

TE-48 Raccoon Island MC Phase B

CONSTRUCTION SPECIFICATIONS

NUMBER	TITLE	PAGES
SP	Special Provisions	SP-1 to SP-5
SP	Attachment 1 – BOEMRE MOA Requirements	SP-6 to SP-8
SP	Attachment 2 – Unanticipated Discoveries Plan	SP-9
5	Pollution Control	5-1 to 5-6
SWPPP	Draft Storm Water Pollution Prevention Plan	SWPPP-1 to SWPPP- 9
NOI	Storm Water General Permit Notice of Intent	1 to 15
NOT	Storm Water General Permit Notice of Termination	1
7	Construction Surveys	7-1 to 7-7
8	Mobilization & Demobilization	8-1 to 8-2
21	Excavation	21-1 to 21-10
23	Earthfill	23-1 to 23-7
93	Identification Markers or Plaques	93-1 to 93-4
94	Contractor Quality Control	94-1 to 94-5

SPECIAL PROVISIONS

1. Known pipelines and utilities are shown in the construction drawings. It is possible that some pipelines and/or utilities exist that have not been shown. The contractor shall be on the alert for such pipelines and utilities, and shall report them immediately to the Contracting Officer (CO). The contractor shall notify Louisiana One Call (LA ONE CALL) at 1-800-272-3020 96 hours prior to digging or driving piling in order to locate utility lines.
2. The contractor shall notify the US Coast Guard (USCG) Eighth District to prepare a Notice to Mariners as required. Notification, with a copy of the permit approval and drawings should be mailed to the following address within 48 hours of issuance of the Notice to Proceed:

CDR 8th Coast Guard District (dpw)
Hale Boggs Federal Bldg.
500 Poydras St. Suite 1230
New Orleans, La. 70130-3396

E-mail notification must also be provided to the USCG Eighth District, Aids to Navigation Branch, Marine Information Office seven (7) to ten (10) days prior to dredging or construction operations. The Marine Information Office may be reached by e-mail at d8marineinfo@d8.uscg.mil. Telephone inquiries may be directed to 504-671-2327. The contractor shall provide documentation of the notification to the NRCS CO.

3. All elevations stated in the plans and specifications refer to NAVD 88, Geoid99. Horizontal position refers to Louisiana State Plane feet, NAD 83.
4. The contractor's responsibilities include, but are not limited to, the following:
 - a. The Contractor shall submit a Hurricane Evacuation Plan and an Oil Spill Response Plan to the CO before the notice to proceed is issued as part of this contract.
 - b. Repair or replace, in like manner any fences, roads, bridges, launches, trails, waterways, and other facilities which may be damaged or destroyed during the construction of the structures and/or appurtenances installed as part of the project, and removal or disposal of all debris associated with construction of the project.
 - c. All tools, equipment, and other property (excluding project features) taken upon or placed upon the land or water bottoms by the contractor shall remain the property of the contractor. All such tools, equipment and other property shall be removed by the contractor prior to the final payment being made.
 - d. In the event of surface alterations resulting from activities of the contractor, beyond those alterations absolutely necessary for accessing the sites and conducting project activities, the contractor is responsible for restoring the site, to the greatest extent practical, to conditions existing at commencement of contractor activities, or the contractor or its insurance carrier will be responsible for the cost of such restoration. The contractor shall be responsible for removing all litter from the project sites upon completion of authorized work.
 - e. The contractor is made aware that occasional access by landowners, lessees and oilfield and utility company employees throughout the work area may be required. The contractor shall provide for such passage in a reasonably adequate and satisfactory manner, as determined by the contracting officer, on such occasions.
 - f. The contractor shall include the State of Louisiana as an additional insured on any and all pertinent liability insurance policies maintained by the contractor during the construction of the project.
 - g. The contractor's movement in the project area shall be limited to the work limits and access routes stated in the specifications and as shown on the plans.

- h. The contractor shall notify the contracting officer within seven (7) calendar days of occurrence of any written or oral notice of conflict between contractor and any subcontractor/supplier regarding non-payment for services or supplies.

In the event that a lawsuit is filed and the prime contractor is notified of such lawsuit while the contract is active, the contractor shall notify the contracting officer within seven (7) calendar days of receipt of such notice.

5. The contractor is advised that tidal fluctuations in this area will vary due to weather and daily tides. Historical tide data can be obtained from the U.S. Army Corps of Engineers (USACE) or the U.S. Geological Survey (USGS). The contractor is responsible for taking the appropriate measures to ensure that tidal fluctuations do not interfere with the execution of the contract.
6. Airboats and small outboards shall be used whenever practical to reduce the usage of marsh buggies. Established trails and access canals shall be utilized by airboats and small outboards whenever possible. Marsh buggy use shall be limited to the construction limits of the project features.
7. The contractor's navigation requirements include, but are not limited to, the following:
 - a. All marine vessels shall follow the Inland Navigation Rules which are contained in the following Federal Laws or Regulation: International Navigational Rules Act of 1977 (Public Law 95-75, 91 Stat. 308, or 33 U.S.C. 1601-1608), and the Inland Navigation Rules Act of 1980 (Public Law 96-591, 94 Stat. 3415, 33 U.S.C. 2001-2038). These rules can be found on the Internet at http://www.navcen.uscg.gov/mwv/navrules/rotr_online.htm. All marine vessels shall display the lights and day shapes required by Part C – Lights and Shapes of the Inland Navigation Rules. The location, type, color, and size of the lights and day shape shall be in accordance with Annex I – Positioning and Technical Details of Lights and Shapes. Any vessel engaged in dredging is considered a “Vessel restricted in her ability to maneuver” and shall display all the lights and shapes required in Rule 27: Vessel Not Under Control.
 - b. The contractor shall operate in compliance with pertinent U.S. Coast Guard (USCG) regulations and shall conduct work in such a manner as to minimize any obstruction to navigation. If the Contractor's dredge or any other floating equipment obstructs any navigation, making navigation difficult or endangering the passage of vessels, said dredge or equipment shall be promptly moved on the approach of any vessel to the extent necessary to afford a practical passage. Upon completion of work, the contractor shall promptly remove the dredge and other floating equipment, as well as ranges, buoys, piles and any other marks or objects that are not permanent project features.
 - c. All vessels that are regulated by the USCG shall have current inspection and certifications issued by the USCG before commencing construction. A copy of the certification shall be posted in a public area on board the vessel.
 - d. All dredge and quarter boats not subject to USCG inspection and certification or not having a current American Bureau of Shipping (ABS) Classification shall be inspected in working mode annually by a marine surveyor accredited by the National Association of Marine Surveyors (NAMS) or the Society of Accredited Marine Surveyors (SAMS). The surveyor must have at least five years experience in commercial marine vessels and equipment. All other vessels shall be inspected before being placed in use and at least annually by a qualified person. The inspection shall be documented. A copy of the most recent inspection report shall be posted in a public area on board the vessel. A copy of the inspection shall be furnished to the Contracting Officer's Representative (COR) upon request. The inspection shall be appropriate for the intended use of the vessel. The inspection, as a minimum, shall evaluate the structural integrity of the vessel and compliance with the National Fire Protection Association code 302 – Pleasure and Commercial Motor Craft.

- e. Officers and crew shall be in possession of a current valid USCG license or a correctly endorsed document as required by the USCG, which shall be posted in a public area on board the vessel.
8. The access route shall be on the northeast corner of the project area and shall occur from open water on the bayside of the island as shown on the construction drawings. At no time shall equipment be used on Raccoon Island outside of the work limits. See sheet 2 of the construction drawings for the access route and the work limits.
9. Disturbing, injuring, collecting or attempting to disturb, injure or collect any flora, fauna, or other property is prohibited.
10. Construction activities on Raccoon Island (Isles Dernieres Barrier Islands Refuge) shall be closely coordinated with the Louisiana Department of Wildlife and Fisheries (LDWF). Raccoon Island is the most important brown pelican and waterbird nesting colony in Louisiana. Access to Raccoon Island by personnel or equipment will need prior approval from LDWF and may require on site LDWF personnel for such activities. The contact person is Cassidy LeJeune at 337-373-0032.
11. Prior to the commencement of any dredging activity in Outer Continental Shelf (OCS) waters, a lease agreement was executed between the federal project sponsor and the U.S. Department of Interior - Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE). As per conditions specified in the lease, BOEMRE requirements will be adhered to during the dredging operation as stated in the Special Provisions Attachment 1.
12. **No construction activities on Raccoon Island shall be performed between March 1 and August 31. See sheet 2 of the construction drawings for detailed notes on containment dike construction.**
13. Additional contractor responsibilities near pipelines, other utilities and structures are as follows.
 - a. ALL PIPELINES
 - 1) At least 96 hours but not more than 120 hours in advance of any work within 50 feet of a pipeline right of way within state waters, the contractor shall notify Louisiana One Call at 1-800-272-3020 and the designated pipeline company representatives listed below. Within the Outer Continental Shelf, the contractor must also comply with the BOEMRE requirement of a 300 meter “no dredge” setback from existing pipelines.
 - 2) The contractor shall provide written documentation to the CO if a pipeline company chooses not to have a representative on site during construction activities in the vicinity of their pipeline.
 - 3) No excavation will be allowed within 50 feet of the center line of any pipeline unless otherwise approved by the pipeline representative and the COR. No activities that will result in the reduction of the existing cover over any pipeline will be permitted.
 - 4) Barges or other watercraft shall not anchor, spud, or dredge within the pipeline right-of-way (ROW) without specific prior approval from the pipeline company. All vessels shall be floating when crossing any pipeline. Spuds shall be welded or pinned up while traveling in and/or crossing any pipeline ROW.

- 5) No heavy construction equipment will operate (place an operating load) within any pipeline ROW without specific prior approval from the pipeline company. When required and approved by the pipeline company, timber mats will be utilized when crossing.
- 6) The contractor shall cross pipelines only at locations designated by the pipeline company and in the manner approved by the pipeline company. The contractor shall not remove the soil cover over the pipeline. Pipeline companies may require the contractor to cross their pipelines at high tide and during daylight hours only; this will be determined by the agreement the contractor has with the pipeline company.
- 7) The contractor shall schedule a pre-work meeting with the associated pipeline company to discuss all aspects of the planned activities, pipeline marking schedule, pipeline crossing locations, and excavations within 50 feet of pipelines within state waters as well as establish lines of communication. Within the Outer Continental Shelf, the contractor must also comply with the BOEMRE requirement of a 300 meter “no dredge” setback from existing pipelines.
- 8) Unless otherwise approved by the COR and pipeline representative, all open excavations made by the contractor that are closer than fifty feet to a pipeline within state waters shall be backfilled at the conclusion of each day.
- 9) Any pipeline markers damaged or removed by the contractor shall be replaced within 24 hours of such damage or removal.
- 10) All equipment crossings of the pipeline shall be marked or flagged.
- 11) The contractor shall be liable for any expense, loss or damage to any pipeline due to the presence his/her equipment/operations in the vicinity of the pipeline, including and without limitation to coating repair, pipe replacement, operational downtime or product loss that the pipeline company may sustain resulting from the operations or activities of the contractor, its agents or employees during construction for any project feature.
- 12) If the contractor’s facilities or related equipment are damaged or destroyed or if said operations and equipment must be relocated or removed due to any emergency, operational or maintenance requirements arising out of the day to day business activities of any pipeline company, the pipeline company shall not be liable to the contractor or to any other person or entity for any damages whatsoever, including, for emphasis only and not by way of limitation, damages of any type arising from the loss of product, loss of profit, interruption of business activity or business loss of any kind. Additionally, any subsequent repair and or reinstallation of said facilities shall be at the sole (100%) expense of the contractor.

b. PIPELINE CONTACT INFORMATION

Trunkline Gas Company (a Williams Company)

Contact **Bennett Comeaux** of Trunkline Gas Company 48 hours prior to performing any work in the vicinity of the pipeline right of way at:

**4094 Hwy 56
Houma, LA 70363
985-876-5712 office
337-350-0498 cell**

Williams Energy Services / Transco

Contact **Diane Cassalena** of Transco 48 hours prior to performing any work in the vicinity of the pipeline right of way at:

