geotextile fabric on the prepared slope or area specified in the Plans in accordance with LSSRB 203.11.3 before placement of riprap. Take care not to damage the geotextile fabric when placing riprap.

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Measurement for Bid Item No. 711-04-00100, Geotextile Fabric for Channel Protection, shall be by the Square Yard.

4.02 PAYMENT

- A. Payment for Bid Item No. 711-04-00100, Geotextile Fabric for Channel Protection, shall be made at the Contract unit price per Square Yard.

-- END OF SECTION --

ITEM 717-01-00100 SEEDING

PART 1 – GENERAL

1.01 SCOPE

- A. Apply seed either mechanically in a dry condition under LSSRB Section 717 or with hydro-seeding equipment in accordance with Section 739.
- B. Obtain the services of an established soil testing entity to coordinate soil sampling, perform testing and analyses, and prepare recommendations for materials and procedures to be used during the pre-planting phase of new turf establishment. Test and analyze samples to determine pH and fertility conditions. Use the test results and recommendations to determine the quantities of agricultural lime and fertilizer required for pre-planting applications. Provide a copy of this test report with recommendations to the engineer. Testing will be at no direct pay.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Reference LSSRB Section 717.02.

PART 3 – EXECUTION

3.01 EXECUTION

- A. Reference LSSRB Section 717. Reference LSSRB Table 717-01 for required seed type respective to time of planting.

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Measurement for Bid Item No. 717-01-00100, Seeding, shall be by the pound (LB).

4.02 PAYMENT

- A. Payment for Bid Item No. 717-01-00100, Seeding, shall be made at the contract unit price per pound (LB).

-- END OF SECTION --

ITEM 720-01-01000 EROSION CONTROL SYSTEM (SLOPE PROTECTION) (TYPE A)

PART 1 – GENERAL

1.01 SCOPE

- A. Furnish and place erosion control matting in accordance with Plan requirements for use as slope protection for the proposed diversion canal embankment.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Erosion control matting shall be North American Green BioNet C125 or approved equal.
- B. Furnish and maintain equipment necessary to satisfactorily perform the Work.

PART 3 – EXECUTION

3.01 EXECUTION

- A. Install erosion control matting/slope protection in accordance with manufacturer recommendations.
- B. Install erosion control matting in accordance with the approved installation plan, no later than 48 hours after completion of seeding operations. Install all staples flush to the ground, penetrating all layers of overlapped or adjacent rows.

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Measurement for Bid Item No. 720-01-01000, Erosion Control System (Slope Protection) (Type A), including hardware, shall be measured by the Square Yard.

4.02 PAYMENT

- A. Payment for Bid Item No. 720-01-01000, Erosion Control System, shall be made at the Contract unit price per Square Yard.

-- END OF SECTION --

ITEM 713-01-00100 TEMPORARY SIGNS AND BARRICADES

PART 1 – GENERAL

1.01 SCOPE

- A. Contractor shall be responsible for providing safe and expeditious movement of traffic through construction zones. A construction zone is defined as the immediate areas of actual construction and all abutting area which are used by the Contractor and which interfere with the driving or walking public. The Contractor shall be responsible for installation and maintenance of all devices and requirements in accordance with the construction signing details for the duration of the construction period.
- B. Contractor shall be responsible for removal, relocation, or replacement of any traffic control device in the construction area which exists as part of the normal pre-construction traffic control scheme. Any such actions shall be performed by the Contractor under the supervision, and in accordance with the Specifications, of the St. Tammany Parish Engineering Department, unless otherwise specified. Also, the Contractor should consult with the Engineering Department immediately on any vehicular or pedestrian safety or efficiency problem incurred as a result of construction of the project.

1.02 REFERENCES

- A. The following is a list of standards which may be referenced in this Section:
 - 1. AASHTO Guide for the Design of Bicycle Facilities, Current Edition.
 - 2. AASHTO Roadside Design Guide, Current Edition
 - 3. American Traffic Safety Services Association (ATSSA)
 - 4. LADOTD Standard Specifications for Roads and Bridges, 2006 Edition unless specified otherwise in this Section.
 - 5. Federal Highway Administration. Standard Highway Signs.
 - 6. NCHRP – Report 350 Recommended Procedures for the Safety Performance Evaluation of Highway Features.
 - 7. U.S. Department of Transportation, Federal Highway Administration (USDOT): Manual of Uniform Traffic Control Devices (MUTCD).
 - 8. U.S. Department of Transportation, Federal Highway Administration: Design Guidance: Accommodating Bicycle and Pedestrian Travel: A Recommended Approach.

PART 2 – PRODUCTS

2.01 SAFETY DEVICES AND SYSTEMS

- A. CONTRACTOR shall use devices and systems which meet NCHRP-350 Report crash test requirements as defined by the Federal Highway Administration unless exceptions are granted by the OWNER.

2.02 TRAFFIC CONTROL SIGNING AND DEVICES

- A. Signs: Comply with requirements of the Traffic Control Plan, other requirements defined in this section and any applicable requirements defined in the reference documents, including DOTD Standard Specifications, plans and details.
- B. Traffic Control Plan:
 - 1. Comply with requirements of the Traffic Control Plan, other requirements defined in this section and any applicable requirements defined in the reference documents, including DOTD Standard Specifications, plans and details.
 - 2. Use construction orange tubular markers and cones during daylight hours only.
- C. Barricades:
 - 1. Comply with the requirements of the Traffic Control Plan, other requirements defined in this section and any applicable requirements defined in the reference documents, including DOTD Standard Specifications, plans and details.
 - 2. Do not use rocks, asphalt, or concrete pieces, construction materials, and other debris as weighting devices for barricades. Sand bags will be permitted as long as a low center of gravity is maintained as approved.
- D. Project Sign:
 - 1. Fabricate and erect project sign per Section 07 of the St. Tammany Parish Bid Requirements – Division 0.