**60825A Highway 1148 West
Plaquemine, LA 70764
225-685-1419 office**

Attachment 1 – BOEMRE MOA Requirements

1. Before mobilization, the contractor shall place a notice in the US Coast Guard Local Notice to Mariners regarding the timeframe and location of dredging and construction operations and shall provide NRCS documentation of this notification.
2. At least two weeks before dredging begins, the contractor shall contact Transcontinental Gas Pipeline (TGP) so that TGP may mark their pipeline Segment No. 1536 if they choose to do so. Contact Mr. Chris Mason, Transcontinental Gas Pipeline Corporation, at (713) 215-2750 or chris.mason@williams.com. Notify NRCS on the outcome of the communication.
3. Before dredging, the contractor shall coordinate with the Federal On-Scene Coordinator (Captain Lincoln Stroh, US Coast Guard) or the Coast Guard Incident Commander for the MC-252 oil spill to ensure construction does not interfere with spill response actions. The contractor shall comply with any communications schedule or reporting criteria established by the Federal On-Scene Coordinator or Coast Guard Incident Commander to ensure activities in the spill area are compatible with spill response actions. NRCS or an NRCS representative shall be informed of the results of the communication.
4. The contractor shall establish lighted marker buoys along the perimeter of the borrow area, with a minimum of one lighted marker buoy at each point of intersection (PI).
5. The contractor shall notify NRCS within 24 hours of the commencement and termination of dredge operations.
6. The contractor shall immediately notify NRCS if dredging occurs outside the approved borrow area.
7. No material from the Raccoon Island Borrow Area will be extracted, transported, or placed that does not meet applicable Federal requirements.
8. The contractor shall not anchor, spud, or in any other way disturb the water bottom outside Raccoon Island Borrow Area.
9. The contractor shall maintain a GPS with an accuracy of plus or minus 3 meters (9.84 feet) on the dredge. The GPS shall be installed as close to the cutterhead as practicable.
10. The contractor shall submit to NRCS a **biweekly** report including:
 - a. A summary of dredge head-track lines, outlining any deviations from the original plans and specifications. A color-coded plot of the cutterhead shall be submitted showing any horizontal or vertical dredge violations. The map shall be in PDF format.
 - b. Construction progress updates including estimated volumetric production rates

11. The contractor shall transmit daily broadcasts on Marine Channel 16 for dredging and construction operations for the day the broadcast is aired and for upcoming days.
12. The contractor shall allow prompt access to any authorized Federal Inspector and shall provide NRCS and BOEMRE any documents/records on occupational or public health, safety, or environmental protection, as requested.
13. May 1st – October 31st is sea turtle nesting and emergence season and the following shall be required during this time:
 - a. All lighting on the dredge and booster pump(s) operating within 3 nautical miles of sea turtle nesting beaches shall use minimal lighting necessary to comply with US Coast Guard and/or OSHA requirements.
 - b. All nonessential lighting on the dredge and booster pump(s) shall be minimized by reduction, shielding, lowering and appropriate placement of lights to minimize illumination of the water to reduce disorientation effects on sea turtles.
 - c. Shielded low-pressure sodium vapor lights are recommended for lights on offshore equipment that cannot be eliminated.
14. The contractor shall implement the following during all phases of the project:
 - a. Vessel operators and crews should maintain a vigilant watch for marine mammals (cetaceans) and sea turtles and slow down and/or stop their vessel to avoid striking protected species.
 - b. When whales are sighted, maintain a minimum distance of 100 yards from the whale. If the whale is believed to be a North Atlantic right whale, maintain a minimum distance of 500 yards.
 - c. When sea turtles or small cetaceans (i.e. dolphins, porpoises) are sighted, attempt to maintain a minimum distance of 50 yards whenever possible.
 - d. When cetaceans are sighted while a vessel is underway, attempt to remain parallel to the animal's course. Avoid excessive speed or abrupt changes in direction until the cetacean has left the area.
 - e. Reduce vessel speed to 10 knots or less when mother/calf pairs, pods, or large assemblages of cetaceans are observed near an underway vessel when safety permits. A single cetacean at the surface may indicate submerged animals in the vicinity of the vessel; therefore, precautionary measures should always be exercised.
 - f. Whales may surface in unpredictable locations or approach slowly moving vessels. When you sight animals in the vessel's path or in close proximity to a moving vessel, reduce speed and shift the engine to neutral. Do not engage the engines until the animals are clear of the area.
 - g. Immediately report sightings of any injured or dead protected species (marine mammals and sea turtles), regardless of whether the injury or death is caused by your vessel. Report marine mammals to the National Marine Fisheries Service (NMFS) Fisheries Stranding Hotline at (305) 862-2850 and sea turtles to the NMFS Southeast Regional Office at (727) 824-5312. In addition, if the injury or death was caused by a collision with your vessel, notify BOEMRE (at dredgeinfo@mms.gov) within 24 hours of the strike. The report to NMFS and

BOEMRE should include the date and location (latitude/longitude) of the strike, the name of the vessel involved, and the species identification or a description of the animal, if possible. Notify NRCS of any communications with NMFS and BOEMRE.

- h. Report any observed sea turtle take to NRCS and BOEMRE within 24 hours of observation.
 - i. Immediately report to NRCS and BOEMRE the observance of 2 or more sea turtles within a 24-hour period.
15. The contractor shall report the discovery of any ordnance (i.e. weapons, ammunitions, armaments) that is encountered while conducting dredging activities to NRCS within 24 hours of the discovery.
16. The contractor shall immediately notify NRCS if any unknown historic or archeological remains or any prehistoric and/or historic aboriginal cultural materials are discovered on Raccoon Island.
17. The dredge operator shall immediately cease operations if the dredge operator discovers any archaeological resource while dredging. The contractor shall immediately report the discovery to NRCS. Items considered an archaeological resource are listed in Attachment 2 – Unanticipated Discoveries Plan and are referred to as ‘Potentially Significant Discoveries of Cultural Resources’.
18. NRCS will monitor the placed marsh fill for items of archaeological interest using standard archaeological survey procedures. If any items of archaeological interest are discovered, dredging operations shall be immediately suspended until further notice. If the find is significant, the dredge shall be relocated to another section of the borrow area.
19. Contractors and subcontractors shall prepare for and take all necessary precautions to prevent discharges of oil and releases of waste and hazardous materials. If a release occurs, notification and response shall be in accordance with 40 CFR Part 300. The contractor shall notify NRCS of any occurrences and remedial actions and provide copies of reports of the incident and resultant actions to NRCS.
20. The contractor shall observe a minimum “no dredge” setback of 300 meters (984.2 feet) from existing pipelines and all oil and gas related infrastructure.
21. The contractor shall immediately notify NRCS if any oil and gas infrastructure on the OCS is disturbed.
22. The contractor shall provide any information necessary for NRCS to compile final reports within ten (10) calendar days of the request.

Attachment 2 – Unanticipated Discoveries Plan

In order to minimize the potential for the accidental discovery of cultural resources, systematic review of remote sensing data was conducted for the Raccoon Island Shoreline Protection and Marsh Creation Project (TE-48). To ensure full and complete compliance with all Federal and State regulations concerning the protection of cultural resources, an Unanticipated Discoveries Plan was prepared for this project. All inspectors have the responsibility to monitor construction sites for potential cultural resources throughout construction. If a potential cultural resource is identified during construction, all operations must immediately cease within 304.8 m (1,000 ft) of the area of the discovery and the discovery must be reported to the Louisiana Division of Archeology. An approved archeological consultant will be hired in consultation with the Louisiana Division of Archeology, State Historic Preservation Office (SHPO) to inspect the discovery and provide an immediate verbal report. If these investigations determine that the resource is significant, the Louisiana Division of Archeology will provide instructions regarding its protection.

Potentially Significant Discoveries of Cultural Resources

Any of the following would be considered potentially significant submerged cultural resources:

- Prehistoric shell middens
- Lithic and ceramic artifacts
- Human and animal bone
- Wooden ship timbers or sections of iron or steel hulls
- Scattered cargo remains, such as ceramics, glass, wooden barrels or barrel staves
- Any distinct mound of stones indicative of a ballast pile
- Cannon and swivel guns and/or ammunition
- Debris comprised of ship rigging, gear and fittings
- Groups of anchors or other objects that indicate the presence of a shipwreck

Louisiana Division of Archeology Contacts:

Dr. Charles “Chip” McGimsey
State Archaeologist and Director
cmcgimsey@crt.la.gov
Main Phone: (225) 219-4598
Fax: (225) 342-4480

Mailing Address:
P.O. Box 44247
Baton Rouge, LA 70804

Physical Address:
1051 N. 3rd Street, Room 40
Baton Rouge, LA 70802

Construction Specification 5—Pollution Control

1. Scope

The work consists of installing measures or performing work to control erosion and minimize the production of sediment and other pollutants to water and air from construction activities.

2. Material

All material furnished shall meet the requirements of the material specifications listed in section 8 of this specification.

3. Erosion and sediment control measures and works

The measures and works shall include, but are not limited to, the following:

Staging of earthwork activities—The excavation and moving of soil materials shall be scheduled to minimize the size of areas disturbed and unprotected from erosion for the shortest reasonable time.

Seeding—Seeding to protect disturbed areas shall occur as soon as reasonably possible following completion of that earthwork activity.

Mulching—Mulching to provide temporary protection of the soil surface from erosion.

Diversions—Diversions to divert water from work areas and to collect water from work areas for treatment and safe disposition. They are temporary and shall be removed and the area restored to its near original condition when the diversions are no longer required or when permanent measures are installed.

Stream crossings—Culverts or bridges where equipment must cross streams. They are temporary and shall be removed and the area restored to its near original condition when the crossings are no longer required or when permanent measures are installed.

Sediment basins—Sediment basins collect, settle, and eliminate sediment from eroding areas from impacting properties and streams below the construction site(s). These basins are temporary and shall be removed and the area restored to its original condition when they are no longer required or when permanent measures are installed.

Sediment filters—Straw bale filters or geotextile sediment fences trap sediment from areas of limited runoff. Sediment filters shall be properly anchored to prevent erosion under or around them. These filters are temporary and shall be removed and the area restored to its original condition when they are no longer required or when permanent measures are installed.

Waterways—Waterways for the safe disposal of runoff from fields, diversions, and other structures or measures. These works are temporary and shall be removed and the area restored to its original condition when they are no longer required or when permanent measures are installed.

Other—Additional protection measures as specified in section 8 of this specification or required by Federal, State, or local government.

4. Chemical pollution

The contractor shall provide watertight tanks or barrels or construct a sump sealed with plastic sheets to collect and temporarily contain chemical pollutants, such as drained lubricating or transmission fluids, grease, soaps, concrete mixer washwater, or asphalt, produced as a by-product of the construction activities. Pollutants shall be disposed of in accordance with appropriate State and Federal regulations. At the completion of the construction work, tanks, barrels, and sumps shall be removed and the area restored to its original condition as specified in section 8 of this specification. Sump removal shall be conducted without causing pollution.

Sanitary facilities, such as chemical toilets, or septic tanks shall not be located next to live streams, wells, or springs. They shall be located at a distance sufficient to prevent contamination of any water source. At the completion of construction activities, facilities shall be disposed of without causing pollution as specified in section 8 of this specification.

5. Air pollution

The burning of brush or slash and the disposal of other materials shall adhere to state and local regulations.

Fire prevention measures shall be taken to prevent the start or spreading of wildfires that may result from project activities. Firebreaks or guards shall be constructed and maintained at locations shown on the drawings.

All public access or haul roads used by the contractor during construction of the project shall be sprinkled or otherwise treated to fully suppress dust. All dust control methods shall ensure safe construction operations at all times. If chemical dust suppressants are applied, the material shall be a commercially available product specifically designed for dust suppression and the application shall follow manufacturer's requirements and recommendations. A copy of the product data sheet and manufacturer's recommended application procedures shall be provided to the engineer 5 working days before the first application.

6. Maintenance, removal, and restoration

All pollution control measures and temporary works shall be adequately maintained in a functional condition for the duration of the construction period. All temporary measures shall be removed and the site restored to near original condition.

7. Measurement and payment

Method 1—For items of work for which specific unit prices are established in the contract, each item is measured to the nearest unit applicable. Payment for each item is made at the contract unit price for that item. For water or chemical suppressant items used for dust control for which items of work are established in section 8 of this specification, measurement for payment will not include water or chemical suppressants that are used inappropriately or excessive to need. Such payment will constitute full compensation for the completion of the work.

Method 2—For items of work for which lump sum prices are established in the contract, payment is made as the work proceeds and supported by invoices presented by the contractor that reflect actual costs. If the total of all progress payments is less than the lump sum contract price for this item, the balance remaining for this item will be included in the final contract payment. Payment of the lump sum contract price will constitute full compensation for completion of the work.

Method 3—For items of work for which lump sum prices are established in the contract, payment will be prorated and provided in equal amounts on each monthly progress payment estimate. The number of months used for prorating shall be the number estimated to complete the work as outlined in the contractor's approved construction schedule. The final month's prorate amount will be provided with the final contract payment. Payment as described will constitute full compensation for completion of the work.

All Methods—The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract, but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items, and the items to which they are made subsidiary, are identified in section 8 of this specification.

8. Items of work and construction details

8. Items of Work and Construction Details

The LDEQ Louisiana Pollution Discharge Elimination System (LPDES) dictates that construction sites greater than five acres in size require a general permit for storm water discharge (LAR100000). Part IV of the LAR100000, found at <http://www.deq.louisiana.gov/portal/Portals/0/permits/lpdes/pdf/FINAL%20LAR100000.pdf>, requires a Storm Water Pollution Prevention Plan. Please note that the rules for LPDES process relative to construction sites are contained in the LAC Title 33:IX.2341. Rules for storm water discharges associated with construction sites covered by general permits are found in LAC Title 33:IX.2345.

Items of work to be performed in conformance with this specification and the construction details therefore are:

a. Subsidiary Item, Pollution Control

- (1) This item shall consist of all work necessary to control erosion and sediment pollution, chemical pollution, water pollution, and air pollution during the period of this contract. The contractor shall perform the work in a manner that will reduce erosion, minimize sediments and other pollutants to the water, and create a minimum of air pollution. As a part of this requirement, a Storm Water Pollution Prevent Plan (SWPPP) shall be developed by the Contractor in compliance with the following sections. The original SWPPP shall be submitted to the Louisiana DEQ and a copy of the SWPPP shall be submitted to the NRCS.

(2) SWPPP Requirements

a. General SWPPP Requirements

The contents of the SWPPP shall address all of the applicable items identified in Part IV of Permit No. LAR100000. Attached is a draft copy of an SWPPP the Contractor may use to develop the site specific SWPPP for implementation on this contract.

b. Scope

The purpose of the SWPPP is to control soil erosion and the resulting sediment from leaving the project work area and prevent pollution of any water body caused by the runoff from the area of construction activities under this contract, under the terms of Permit No. LAR100000. The Contractor shall develop a site specific SWPPP that corresponds with the proposed construction activities by type and time of occurrence, and implement the SWPPP in a manner which will meet the requirements Permit No. LAR 100000. The Contractor shall also assure that all subcontractors have reviewed the plan and that they comply with its provisions.

c. Definitions

Construction Owner – The construction owner is the party that has operational control over plans and specification including the ability to make changes to those items. The Natural Resources Conservation Service is the construction owner.

Construction Operator – The construction operator is the party having day-to-day operational control over those activities at a project site that are necessary to ensure compliance with the SWPPP or other permit conditions. The Contractor is the construction operator.

Notice of Intent (NOI) – A document that is completed and submitted to the Louisiana Department of Environmental Quality (LDEQ) as application for coverage to discharge under the Permit No. LAR100000.

Notice of Termination (NOT) – A document that is completed and submitted to the Louisiana Department of Environmental Quality (LDEQ) to terminate permission to discharge under the Permit No. LAR100000. The NOT should be filed when the permittee is no longer the Construction Operator of the contract, or when termination of storm water discharge has been accomplished.

d. Notice of Intent (NOI)

The Government will submit an NOI to the LDEQ as application for the Government's coverage under the terms of the Permit No. LAR100000. If a specific LPDES permit applicable to this construction has been received from the LDEQ in response to the NOI, a copy of the permit, as well as a copy of the Government's NOI will be provided to the Contractor at the Pre-Construction Conference. The Contractor shall make site specific modifications necessary to the attached preliminary SWPPP, attach the Construction Owner/Operator certification statement provided, and certify by signing the statement as the Construction Operator. The Contractor shall submit a NOI to the LDEQ as application for his/her coverage under the terms of Permit No. LAR100000 prior to the initiation any construction activities. An Environmental Assessment has been made for this project in accordance with NEPA requirements. As such the Government will provide the Contractor with specific information regarding the Threatened and Endangered Species and Historical Properties sections of the NOI. Certified mail is recommended for the Contractor's proof of submittal. A copy of the Contractor's NOI submittal shall be provided to the Contracting Officer at the time of submittal. LDEQ will provide a LPDES permit to the Contractor in response to the NOI submitted. Then NOI's of both the Contractor and the Government, as well as the specific permits in response to the NOI, shall be posted at the job site by the Contractor.

e. Record Retention Requirements

Records of the NOT as well as any data used to complete it, the SWPPP, and any reports required by Permit No. LAR100000 shall be retained by the permittee for at least three years from the date that the site is finally stabilized. Certification of the SWPPP by the Contractor or any sub-contractor is required in accordance with Permit No. LAR100000.

f. Plan Accessibility

The Contractor shall post a notice near the main entrance of the construction site with the following information:

- The LDPEs permit number (LAR100000) and effective date of this permit
- The name and telephone number of a local contact person
- A brief description of the project
- The location of the SWPPP

A copy of the SWPPP required by the permit, including a copy of the permit language shall be retained at the construction site from the date of construction initiation to the date of stabilization. The permittee with day-to-day operational control over the SWPPP implementation shall have a copy of the plan available at a central location on-site for the use of operators and those identified as having responsibilities under the plan.

g. LDEQ Correspondence

Any written correspondence concerning the NOI, NOT, SWPPP, or discharges covered under Permit No. LAR100000, shall be identified by permit number, if one has been assigned, and a copy provided to the Contracting Officer. LDEQ mailing address is as follows:

Louisiana Department of Environmental Quality
Office of Environmental Services
P.O. Box 4313
Baton Rouge, LA 70821-4313
Attn: Permits Division

h. Maintenance and Surveillance Fees

The Contractor, without additional expense to the Government, shall be responsible for paying any state required annual maintenance and surveillance fee for work associated with coverage under Permit No. LAR100000.

i. Control Measures

Control measures that will be implemented shall be in compliance with Permit No. LAR100000, and identified in the SWPPP. The control measures shall include erosion control measures for both short and long term erosion control measures (BMP's) both vegetative and structural.

j. Maintenance and Inspection

The Contractor shall maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition. The Contractor shall inspect disturbed areas of the construction site, areas used for storage of materials, stabilization practices, structural practices, and other controls at least once every fourteen (14) calendar days, before anticipated storm events expected to cause a significant amount of runoff, and within 24 hours of the end of any storm that produces 0.5 inches or more of precipitation.

A report of each inspection shall be made and included with the daily QC report. Any items identified in the inspection requiring repairs or restoration shall be immediately corrected and actions taken reported in the daily QC report.

k. Notice of Termination (NOT)

Upon stabilization and elimination of all storm water discharges authorized by Permit No. LAR100000, a Notice of Termination (NOT) shall be certified and submitted by the Contractor to the Permits Division of LDEQ. Certified mail is recommended as proof of the NOT submittal. A copy of the Contractor's NOT submittal shall be provided to the Contracting Officer at the time of submittal, prior to final acceptance of the work.

- (3) All paints and hazardous materials shall be kept in the original containers and tightly sealed with the manufacturer's label attached. These must be properly stored when not in use. They shall also be stored in a neat orderly manner in their original containers. Disposal of surplus materials shall be in accordance with the manufacturer's or State and Local regulations and recommended methods. Containers shall be empty before disposal.
- (4) Petroleum products such as fuels and lubricants will be stored in tightly sealed containers that are clearly labeled. The storage and dispensing of all petroleum products will be in accordance with part 1926.152 of the OSHA Construction Industry Safety and Health Standards. All spills will be cleaned up on the same workday of the spill occurrence or whenever discovered.
- (5) Soils contaminated with petroleum products will be removed from the site and disposed of in accordance with State and Local regulations.
- (6) All onsite vehicles and equipment shall be monitored for leaks and receive regular preventive maintenance to reduce the chance for leakage. Leaks shall be repaired as soon as they are identified.
- (7) Sumps used to control chemical pollution shall be sealed with plastic sheets having a minimum thickness of 20 mils.
- (8) The contractor shall anchor all temporary materials used for pollution control in such a manner to prevent its being transported off the worksite by storm runoff water. Damage caused by clogging by such temporary materials being transported by storm water shall be the responsibility of the contractor.

- (9) No pumping of bilge into the Outer Continental Shelf (OCS) or state waters will be allowed.
- (10) Contractors and subcontractors shall prepare for and take all necessary precautions to prevent discharges of oil and releases of waste and hazardous materials. If a release occurs, notification and response shall be in accordance with 40 CFR Part 300. The contractor shall notify NRCS of any occurrences and remedial actions and provide copies of reports of the incident and resultant actions to NRCS.
- (11) The contractor shall observe a minimum “no dredge” setback of 300 meters (984.2 feet) from existing pipelines and all oil and gas related infrastructure on the Outer Continental Shelf. The contractor shall immediately notify NRCS and the representative pipeline company if any oil and gas infrastructure is disturbed.
- (12) Section 7, Measurement and Payment, no separate payment shall be made for this item. Payment for this item shall be included in the payment for Bid Item 3, Excavation, Marsh Creation Dredging.

DRAFT

**STORM WATER POLLUTION
PREVENTION PLAN**

**TE-48 Phase B
Raccoon Island Marsh Creation**

TERREBONNE PARISH, LOUISIANA

DRAFT

TABLE OF CONTENTS

1.0	SITE OWNER.....	3
2.0	SWPPP COORDINATOR AND DUTIES.....	3
3.0	SITE LOCATION.....	3
4.0	CONSTRUCTION TYPE	3
5.0	EXISTING CONDITIONS	4
6.0	CONSTRUCTION SEQUENCE AND QUANTITIES	4
7.0	ENDANGERED OR THREATENED SPECIES.....	4
8.0	POTENTIAL CONTAMINANTS.....	5
9.0	CONTROLS TO REDUCE POLLUTANTS	6
10.0	CERTIFICATION OF COMPLIANCE WITH REGULATIONS.....	7
11.0	MAINTENANCE AND INSPECTION PROCEDURES	7
12.0	CERTIFICATION.....	8
13.0	SUBCONTRACTOR CERTIFICATION	9

1.0 SITE OWNER

Owner's Name and Address: (Permanent)

Louisiana Department of Wildlife and Fisheries
2000 Quail Drive
Baton Rouge, LA 70898

Owner's Name and Address: (During Construction)

USDA Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

2.0 SWPPP COORDINATOR AND DUTIES

The construction site Storm Water Pollution Prevention Plan (SWPPP) coordinator for this Project is (**Contractor inserts appropriate persons name, title, contact no., etc.**). Mr./Ms. _____ duties include the following:

- Implement the SWPPP
- Oversee installation of control measures
- Conduct inspections of control measures
- Identify deficiencies in the SWPPP or control measures and take corrective action

3.0 SITE LOCATION

Project name and location:

TE-48 Raccoon Island Marsh Creation
Terrebonne Parish, LA

The approximate coordinates of the site are:

Latitude 29° 03' 07" N
Longitude 90° 55' 33" W

The location map and site plan within the construction drawings of the contract will act as the site map.

4.0 CONSTRUCTION TYPE

Install marsh creation:

- Build approximately 9,925 linear feet of containment dikes for the marsh creation area.
- Dredge borrow material and dispose of the material within the marsh creation area.

The marsh creation area, including the containment dikes, will encompass approximately 58 acres.