PART 3 – EXECUTION

3.01 VEHICULAR TRAFFIC

- A. Contractor shall:
 - 1. Conform to the USDOT MUTCD or applicable statutory requirements of authority having jurisdiction and the accepted Traffic Control Plan.
 - 2. Allow emergency vehicles immediate passage.
 - 3. Recognize that Local Government requirements take precedence over the MUTCD. Operations on or about traffic areas and provisions for regulating traffic shall additionally be subject to the regulation of other governmental agencies having jurisdiction over the affected areas.
 - 4. Keep traffic areas free of excavated material, construction equipment, pipe, other materials and equipment. Any materials inadvertently spilled on public roadways shall be cleaned immediately.
 - 5. Keep fire hydrants and water control valves free from obstruction and available for use at all times.

6. Conduct operations in a manner to avoid unnecessary interference with public and private roads and drives and provide and maintain temporary access for businesses and residences. Provide and maintain suitable and safe bridges, detours, or other temporary expedients for accommodation of public and private travel. When access to private driveways must be temporarily denied due to construction operations, notify the property owner or responsible party of such closure no less than 24 hours in advance of closure. Give notification in writing and include the estimated duration of the closure.
 7. Minimum lane width shall be 10 feet, unless noted otherwise. Where cones are used to separate traffic lane from construction zone, do not use traffic lane for accessing construction zone, and do not store materials or equipment on or near shoulder of traffic lane side of roadway.
 8. In making street crossings, do not block more than one-half the street at a time. Maintain one lane of traffic at all times. Ensure access for traffic in both directions.
 9. Notify the fire department, police/sheriff department, highway patrol, ambulance service, local school district, and transit 14 days before closing of roadway or portion thereof. Notify said departments or agencies when streets are again passable for vehicles. Conduct operations with the least interference to fire equipment access, and at no time prevent such access. Furnish Contractor's night emergency telephone numbers to the police or sheriff's department.
 10. Pedestrian and bicycle access along sidewalks and streets will be kept open and safe from construction activities and traffic lanes.
- B. Flaggers: May be required to provide for public safety or the regulation of traffic, or by jurisdictional authorities; and if used, shall be properly equipped and certified by ATSSA.

3.02 PROTECTION OF WORK AND PROPERTY

- A. Warning Signs and Barricades:
1. Provide warning signs and barricades for the following:
 - a. Open trenches and other excavations.
 - b. Obstructions, such as material piles, equipment (moving or parked), and piled embankment.
 - c. Protection of roads and driveways.
 2. Warning signs and barricades shall be illuminated by means of warning lights from sunset to sunrise.

3.03 CONTRACTOR PARKING

- A. Contractor, with approval of Engineer and Owner, shall designate parking areas for the use of all construction workers and other performing Work or furnishing services in connection with the Project so as avoid interference with public traffic, OWNER's operations, or construction activities.

3.04 ROADWAY USAGE BETWEEN OPERATIONS

- A. At all times when WORK is not actually in progress, Contractor shall make passable and shall open to traffic such portions of the Project and temporary roadways or portions thereof as may be agreed upon between Contractor and Owner and all authorities having jurisdiction over any properties involved.

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Measurement for Bid Item No. 713-01-00100, Temporary Signs and Barricades, involves the furnishing, erecting, maintaining, and subsequent removing of temporary construction signs, barrivades, and related devices and shall be on a Lump Sum basis.

4.02 PAYMENT

- A. Payment for Bid Item No. 713-01-00100, Temporary Signs and Barricades, shall be made at the Contract Lump Sum price in accordance with the payment schedule of Table 713-2. Payment shall constitute full compensation for furnishing all labor, materials, and equipment for the item.

**Table 713-2
Payment Schedule
Temporary Signs, Barricades and Related Devices**

| Percent of Total Contract Amount Earned | Allowable Percent of Lump Sum Price for Temporary Signs and Barricades |
|---|--|
| Initial Erection | 40 |
| 25 | 60 |
| 50 | 80 |
| 75 | 95 |
| 100 | 100 |

-- END OF SECTION --

ITEM 727-01-00100 MOBILIZATION

PART 1 – GENERAL

1.01 SCOPE

- A. Consists of preparatory work and operations, including those necessary for movement of personnel, equipment, supplies, and incidentals to the project site; the establishment of offices, buildings, and other facilities necessary for work on the project; the cost of bonds and any required insurance; and other preconstruction expenses necessary for start of the work, excluding the cost of construction materials.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Bid Item No. 727-01-00100, Mobilization, will be measured on a Lump Sum basis.

4.02 PAYMENT

- A. Payment shall be made at the Contract Lump Sum price per LADOTD Standard Specifications, Subsection 727.05. Partial payments for mobilization will be made in accordance with the schedule of Table 727-1 up to a maximum of 10 percent of the original total contract amount, including this item.

**Table 727-1
Mobilization Payment Schedule**

| Percent of Total Contract Amount Earned | Allowable Percent of the Lump Sum Price for Mobilization |
|---|--|
| 1st Partial Estimate | 25 |
| 10 | 50 |
| 25 | 75 |
| 50 | 100 |

-- END OF SECTION --

APPENDIX A – PERMITS

APPENDIX B - SWPPP

(To be provided after contract is awarded.)

SECTION 13
PLANS