5.0 EXISTING CONDITIONS

Construction activities will entail placing earthfill in open water areas. For antecedent moisture condition II, the runoff curve number will be 94 before and after construction.

6.0 CONSTRUCTION SEQUENCE AND QUANTITIES

The anticipated sequence of marsh creation installation is as follows:

1. Excavate and place spoil as required for containment dikes.
2. Dredge and pump spoil from borrow area.

A summary of the quantities for each major item of work are as follows:

Mobilization and Demobilization	1	Job
Pollution Control	1	Job
Construction Surveys	1	Job
Contractor Quality Control	1	Job
Earthfill, Marsh Creation	640,000	CY
Earthfill, Containment	1	Job

7.0 ENDANGERED OR THREATENED SPECIES

Based on consultation with the U.S. Fish and Wildlife Service (USFWS) in 2003, there is one threatened (T) and one endangered (E) species that occur within the project boundaries. Other threatened and endangered species do occur within the adjacent gulf waters but are not likely to be found within the actual boundaries of the project. As noted previously, endangered brown pelicans nest in large numbers on Raccoon Island (4,500 nests in 2002), (Hess, 2003, personal communication). In addition to Raccoon Island, endangered brown pelicans are currently nesting on Queen Bess Island, Wine Island, and scattered locations within the Chandeleur chain. Nests are built in the late winter, spring, and summer, primarily in mangrove trees and other shrubby vegetation, but may also occur on the ground. Brown pelicans also utilize the shallow estuarine waters and open gulf for feeding, and the beach, sand flats and rock breakwaters as resting or loafing sites.

Threatened piping plovers migrate during the fall and spring through coastal Louisiana. These birds are primarily associated with the sand flats and beaches, and occur within the project area primarily during migration periods, but may be present in Louisiana for 8 to 10 months of the year. They arrive from their breeding grounds as early as late July and may remain until late March or April. Designated critical habitat of the piping plover are those habitat components that support foraging, roosting, and sheltering and the physical features necessary for maintaining the natural processes. These components include sparsely vegetated intertidal beaches and flats that occur between annual low tide and annual high tide and associated dunes and flats above annual high tide. Roosting plovers prefer un-vegetated or sparsely vegetated sand, mud, or algal flats above high tide. Major threats to this species in Louisiana are degradation and loss of habitat.

The endangered Kemp's ridley (*Lepidochelys kempii*), hawksbill (*Eretmochelys imbricate*) and leatherback (*Dermochelys coriacea*) sea turtles as well as the threatened loggerhead (*Caretta caretta*) and green (*Chelonia mydas*) sea turtles occur in the Gulf of Mexico. Of these five sea turtle species, the loggerhead and ridley sea turtles are relatively common in the nearshore waters of the Gulf of Mexico where they forage, and may occur within the actual project area. Juvenile and sub-adult Kemp's ridley turtles occupy shallow coastal waters where crabs are

abundant and substrates are sand or mud. Small turtles are generally found nearshore from May through October. Adults and juveniles move offshore to deeper, warmer water during the winter.

There are five endangered species of whales that occur in the Gulf of Mexico. They include the finback (*Balaenoptera physalus*), humpback (*Megaptera novaeangliae*), right (*Eubalaena glacialis*), sei (*Balaenoptera borealis*) and sperm (*Physeter catodon*) whales. Due to the extreme shallow waters within the project area, none of these species would likely occur.

8.0 POTENTIAL CONTAMINANTS

The following list of materials or substances are expected to be present during construction which could impact water or air quality if improperly used.

- Petroleum Based Products
- Earthfill (sediment)

The contractor will be responsible for spill prevention and cleanup. The contractor will submit an emergency response plan to the Contracting Officer prior to the start of work on this contract. The contractor's emergency response plan will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

The following are the Material Management Practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm runoff water:

- An effort will be made to store only enough products required to do the job.
- All materials stored on site will be stored in a neat, orderly manner in their appropriate containers and, if possible under a roof or other enclosure.
- Products will be kept in their original containers with the manufacturers' label.
- Manufacturers' recommendations for proper use and disposal will be followed.
- Containers of products will be empty before disposal.

The following additional Practices will be used to reduce the risks associated with hazardous materials:

- Hazardous products will be kept in original containers unless containers cannot be resealed.
- Original labels and materials safety data will be retained.
- Surplus products and containers will be properly disposed of in accordance with manufacturers' or State and local regulations and recommended methods.
- Containers will be empty before disposal.

Petroleum Products:

- All on site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage.
- Petroleum products will be stored in tightly sealed containers, which are clearly labeled.
- Any asphalt substances used onsite will be applied according to manufacturer's recommendations.
- All spills of petroleum products will be cleaned up immediately.

- All contaminated soils will be removed from the site and disposed of in accordance with State and local regulations.

Fertilizers:

- Fertilizers will be applied in the amount and at the rate recommended in the project specifications. These rates shall not exceed the manufacturers' recommendation.
- Storage will be in a covered shed.
- The contents of any partially used bags of fertilizer will be transferred to an acceptable sealable plastic container to avoid spills.

Spill Control Practices - The following additional practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted onsite.
- Site personnel will be made aware of the procedures and the location of the cleanup information and supplies.
- Materials and equipment necessary for spill cleanup will be located onsite.
- All spills of hazardous materials will be cleaned up immediately after discovery.
- Spills of toxic or hazardous materials will be reported to the appropriate State and local government agency.
- The contractor will be responsible for spill prevention and cleanup.

9.0 CONTROLS TO REDUCE POLLUTANTS

The contractor will be required to prepare a written plan for pollution control at the project site. The plan will outline construction sequences and construction activities so that the least area possible is disturbed by the various construction activities in the course of the construction of the project. It will contain management provisions for storm water pollution control.

It is the responsibility of the Contractor to develop a **Site Specific SWPPP** around the proposed construction operations. The following Erosion and Sediment Control plan is offered for consideration by the Contractor in the development of the plan for the installation of the structures. The contractor is reminded that **this is a draft plan only** and is not intended to dictate a construction sequence or any construction activities.

Temporary Erosion and Sediment Controls:

- Containment dikes

Waste Disposal:

- All chemical, hazardous and sanitary waste materials will be disposed of in an approved offsite disposal area. Chemical waste shall be temporarily stored in leak-proof containers until disposed of in an approved area.
- Accidental chemical spills will be properly cleaned up on the same day of occurrence. Daily inspection will be made to determine needed cleanup.
- Sanitary waste will be collected from portable units a minimum of two times per week to avoid overflowing.

10.0 CERTIFICATION OF COMPLIANCE WITH REGULATIONS

All local and state regulations will be adhered to concerning the burning of organic materials or disposal of organic, chemical, and sanitary waste. This project has been authorized by the Department of the Army in accordance with Section 404 of the Clean Water Act (CWA). The LDEQ has issued a Water Quality Certification permit. There are no other applicable State or Federal requirements for sediment and erosion site plans or storm water management site plans.

11.0 MAINTENANCE AND INSPECTION PROCEDURES

The contractor will be responsible for intermittent review and inspection of the operation and maintenance of all pollution control measures throughout the life of the contract. Visual inspections of all cleared and graded areas of the construction site will be performed daily. Also inspection of the conditions and the need for repair shall be made after each storm rainfall exceeding 0.5 inch. Daily inspections of the need for clean up of chemical spills and sanitary facilities are specified.

The inspections will verify that the procedures used to prevent storm water contamination from construction materials are effective. Any items requiring maintenance will be immediately addressed.

12.0 CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system design to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manages the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____

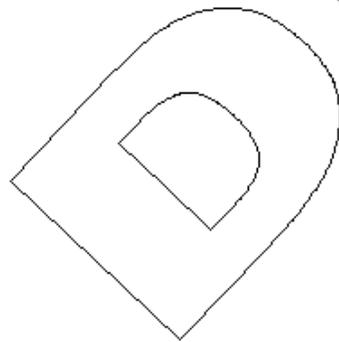
Name: _____

Title: _____

Firm: _____

Address: _____

Phone: _____



13.0 SUBCONTRACTOR CERTIFICATION

I certify under penalty of law that I understand the terms and conditions of the general Louisiana Pollution Discharge Elimination Systems (LPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature: _____

Date: _____

Name: _____

Title: _____

Firm: _____

Address: _____

Phone: _____

Signature: _____

Date: _____

Name: _____

Title: _____

Firm: _____

Address: _____

Phone: _____



**To: Prospective Applicants for a Stormwater
General Permit Associated with Construction
Activity Greater than 5 Acres**

Attached is a **Stormwater General Permit Associated with Construction Activity Greater than 5 Acres Notice of Intent (NOI) CSW-G**, for a Louisiana Pollutant Discharge Elimination System (LPDES) permit, authorized under EPA's delegated NPDES program under the Clean Water Act. To be considered complete, every item on the form must be addressed and the last page signed by an authorized company agent. If an item does not apply, please enter "NA" (for not applicable) to show that the question was considered.

Two copies (one original and one copy) of your **completed NOI** should be submitted to:

Mailing Address:

Department of Environmental Quality
Office of Environmental Services
Post Office Box 4313
Baton Rouge, LA 70821-4313
Attention: Water Permits Division

Physical Address (if NOI is hand delivered):

Department of Environmental Quality
Office of Environmental Services
602 N Fifth Street
Baton Rouge, LA 70802
Attention: Water Permits Division

Please be advised that completion of this NOI may not fulfill all state, federal, or local requirements for facilities of this size and type.

According to L. R. S. 48:385, any discharge to a state highway ditch, cross ditch, or right-of-way shall require approval from:

Louisiana DOTD
Office of Highways
Post Office Box 94245
Baton Rouge, LA 70804-9245
(225) 379-1927

AND

Louisiana DHH
Office of Public Health
Center for Environmental Services
Post Office Box 4489
Baton Rouge, LA 70821-4489
(225) 342-7395

A copy of the LPDES regulations may be obtained from the Department's website at <http://www.deq.louisiana.gov/portal/tabid/1674/Default.aspx#Title33> or by contacting the Office of Environmental Assessment, Regulations Development Section, Post Office Box 4314, Baton Rouge, Louisiana 70821-4314, phone (225) 219-3550.

After the review of the NOI, this Office will issue written notification to those applicants who are accepted for coverage under this general permit.

For questions regarding this NOI please contact the Water Permits Division at (225) 219-3181. For help regarding completion of this NOI please contact DEQ, Small Business/Small Community Assistance at 1-800-259-2890.

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Environmental Services, Permits Division
Post Office Box 4313
Baton Rouge, LA 70821-4313
PHONE#: (225) 219-3181

**LPDES NOTICE OF INTENT (NOI) TO DISCHARGE STORMWATER ASSOCIATED
WITH CONSTRUCTION ACTIVITY GREATER THAN 5 ACRES**
(Attach additional pages if needed.)

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by an LPDES permit issued for stormwater discharges associated with construction activity in Louisiana. In order to be automatically authorized under General Permit LAR100000 you must submit a complete and accurate NOI to LDEQ.

EVERY ITEM MUST BE COMPLETED.

Submission of this Notice of Intent also constitutes that implementation of the Storm Water Pollution Prevention Plan required under the general permit will begin at the time the permittee commences work on the construction project identified in Section II below.

SECTION I - FACILITY INFORMATION

A. Permit is to be issued to the following: (must be a party having operational control over construction plans and specifications and /or a party having day-to-day operational control over those activities at a project site which are necessary to ensure compliance with the storm water pollution prevention plan or other permit conditions LAC 33:IX.2501.B and LAC 33:IX.2503.A and B).

1. Legal Name of Applicant

(Company, Partnership, Corporation, etc.) _____

Project Name _____

(NOTE: Only one NOI needs to be submitted to cover all of the permittee's activities on the common plan of development or sale (e.g., you do not need to submit a separate NOI for each separate lot in a **residential subdivision** or for two separate buildings being constructed on the same property, provided your SWPPP covers each area for which you are the operator.)

Mailing Address _____

Zip Code: _____

If the applicant named above is not also the owner, state owner name, phone # and address.

Check status: Federal Parish Municipal
 State Public Private Other: _____

2. Location of project. Provide a specific address, street, road, highway, interstate, and/or River Mile/Bank location of the project for which the NOI is being submitted.

City _____

Zip Code _____

Parish _____

SECTION I - FACILITY INFORMATION

Front Gate Coordinates:

Latitude- ____ deg. ____ min. ____ sec. Longitude- ____ deg. ____ min. ____ sec.

Method of Coordinate Determination:

(ex:<http://terraserver-usa.com/Quad Map>, Previous Permit, website, GPS)

Is the facility located on Indian Lands? Yes No

B. Stormwater Pollution Prevention Plan Information.

1. Has the Stormwater Pollution Prevention Plan (SWPPP) been prepared? (NOTE: The SWPPP must be prepared prior to submittal of the NOI. Do **not** submit SWPPP with this NOI.)

Yes No

2. Indicate address of location of SWPPP if different from Project Location. (N/A if SWPPP is located at the construction site.)

Address _____

City _____ State _____ Zip _____

C. Location Information

1. Estimated Construction Start Date: (mo/day/yr) _____

2. Estimated Construction Completion Date: (mo/day/yr) _____

3. Estimate of area to be disturbed (to nearest acre) _____

4. Is the project part of a larger development or subdivision? Yes No

If yes, provide the name of the development or subdivision. _____

D. Discharge Information

1. Indicate how the storm water run-off reaches state waters (named water bodies). This will usually be either *directly*, by *open ditch* (if it is a highway ditch, indicate the highway), or by *pipe*. Please specifically name all of the minor water bodies that your discharge will travel through on the way to a major water body. This information can be obtained from U.S.G.S. Quadrangle Maps. Maps can also be obtained online at <http://map.deq.state.la.us/> or www.topozone.com. Private map companies can also supply you with these maps. If you cannot locate a map through these sources you can contact the Louisiana Department of Transportation and Development at the address on the first page of this form.

By _____ (effluent pipe, ditch, etc.);

thence into _____ (effluent pipe, ditch, etc.);

thence into _____ (Parish drainage ditch, canal, etc.);

thence into _____ (named bayou, creek, stream, etc.)

2. Based on Appendix C, the Outstanding Natural Resource Water (ONRW) list, does your stormwater run-off flow directly into a waterbody listed as an ONRW?

Yes No

NOTE: If the discharge will ultimately enter a scenic stream, contact the Louisiana Department of Wildlife and Fisheries (LDWF) Scenic Stream Division at 318-343-4044.

SECTION I - FACILITY INFORMATION

3. Based on Appendix A, Endangered Species Guidance, are there any listed endangered or threatened species in the project area?

Yes No

NOTE: Use the Endangered Species Guidance in Appendix A to determine if there are listed endangered or threatened species in the project area. Applicants should contact the U. S. Fish and Wildlife Service (address is in Appendix A) for guidance if they need assistance in making a determination.

4. Based on Appendix B, Historic Properties Guidance, are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or in proximity to the discharge?

Yes No

5. Was the State Historic Preservation Office (see Part I.A.3.f of the permit) involved in your determination of eligibility?

Yes No

E. Additional Discharge Information

1. Will the facility being constructed result in a discharge that will require a water discharge permit (including sanitary wastewater, such as a subdivision or apartment complex)?

Yes No

2. If yes, the party or developer responsible for construction plans and specifications must provide this information to: DEQ, OES, P.O. Box 4313, Baton Rouge, LA 70821-4313, Attn: Water Permits Division, and obtain a preliminary determination whether permit limits may be more stringent. **Failure to submit this information may result in denial of this and/or any future applications for discharge of wastewater to waters of the state. The "Request for Preliminary Determination of LPDES Permit Issuance Form" requests the information referenced above and can be accessed on our web page <http://www.deq.louisiana.gov> under DIVISIONS, Water Permits, LPDES Permits, LPDES forms**

SECTION II – LAC 33.I.1701 REQUIREMENTS

- A. Does the company or owner have federal or state environmental permits in other states that are identical to, or of a similar nature to, the permit for which you are applying? (This requirement applies to all individuals, partnerships, corporations, or other entities who own a controlling interest of 50% or more in your company, or who participate in the environmental management of the facility for an entity applying for the permit or an ownership interest in the permit.)

Permits in Louisiana. List Permit Numbers: _____

Permits in other states (list states): _____

No environmental permits.

- B. Do you owe any outstanding fees or final penalties to the Department? Yes No

If yes, please explain.

- C. Is your company a corporation or limited liability company? Yes No

If yes, is the corporation or LLC registered with the Secretary of State? Yes No

SECTION III - SIGNATURE

According to the Louisiana Water Quality Regulations, LAC 33:IX.2503, the following requirements shall apply to the signatory page in this application:

Chapter 25. Permit Application and Special LPDES Program Requirements

2503. Signatories to permit applications and reports

- A. All permit applications shall be signed as follows:
1. For a corporation - by a responsible corporate officer. For the purpose of this Section responsible corporate officer means:
 - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
 - (b) The manager of one or more manufacturing, production, or operating facilities provided: the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken together complete and accurate information for permit application requirements; and the authority to sign documents has been assigned or delegated to the manager in accordance with corporation procedures.
- NOTE:** LDEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in the Permit **Standard Permit Conditions, Part VI.G.1.a(1)** The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Permit **Standard Permit Conditions, Part VI.G.1a.(2)** rather than to specific individuals.
2. For a partnership or sole proprietorship - by a general partner or the proprietor, respectively; or
 3. For a municipality, state, federal or other public agency – by either a principal executive officer or ranking elected official. For the purposes of this section a principal executive officer of a federal agency includes:
 - (a) The chief executive officer of the agency, or
 - (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I also certify that a storm water pollution prevention plan, including both construction and post construction controls, has been prepared for the site in accordance with the permit and that such plan complies with approved State, Tribal and/or local sediment and erosion plans or permits and/or storm water management plans or permits. I am aware that signature and submittal of the NOI is deemed to constitute my determination of eligibility under one or more of the requirements of Permit Part I.A.3.e(1), related to the Endangered Species Act requirements. To the best of my knowledge, I further certify that such discharges and discharge related activities will not have an effect on properties listed or eligible for listing on the National Register of Historic Places under the National Historic Preservation Act, or are otherwise eligible for coverage under Part I.A.3.f of the permit. I am also aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NOTE: SIGNATURE MUST COMPLY WITH REQUIREMENTS STATED ABOVE IN SECTION III.

Signature _____

Printed Name _____

Title _____

Company _____

Date _____

Telephone _____

*****ANY NOI THAT DOES NOT CONTAIN ALL OF THE REQUESTED INFORMATION WILL BE CONSIDERED INCOMPLETE. NOI PROCESSING CANNOT PROCEED UNTIL ALL REQUIRED INFORMATION HAS BEEN SUBMITTED.**

APPENDIX A

ENDANGERED SPECIES GUIDANCE – LARGE CONSTRUCTION GP

I. INSTRUCTIONS

A list of endangered and threatened species that EPA has determined may be affected by the activities covered by the General Permit for Construction Activities Five Acres or More is available on the LDEQ Internet website at <http://www.deq.louisiana.gov/portal/>. The list is included in a document titled *“Implementation Strategy for the Louisiana Department of Environmental Quality and the U.S. Fish and Wildlife Service – Memorandum of Understanding” (MOU)*. Go through the following links to find the MOU: INFO ABOUT Water – Permits – LPDES Program Page – OTHER LPDES DOCUMENTS – 2007 Endangered Species Listing – Fish and Wildlife Service MOU. The species are listing by parish is found near the end of the MOU. You should note that the list is updated annually; therefore, the title “2008 Endangered Species Listing” will become the “2009 Endangered Species Listing” late in 2009, and will become the “2010 ... Listing” late in 2010, etc.

In order to be eligible for coverage under this permit, operators must:

Determine whether any species listed in this Guidance or critical habitat are in proximity to the facility,

Pursuant to Permit Part I.A.3.e follow the procedures found in this Guidance to protect listed endangered and threatened species and designated critical habitat and determine that the storm water discharges and BMPs to control storm water run off covered under this permit meet one or more of the eligibility requirements of Part I.A.3.e.(1) of this permit. Signature and submittal of the Notice of Intent form is deemed to constitute the Operator's compliance with eligibility requirements for permit coverage.

To determine permit eligibility and to avoid unauthorized impacts upon threatened or endangered species or on the critical habitat for those species, you must follow steps 1 through 4 (and 5 if applicable), below when completing the NOI form and when developing the pollution prevention plan.

NOTE: At any step in the determination, applicants may contact the U.S. Fish and Wildlife Service (FWS) for guidance. That request should be in writing and should include a description of the facility and a topographic map depicting the locations of the facility, the proposed construction activities, and the associated storm water discharges.

U.S. Fish and Wildlife Service
646 Cajundome Blvd.
Suite 400
Lafayette, LA 70506
(337) 291-3108

STEP 1: DETERMINE IF THE CONSTRUCTION SITE OR ASSOCIATED STORM WATER DISCHARGES ARE WITHIN THE VICINITY OF FEDERALLY LISTED THREATENED OR ENDANGERED SPECIES, OR THEIR DESIGNATED CRITICAL HABITAT.

If either the proposed site or the path of storm water from the site to the receiving stream is in a parish included on the Endangered Species List, the applicant should proceed to **Step 2** below. If, however, neither is located in a listed parish, then the applicant should proceed directly to **Step 5**.

If no species are listed in the site's parish or if a facility's parish is not found on the list, the applicant is eligible for permit coverage. Where a project is located in more than one parish, the lists for all parishes shall be reviewed.

(EPA notes that many measures imposed to protect listed species under steps 3 through 4 will also protect critical habitat. However, obligations to ensure that an action is not likely to result in the destruction or adverse modification of critical habitat are separate from those of ensuring that an action is not likely to jeopardize the existence of threatened and endangered species. Thus, meeting the eligibility requirements of this permit may require measures to protect critical habitat that are separate from those to protect listed species.).

STEP 2: DETERMINE IF ANY SPECIES MAY BE FOUND "IN PROXIMITY" TO THE CONSTRUCTION ACTIVITY'S STORM WATER DISCHARGES:

A species is in proximity to a construction activity's storm water discharge when the species is:

- Located in the path or immediate area through which or over which contaminated point source storm water flows from construction activities to the point of discharge into the receiving water; or
- Located in the immediate vicinity of, or nearby, the point of discharge into receiving waters; or
- Located in the area of a site where storm water BMPs are planned or are to be constructed.

The area in proximity to be searched/surveyed for listed species will vary with the size and structure of the construction activity, the nature and quantity of the storm water discharges, and the type of receiving waters. Given the number of construction activities potentially covered by the permit, no specific method to determine whether species are in proximity is required for permit coverage. Instead, operators should use the method or methods which best allow them to determine to the best of their knowledge whether species are in proximity to their particular construction activities. These methods may include:

- Conducting visual inspections: This method may be particularly suitable for construction sites that are smaller in size or located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no natural habitat, or for construction activities that discharge directly into municipal storm water collection systems.
- Contacting the nearest State or Tribal Wildlife Agency or U.S. Fish and Wildlife Service (FWS) offices. Many endangered and threatened species are found in well-defined areas or habitats. That information is frequently known to State, Tribal, or Federal wildlife agencies.
- Contacting local/regional conservation groups. These groups inventory species and their locations and maintain lists of sightings and habitats.
- Conducting a formal biological survey. Larger construction sites with extensive storm water discharges may choose to conduct biological surveys as the most effective way to assess whether species are located in proximity and whether there are likely adverse effects.

- Conducting an Environmental Assessment Under the National Environmental Policy Act (NEPA). Some construction activities may require environmental assessments under NEPA. Such assessments may indicate if listed species are in proximity. (Construction General Permit coverage does not trigger NEPA because it does not regulate any dischargers subject to New Source Performance Standards under Section 306 of the Clean Water Act. See CWA, 511(c). However, some construction activities might require review under NEPA because of Federal funding or other Federal nexus.)

If no species are in proximity, an operator is eligible for Construction General Permit coverage under Permit Part I.A.3.e.(1)(a).

If listed species are found in proximity to a facility, operators must indicate the location and nature of this presence in the storm water pollution prevention plan and follow step 3 below.

STEP 3: DETERMINE IF SPECIES OR CRITICAL HABITAT COULD BE ADVERSELY AFFECTED BY THE CONSTRUCTION ACTIVITY'S STORM WATER DISCHARGES OR BY BMPs TO CONTROL THOSE DISCHARGES.

Scope of Adverse Effects: Potential adverse effects from storm water include:

- Hydrological. Storm water may cause siltation, sedimentation or induce other changes in the receiving waters such as temperature, salinity or pH. These effects will vary with the amount of storm water discharged and the volume and condition of the receiving water. Where a storm water discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely.
- Habitat. Storm water may drain or inundate listed species habitat.
- Toxicity. In some cases, pollutants in storm water may have toxic effects on listed species.

The scope of effects to consider will vary with each site. Operators must also consider the likelihood of adverse effects on species from any BMPs to control storm water. Most adverse impacts from BMPs are likely to occur from the construction activities. However, it is possible that the operation of some BMPs (for example, larger storm water retention ponds) may affect endangered and threatened species.

If adverse effects are determined to be not likely, then the operator is eligible for permit coverage under Part I.A.3.e(1)(a).

If adverse effects are likely, operators should follow step 4 below.

STEP 4: DETERMINE IF MEASURES CAN BE IMPLEMENTED TO AVOID ANY ADVERSE EFFECTS:

If an operator determines that adverse effects cannot be ruled out or are likely, it can receive coverage if appropriate measures are undertaken to avoid or eliminate any actual or potential adverse effects prior to applying for permit coverage. These measures may involve relatively simple changes to construction activities such as re-routing a storm water discharge to bypass an area where species are located, relocating BMPs, or limiting the size of construction activity that will be subject to storm water discharge controls.

At this stage, operators must contact the FWS (or the National Marine Fisheries Service if referred to that Service by FWS) to see what appropriate measures might be suitable to avoid or eliminate adverse impacts to listed species and/or critical habitat. (See 50 CFR 402.13(b)). This can entail the initiation of informal consultation with the FWS (and/or NMFS, if appropriate) which is described in more detail below at step 5.

If operators adopt measures to avoid or eliminate adverse effects, they must continue to abide by them during the course of permit coverage. These measures must be described in the storm water pollution prevention plan and may be enforceable as permit conditions.

If appropriate measures to avoid the likelihood of adverse effects are not available to the operator, the operator should follow step 5 below.

STEP 5: DETERMINE IF THE ELIGIBILITY REQUIREMENTS OF PART I.A.3.E.(1)(b)-(d) CAN BE MET.

Where adverse effects are likely, the operator must contact FWS. Operators may still be eligible for permit coverage if any likelihood of adverse effects is addressed through meeting the criteria of Part I.A.3.e.(1)(b)-(d) of the permit if:

- I.A.3.e.(1)(b). The operator's activity has received previous authorization through an earlier Section 7 consultation or issuance of a Endangered Species Act (ESA) Section 10 permit (incidental taking permit) and that authorization addressed storm water discharges and/or BMPs to control storm water runoff (e.g., developer included impact of entire project in consultation over a wetlands dredge and fill permit under Section 7 of the ESA).

OR

- I.A.3.e.(1)(c). The operator's activity was previously considered as part of a larger, more comprehensive assessment of impacts on endangered and threatened species and /or critical habitat under Section 7 or Section 10 of the Endangered Species Act which accounts for storm water discharges and BMPs to control storm water runoff (e.g., where an area-wide habitat conservation plan and Section 10 permit is issued which addresses impacts from construction activities including those from storm water or a NEPA review is conducted which incorporates ESA Section 7 procedures).

OR

- I.A.3.e.(1)(d). The operator's activity was considered as part of a larger, more comprehensive site-specific assessment of impacts on endangered and threatened species by the owner or other operator of the site when it developed a SWPPP and that permittee met the eligibility requirements stated in items I.A.3.e.(1)(a), (b), (c), or (d) of the permit (e.g., owner was able to determine there would be no adverse impacts for the project as a whole under item (a), so contractor meets the eligibility requirements stated in item (d)). Utility companies applying for area-wide permit coverage meet the eligibility requirements stated in item (d) since authorization to discharge is contingent on a principal operator of a construction project having been granted coverage under this, or an alternative LPDES permit for the areas of the site where utilities installation activities will occur.

The determination of eligibility under the conditions of permit Parts I.A.3.e.(1) (b)-(d) shall be documented in the facility's SWPPP and copies of all applicable documents, such as FWS approval letters, included in the SWPPP. The operator must comply with any terms and conditions imposed under the eligibility requirements of permit Parts I.A.3.e.(1)(a), (b), (c), (d) to ensure that storm water discharges or BMPs to control storm water runoff are protective of listed endangered and threatened species and/or critical habitat. Such terms and conditions must be incorporated in the operator's storm water pollution prevention plan.

If the eligibility requirements of Part I.A.3.e.(1)(a)-(d) cannot be met then the operator may not receive coverage under this permit. Operators should then consider applying to LDEQ for an individual permit.

This permit does not authorize any taking (as defined under Section 9 of the Endangered Species Act) of endangered or threatened species unless such takes are authorized under Sections 7 or 10 the Endangered Species Act. Operators who believe their construction activities may result in takes of listed endangered and threatened species should be sure to get the necessary coverage for such takes through an individual consultation or Section 10 permit.

This permit does not authorize any storm water discharges or BMPs to control storm water runoff that are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the Endangered Species Act or result in the adverse modification or destruction of designated critical habitat.

II. ENDANGERED SPECIES PARISH LIST

At the time this general permit was finalized, the list could be located on the LDEQ website at:

<http://www.deq.louisiana.gov/portal/LinkClick.aspx?fileticket=NedPkSZRWhs%3d&tabid=243>

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Please note that LDEQ internet addresses are subject to change as the LDEQ website is updated. If you are unable to locate the Endangered Species Parish List using this Internet address, you should try to locate it at www.deq.louisiana.gov/portal/ (go through the following links to find the MOU DOCUMENTS – 2007 Endangered Species Listing – Fish and Wildlife Service MOU.) If that doesn't work, you should do a Google search for "Department of Interior LDEQ Endangered Species List." If you are still unable to locate the list by utilizing these suggestions, please contact the Water Permits Division at (225) 219-3181 for assistance.

APPENDIX B HISTORIC PROPERTIES GUIDANCE

Applicants must determine whether their facility's storm water discharge has the potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places.

For existing dischargers who do not need to construct BMPs for permit coverage, a simple visual inspection may be sufficient to determine whether historic properties are affected. However, for facilities which are new stormwater dischargers, applicants should conduct further inquiry to determine whether historic properties may be affected by the stormwater discharge or BMPs to control the discharge. In such instances, applicants should first determine whether there are any historic properties or places listed on the National Register or if any are eligible for listing on the register (e.g., they are "eligible for listing").

Due to the large number of entities seeking coverage under this permit and the limited number of personnel available to the State Historic Preservation Officer to respond to inquiries concerning the location of historic properties, it is suggested that applicants first access the "National Register of Historic Places" information listed on the Louisiana Office of Cultural Development's web page at the address listed below. The address for the Louisiana State Historic Preservation Officer is also listed below. Applicants may also contact city, parish or other local historical societies for assistance, especially when determining if a place or property is eligible for listing on the register.

The following scenarios describe how applicants can meet the permit eligibility criteria for protection of historic properties under this permit:

- (1) If historic properties are **not identified** in the path of a facility's storm water discharge or where construction activities are planned to install BMPs to control such discharges (e.g., diversion channels or retention ponds), or

if historic properties **are identified** but it is determined that they will **not be affected** by the discharge or construction of BMPs to control the discharge

then the applicant has met the permit eligibility criteria under Part I.A.3.f.

- (2) If historic properties **are identified** in the path of a facility's storm water discharge or where construction activities are planned to install BMPs to control such discharges, and it is determined that **there is the potential** to adversely affect the property, the applicant can still meet the permit eligibility criteria if he/she obtains and complies with a written agreement with the State Historic Preservation Officer which outlines measures the applicant will follow to mitigate or prevent those adverse effects. The contents of such a written agreement must be included in the facility's storm water pollution prevention plan.

In situations where an agreement cannot be reached between an applicant and the State Historic Preservation Officer, applicants should contact the Advisory Council on Historic Preservation listed below in this addendum for assistance.

The term "adverse effects" includes but is not limited to damage, deterioration, alteration or destruction of the historic property or place. LDEQ encourages applicants to contact the Louisiana State Historic Preservation Officer as soon as possible in the event of a potential adverse effect to a historic property.

Applicants are reminded that they must comply with all applicable State and local laws concerning the protection of historic properties and places.

I. Internet Information on the National Register of Historic Places

An electronic listing of the "National Register of Historic Places," as maintained by the Louisiana Office of Cultural Development, Division of Historic Preservation, can be accessed on the Internet at <http://www.crt.state.la.us/hp/historicplacesprogram.asp>. Remember to use small case letters when accessing Internet addresses.

II. Louisiana State Historic Preservation Officer (SHPO)

Louisiana, SHPO, Office of Cultural Development, P.O. Box 44247, Baton Rouge, LA 70804-4247. For questions contact the Section 106 Review Coordinator, Telephone: (225) 342-8170.

III. Advisory Council on Historic Preservation

Advisory Council on Historic Preservation, 12136 W. Bayaud Ave., Suite 330, Lakewood, CO 80228, Telephone (303) 969-5110, Fax: (303) 969-5115, Email: achp@achp.gov

APPENDIX C
Outstanding Natural Resource Waters

ATCHAFALAYA RIVER BASIN:

None

BARATARIA BASIN:

Bayou Des Allemands – from Lac Des Allemands to old US 90

Bayou Des Allemands – fro Hwy. 90 to Lake Salvador

CALCASIEU RIVER BASIN:

Calcasieu River – from LA Highway 8 to the Rapides/Allen Parish line

Calcasieu River – from Rapides-Allen Parish line to Marsh Bayou

Calcasieu River – from Marsh Bayou to saltwater barrier

Whiskey Chitto Creek – from the southern boundary of Fort Polk Military Reservation to the Calcasieu River

Six Mile Creek – East and West Forks from the southern boundary of Fort Polk Military Reservation to Whiskey Chitto Creek

Ten Mile Creek – from headwaters to Whiskey Chitto Creek

LAKE PONTCHARTRAIN BASIN:

Comite River – from Wilson-Clinton Highway to entrance of White Bayou

Amite River – from Mississippi State Line to LA Highway 37

Blind River – from the Amite River Diversion Canal to the mouth at Lake Maurepas

Blind River – from headwaters to Amite River Diversion Canal

Tickfaw River – from the Mississippi State Line to LA Highway 42

Tangipahoa River – from the Mississippi State Line to I-12

Chappepeela Creek – from Louisiana Highway 1062 to Tangipahoa River

Tchefuncte River – from headwaters to Bogue Falaya River, includes tributaries

Lower Tchefuncte River – from Bogue Falaya River to LA Highway 22

Bogue Falaya River – from headwaters to Tchefuncte River

Bayou Lacombe – from the headwaters to U.S. Highway 190

Bayou Lacombe – from U.S. Highway 190 to Lake Pontchartrain

Bayou Cane – from the headwaters to U.S. Highway 190

Bayou Cane – from U.S. Highway 190 to Lake Pontchartrain

Bayou Labranche – from headwaters to Lake Pontchartrain

Bayou Trepagnier – from Norco to Bayou Labranche

Bayou St. John

Bayou Chaperon

Bashman Bayou – from headwaters to Bayou Dupre

Bayou Dupre – from Lake Borgne Canal to Terre Beau Bayou

Lake Borgne Canal – from the Mississippi River siphon at Violet to Bayou Dupre; also called Violet Canal

Pirogue Bayou – from Bayou Dupre to New Canal

Terre Beau Bayou – from Bayou Dupre to New Canal

Bayou Bienvenue – from Bayou Villere to Lake Borgne

MERMENTAU RIVER BASIN:

None

VERMILION-TECHE RIVER BASIN:

Spring Creek – from headwaters to Cocodrie Lake

Bayou Cocodrie – from U.S. Highway 167 to the Bayou Boeuf-Cocodrie Diversion Canal

MISSISSIPPI RIVER BASIN:

None

OUACHITA RIVER BASIN:

Bayou Bartholomew – from Arkansas State Line to Ouachita River

Bayou de L'Outre – from the Arkansas State Line to the Ouachita River

Bayou D'Arbonne – from Bayou D'Arbonne Lake to the Ouachita River

Corney Bayou – from the Arkansas State Line to Corney Lake

Corney Bayou – from Corney Lake to Bayou D'Arbonne Lake

Middle Fork of Bayou D'Arbonne – from headwaters to Bayou D'Arbonne Lake

Little River – from Bear Creek to Catahoula Lake

Fish Creek – from headwaters to Little River

Trout Creek – from headwaters to Little River

Big Creek – from the headwaters to Little River

PEARL RIVER BASIN:

Holmes Bayou – from Pearl River to West Pearl River

West Pearl River – from headwaters to Holmes Bayou

West Pearl River – from Holmes Bayou to The Rigolets; includes the east and west mouths)

Morgan River – from Porters River to West Pearl River

Wilson Slough – from Bogue Chitto to West Pearl River

Bradley Slough - from Bogue Chitto to West Pearl River

Pushepatapa Creek – from headwaters and tributaries at Mississippi State Line to Pearl River flood plain

Bogue Chitto River – from Mississippi State Line to Pearl River Navigation Canal

RED RIVER BASIN:

Bayou Dorcheat – from Arkansas State Line to Lake Bistineau

Black Lake Bayou – from one mile north of Leatherman Creek to Black Lake

Saline Bayou – from headwaters near Arcadia to Saline Lake

Kisatchie Bayou – from its Kisatchie National Forest to Old River

Saline Bayou – from Larto Lake to Saline Lake

Bayou Cocodrie – from Little Cross Bayou to Wild Cow Bayou

SABINE RIVER BASIN:

Pearl Creek – from headwaters to Sabine River

TERREBONNE BASIN:

Bayou Penchant – from Bayou Chene to Lake Penchant



STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Office of Environmental Services, Permits Division
Post Office Box 4313
Baton Rouge, La 70821-4313
Phone#: (225) 219-3181

LPDES NOTICE OF TERMINATION (NOT) OF COVERAGE UNDER
LPDES GENERAL PERMIT FOR STORMWATER DISCHARGES
ASSOCIATED WITH CONSTRUCTION ACTIVITY GREATER THAN 5 ACRES

SECTION I - PERMIT INFORMATION

Facility's Storm Water General Permit Authorization Number LAR10

Check here if you are no longer the Operator of the Facility

Check here if the Storm water discharge associated with the
construction activity is Being Terminated

SECTION II - FACILITY OPERATOR INFORMATION

Name
Address
City
State Zip Phone

SECTION III - FACILITY/SITE LOCATION INFORMATION

Name of Project
Location of Project
City State Zip
Latitude- deg. min. sec. Longitude- deg. min. sec.
Parish

SECTION IV - CERTIFICATION

I certify under penalty of law that all storm water discharges associated with construction activity from
the identified facility that are authorized by a LPDES general permit have been eliminated or that I am
no longer the operator of the facility or construction site. I understand that by submitting this Notice
of Termination, I am no longer authorized to discharge storm water associated with industrial activity
under this general permit, and that discharging pollutants in storm water associated with industrial
activity to waters of the State is unlawful under the Clean Water Act where the discharge is not
authorized by a LPDES permit. I also understand that the submittal of this Notice of Termination does
not release an Operator from liability for any violation of this permit or the Clean Water Act.

Print Name Date

Signature

Construction Specification 7—Construction Surveys

1. Scope

The work consists of performing all surveys, measurements, and computations required by this specification.

2. Equipment and material

Equipment for construction surveys shall be of a quality and condition to provide the required accuracy. The equipment shall be maintained in good working order and in proper adjustment at all times. Records of repairs, calibration tests, accuracy checks, and adjustments shall be maintained and be available for inspection by the engineer. Equipment shall be checked, tested, and adjusted as necessary in conformance with manufacturer's recommendations.

Material is field notebooks, stakes, templates, platforms, equipment, spikes, steel pins, tools, and all other items necessary to perform the work specified.

3. Quality of work

All work shall follow recognized professional practice and the standards of the industry unless otherwise specified in section 9 of this specification. The work shall be performed to the accuracy and detail appropriate for the type of job. Notes, sketches, and other data shall be complete, recorded neatly, legible, reproducible and organized to facilitate ease in review and allow reproduction of copies for job documentation. Survey equipment that requires little or no manual recording of field data shall have survey information documented as outlined in section 9 of this specification.

All computations shall be mathematically correct and shall include information to identify the bid item, date, and who performed, checked, and approved the computations. Computations shall be legible, complete, and clearly document the source of all information used including assumptions and measurements collected.

If a computer program is used to perform the computations, the contractor shall provide the engineer with the software identification, vendor's name, version number, and other pertinent data before beginning survey activities. Computer generated computations shall show all input data including values assigned and assumptions made.

The elevations of permanent and temporary bench marks shall be determined and recorded to the nearest 0.01 foot. Differential leveling and transit traverses shall be of such precision that the error of vertical closure in feet shall not exceed plus or minus 0.1 times the square root of the traverse distance in miles. Linear measurements shall be accurate to within 1 foot in 5,000 feet, unless otherwise specified in section 9 of this specification. The angular error of closure for transit traverses shall not exceed 1 minute times the square root of the number of angles turned.

The minimum requirements for placing slope stakes shall be at 100-foot stations for tangents, as little as 25 feet for sharp curves, breaks in the original ground surface and at any other intermediate stations necessary to ensure accurate location for construction layout and measurement. Slope stakes and cross sections shall be perpendicular to the centerline. Significant breaks in grade shall be determined for cross sections. Distances shall be measured horizontally and recorded to the nearest 0.1 foot. Side shots for interim construction stakes may be taken with a hand level.

Unless otherwise specified in section 9 of this specification, measurements for stationing and establishing the location of structures shall be made to the nearest 0.1 foot.

Elevations for concrete work, pipes, and mechanical equipment shall be determined and recorded to the nearest 0.01 foot. Elevations for earth work shall be determined and recorded to the nearest 0.1 foot.

4. Primary control

The baselines and bench marks for primary control, necessary to establish lines and grades needed for construction, are shown on the drawings and have been located on the job site.

These baselines and bench marks shall be used as the origin of all surveys, layouts, and measurements to establish construction lines and grades. The contractor shall take all necessary precautions to prevent the loss or damage of

primary control points. Any stakes or control points lost or damaged by construction activity will be reestablished by the contractor or at contractor expense.

5. Construction surveys

Before work starts that requires contractor performed surveys, the contractor shall submit in writing for the engineer's review: the name, qualifications, and experience of the individuals to be assigned to the survey tasks.

Method 1—Contractor performed surveys shall include:

- checking and any supplemental or interim staking
- performing quantity surveys, measurements, and computations for progress payment
- other surveys as described in section 9 of this specification

Method 2—Contractor performed surveys shall consist of all work necessary for:

- establishing line and grade for all work
- setting slope stakes for all work
- checking and any supplemental or interim staking
- establishing final grade stakes
- performing quantity surveys, measurements, and computations for progress payment
- other surveys as described in section 9 of this specification

Method 3—Contractor performed surveys shall consist of all work necessary for:

- establishing line and grade for all work
- setting slope stakes for all work
- checking and any supplemental or interim staking
- establishing final grade stakes
- performing quantity surveys, measurements, and computations for progress payments
- performing original (initial) and final surveys for determinations of final quantities
- other surveys as described in section 9 of this specification.

6. Staking

The construction staking required for the item shall be completed before work on any item starts. Construction staking shall be completed as follows or as otherwise specified in section 9 of this specification:

Clearing and grubbing—The boundary of the area(s) to be cleared and grubbed shall be staked or flagged at a maximum interval of 200 feet, closer if needed, to clearly mark the limits of work. When contractor staking is the basis for determining the area for final payment, all boundary stakes will be reviewed by the engineer before start of this work item.

Excavation and fill—Slope stakes shall be placed at the intersection of the specified slopes and ground line. Slope stakes and the reference stakes for slopes shall be marked with the stationing, required cut or fill, slope ratio, and horizontal distance from the centerline or other control line. The minimum requirements for placing slope stakes is outlined in section 3, Quality of work.

Structures—Centerline and offset reference line stakes for location, alignment, and elevation shall be placed for all structures.

7. Records

All survey data shall be recorded in fully identified standard hard-bound engineering survey field notebooks with consecutively numbered pages. All field notes and printed data shall include the purpose or description of the work, the date the work was performed, weather data, sketches, and the personnel who performed and checked the work. Electronically generated survey data and computations shall be bound, page numbered, and cross referenced in a bound field notebook containing the index for all survey activities. All work shall follow recognized professional practice.

The construction survey records shall be available at all times during the progress of the work for examination and use by the engineer and when requested, copies shall be made available. The original field notebooks and other records shall be provided to and become the property of the owner before final payment and acceptance of all work.

Complete documentation of computations and supporting data for progress payments shall be submitted to the engineer with each invoice for payment as specified in section 9 of the specification. When the contractor is required to conduct initial and final surveys as outlined in section 5, Construction Surveys, notes shall be provided as soon as possible after completion to the engineer for the purpose of determining final payment quantities.

8. Payment

Method 1—For items of work for which lump sum prices are established in the contract, payment is made as the work proceeds, after presentation of correct and accurate invoices by the contractor showing related costs and evidence of the charges of suppliers, subcontractors, and others for supplies furnished and work performed. Invoices for the total amount of the contract price will not be accepted until all surveys are complete and required documentation has been determined complete. If the total of such payments is less than the lump sum contract price for this item, the unpaid balance will be included in the final contract payment. Payment of the lump sum contract price will constitute full compensation for completion of all work under the bid item.

Method 2—For items of work for which lump sum prices are established in the contract, payment is made as the work proceeds with progress payment amounts determined as a percentage of the total work planned as projected from the contractor's approved construction schedule. Payment of the lump sum contract price will constitute full compensation for completion of all work under this bid item.

All Methods—Payment will not be provided under this item for the purchase price of materials or equipment having a residual value.

Compensation for any item of work described in the contract, but not listed in the bid schedule will be included in the payment for the item of work to which it is made subsidiary. Such items and the item to which they are made subsidiary are identified in section 9 of this specification.

9. Items of work and construction details

9. Items of Work and Construction Details

Items of work to be performed in conformance with this specification and the construction details therefore are:

a. Bid Item 2, Construction Surveys

(1) This item shall consist of all work necessary by the Contractor to check NRCS provided surveys, perform supplemental or interim staking for the Contractor's own use, perform progress payment surveys, and computations for progress payments, and any other surveys the Contractor feels are required which are not specifically indicated to be provided by the NRCS.

(2) Under this specification the NRCS will provide basic staking utilizing NAD 83, NAVD 88, and Geoid99 datum that includes the following:

- Centerline alignment at all PI's and at 200 foot intervals for the containment dikes and berm limits
- Limits of the borrow area staked at all PI's
- Access route and pipeline corridor to marsh creation area at all PI's and at 200' intervals
- The location for each staff gauge in the marsh creation area
- Establish the elevation for each reflective depth gauge on each staff gauge post

a. The above staking will be provided on a one time basis by NRCS. If such posts or marks are destroyed, the Contractor will bear sole responsibility for replacement.

b. NRCS will also perform periodic construction checks.

c. Additionally NRCS will perform the before dredge and after dredge surveys of the borrow areas for purposes of computing final quantities for payment as well as performing interim surveys. NRCS surveys for interim and final quantity computations will be as defined below.

i. Equipment

1. Vessel

The vessel performing hydrographic surveys shall be capable of providing a stable platform for the effective operation of the sounding equipment.

2. Fathometer

The fathometer shall be an echo depth sounding instrument capable of recording depths from 3 to 100 feet below the transducer with an accuracy of one half of one percent (.5%) for the range. The surveys will be performed with a dual frequency transducer. The acoustic frequency shall be between 8 kHz and 28 kHz inclusive for the low frequency range and 200 kHz and 210 kHz inclusive for the high frequency range. The fathometer shall be capable of providing an electronic recording and or analog recording of the depth measurements taken during the survey. A copy of all electronic recordings shall be retained in an unedited state.

Calibration of the fathometer shall be made at a minimum of two times each day hydrographic surveys are performed. The calibration shall consist of both a sound velocity check and a bar check. Both checks shall be performed at depths of five-foot intervals to extend to the maximum anticipated depth to be surveyed that day. The checks shall be performed prior to commencement and upon completion of each day's surveys.

A daily tide file shall be generated from a staff gauge tied to the project control benchmarks while performing the hydrographic surveys and shall be used to make corrections to the hydrographic survey data. All survey data used in quantity calculations shall be corrected for tides, differential movement of survey vessel, and any other factors affecting the final position of the water bottom points. All correction files used shall be documented and provided as part of the electronic survey data.

3. Positioning Equipment

Equipment for positioning will be by differential GPS utilizing the established control indicated on the plans. Horizontal and vertical position of the transducer will be determined using differential GPS equipment and integrated with the fathometer data utilizing the latest version of "Hypack" software to develop the horizontal and vertical position of water bottom points.

ii. Before Dredge Surveys

The entire borrow area shall be surveyed on the survey lines shown in the plans by NRCS **within 30 days before** the start of the contractor's dredging operation utilizing the equipment described above.

iii. Interim Dredge Surveys

NRCS shall perform interim surveys approximately every 200,000 cubic yards of material dredged. The estimated dredge volumes in the biweekly BOEMRE reports as well as communication between NRCS and the contractor will be used for scheduling the interim surveys. These surveys shall be performed utilizing the equipment described above. The location of the survey lines will be the same as the before dredge surveys, as shown in the plans.

A pre-dredge shallow hazards survey utilizing the equipment described above may be required after a storm event.

iv. After Dredge Surveys (Final Quantity Surveys)

Upon notification from the contractor that dredging has been completed as prescribed in Specification 21 and as concurred in by the COR, NRCS shall perform the final quantity survey **within 72 hours of notification**. This survey shall be performed utilizing the equipment described above. The location of the survey lines will be the same as the before dredge surveys, as shown in the plans.

(3) Contractor construction surveys under this specification shall be in accordance with Method 2 of Section 5, Construction Surveys, of this specification with the following additional requirements:

- a. Water elevations shall not be used as an elevation check or as the primary control for any surveys related to the containment dikes or staff gauges. Geoid99 shall be used for all surveys.

- b. Construction check and progress surveys of the containment dikes:
- i. The containment dikes shall be surveyed (centerline profile and cross sections) prior to acceptance. Surveys shall be plotted in Microstation and provided to the CO a minimum of 72 hours prior to requesting payment of a reach.
 - ii. Cross-sections of the containment dikes shall be taken at intervals not to exceed 200 feet with shots taken for the centerline profile taken at minimum of 25-foot intervals.
- c. Hydrographic surveys of the borrow area for purposes of computing quantities for progress payments shall be performed by the contractor.
- i. The contractor shall submit to the Contracting Officer at the pre-construction meeting for approval the equipment and computer software to be used, methods of surveying (with previous examples) and methods of computing quantities for purpose of determining quantities for progress payments. The approved equipment, software, and methods shall not be changed during the contract unless otherwise approved by the CO. The contractor is **strongly** encouraged to utilize like equipment and methods as described above for NRCS performed surveys.
 - ii. Any fathometer utilized and its calibration shall comply with the requirement of paragraph 9.a.(2)b.i.2. above.
 - iii. Before Dredge Survey

The contractor shall perform a before dredge survey utilizing their approved equipment and methods **within 30 days** before the start of dredging operations. The surveys shall be taken on the lines shown in the plans. The contractor shall provide the before dredge survey data to NRCS **two weeks prior** to the start of dredging operations. Volume calculations shall be performed utilizing the Philadelphia Method within Hypack. The contractor shall provide drawings in *.dgn or *.dxf format compatible with MicroStation. The drawings shall include a plan view with contours and all survey lines and a set of sheets showing all profile and cross sections. All raw survey data shall be provided in *.asc or *.dat files.

- iv. After Dredge Surveys (Progress Surveys)

The contractor shall perform after dredge surveys utilizing the same approved equipment and methods utilized for the before dredge surveys. The after dredge surveys shall be taken on the same lines as the before dredge surveys (the lines shown in the plans). The surveys shall encompass the entire area for which progress payment will be requested. Volume calculations shall be performed utilizing the Philadelphia Method within Hypack. Drawings shall be in *.dgn or *.dxf format compatible with MicroStation and shall include a plan view with contours and all survey lines and a set of sheets showing all profile and cross sections. All raw survey data shall be provided in *.asc or *.dat files.

- v. Data

Soundings shall be taken to the nearest 0.1-foot vertical and X and Y coordinates of the location should be to the nearest foot.

All data gathered for progress quantity surveys by the contractor shall be recorded as prescribed in this specification and submitted to the CO with any request for payment. The data shall include all quantity computations and shall be plotted. The contractor shall provide drawings in *.dgn or *.dxf format compatible with MicroStation. The drawings shall include a plan view with contours and all survey lines and a set of sheets showing all profile and cross sections. All raw survey data shall be provided in *.asc or *.dat files. All electronic data shall be properly recorded and processed.

From the processed data, the Contractor shall provide certain survey information taken for the purpose of computing the total amount of work to be paid for. The Contractor shall furnish the required data on a CD or by electronic transmission containing ASCII character set. The information received should be free of errors and in the following format: (a) The X-coordinate in feet of a recognized Louisiana Lambert grid system, (b) the Y-coordinate in feet of same recognized Louisiana Lambert grid system, (c) the sounding, and (d) remarks such as the survey line (i.e.: L100). The time and date the survey was taken and the gage reading applicable to the section shall also be included. The electronically recorded data files, along with a hard copy of any field notes, shall be presented to the COR onsite no later than two days after the survey is taken. Under no circumstances shall the information be edited for the purpose of eliminating incorrect soundings. The Contractor shall provide a separate file listing all incorrect soundings to be eliminated.

- (4) The Contractor shall be responsible for executing the work to the limits, lines, locations, and grades established by the NRCS. The Contractor shall also be responsible for maintaining and preserving all Permanent Benchmarks, Temporary Benchmarks and any other control marks established by the NRCS.
- (5) The Contractor shall notify the CO at least 48 hours in advance of any pending surveys to be performed by the Contractor.
- (6) Persons considered qualified by the NRCS to perform Contractor surveys shall be certified or licensed land surveyors, registered engineers, or construction personnel who are deemed qualified based on previous performance or who can demonstrate through performance that they are capable and qualified to perform any surveys required by the Contractor. The Contractor shall submit in writing to the Contracting Officer for approval resumes, experience or qualification statements and references for the individuals to be assigned Contractor survey responsibilities.
- (7) All survey notes shall conform to the requirements of Section 7, Records, of this specification with the following additions:
 - a. The contractor shall provide to the CO an example copy of the notes for each type survey the contractor plans on performing. The contractor shall not perform any surveys until the CO has approved the example field notes for each type of survey. When the example field notes have been approved by the CO the contractor shall use such format for the duration of the survey work to be performed.
 - b. Notes recorded in bound hard copy field books shall be recorded at the time of survey performance. Any errors shall be line through, not erased. Field notes generated in the office from notes taken from field notes recorded on loose leaf paper, etc., shall be rejected.
- (8) In Section 8, Payment, Method 2 shall apply. Such payment shall be considered as full compensation for this item.

Construction Specification 8—Mobilization and Demobilization

1. Scope

The work consists of the mobilization and demobilization of the contractor's forces and equipment necessary for performing the work required under the contract. It does not include mobilization and demobilization for specific items of work for which payment is provided elsewhere in the contract. Mobilization will not be considered as work in fulfilling the contract requirements for commencement of work.

2. Equipment and material

Mobilization shall include all activities and associated costs for transportation of contractor's personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the contractor's operations at the site; premiums paid for performance and payment bonds including coinsurance and reinsurance agreements as applicable; and other items specified in section 4 of this specification.

Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not required or included in the contract from the site; including the disassembly, removal, and site cleanup of offices, buildings, and other facilities assembled on the site specifically for this contract.

This work includes mobilization and demobilization required by the contract at the time of award. If additional mobilization and demobilization activities and costs are required during the performance of the contract as a result of changed, deleted, or added items of work for which the contractor is entitled to an adjustment in contract price, compensation for such costs will be included in the price adjustment for the item or items of work changed or added.

3. Payment

Payment will be made as the work proceeds, after presentation of paid invoices or documentation of direct costs by the contractor showing specific mobilization and demobilization costs and supporting evidence of the charges of suppliers, subcontractors, and others. When the total of such payments is less than the lump sum contract price, the balance remaining will be included in the final contract payment. Payment of the lump sum contract price for mobilization and demobilization will constitute full compensation for completion of the work.

Payment will not be made under this item for the purchase costs of materials having a residual value, the purchase costs of materials to be incorporated in the project, or the purchase costs of operating supplies.

4. Items of work and construction details

4. Items of Work and Construction Details

Items of work to be performed in conformance with this specification and the construction details therefore are:

a. Bid Item 1, Mobilization and Demobilization

- (1) This item shall consist of mobilizing and demobilizing personnel and equipment as well as other preparations necessary to perform the work within the scope of this contract.
- (2) Before mobilization begins, the contractor shall place a notice in the US Coast Guard Local Notice to Mariners regarding the timeframe and location of dredging and construction operations and shall provide NRCS documentation of this notification.
- (3) Access to the site may be impeded due to shallow water conditions and/or existing utilities. The contract shall not be modified to increase the performance time or monetary value as a result of difficulty in accessing these sites due to shallow water conditions or existing utilities. Pipelines are located within the vicinity of the project area. All tug boats and barges will be loaded in a manner to ensure that they float at all times.
- (4) The contractor's movement within the project area is limited to the access routes and work limits as shown on the construction drawings.
- (5) This item shall include mobilizing and demobilizing equipment and operating supplies to the general work area in this contract.
- (6) This item shall not include the movement of personnel and supplies within the work sites associated with the daily operation of the contractor's work force.
- (7) Payment shall be as specified in Section 3. Such payment shall be considered full compensation for this item.

Construction Specification 21—Excavation

1. Scope

The work shall consist of the excavation required by the drawings and specifications and disposal of the excavated materials.

2. Classification

Excavation is classified as common excavation, rock excavation, or unclassified excavation in accordance with the following definitions.

Common excavation is defined as the excavation of all materials that can be excavated, transported, and unloaded using heavy ripping equipment and wheel tractor-scrapers with pusher tractors or that can be excavated and dumped into place or loaded onto hauling equipment by excavators having a rated capacity of one cubic yard or larger and equipped with attachments (shovel, bucket, backhoe, dragline, or clam shell) appropriate to the material type, character, and nature of the materials.

Rock excavation is defined as the excavation of all hard, compacted, or cemented materials that require blasting or the use of ripping and excavating equipment larger than defined for common excavation. The excavation and removal of isolated boulders or rock fragments larger than 1 cubic yard encountered in materials otherwise conforming to the definition of common excavation shall be classified as rock excavation. The presence of isolated boulders or rock fragments larger than 1 cubic yard is not in itself sufficient cause to change the classification of the surrounding material.

For the purpose of these classifications, the following definitions shall apply:

Heavy ripping equipment is a rear-mounted, heavy duty, single-tooth, ripping attachment mounted on a track type tractor having a power rating of at least 250 flywheel horsepower unless otherwise specified in section 10.

Wheel tractor-scraper is a self-loading (not elevating) and unloading scraper having a struck bowl capacity of at least 12 cubic yards.

Pusher tractor is a track type tractor having a power rating of at least 250 flywheel horsepower equipped with appropriate attachments.

Unclassified excavation is defined as the excavation of all materials encountered, including rock materials, regardless of their nature or the manner in which they are removed.

3. Blasting

The transportation, handling, storage, and use of dynamite and other explosives shall be directed and supervised by a person(s) of proven experience and ability who is authorized and qualified to conduct blasting operations.

Blasting shall be done in a manner as to prevent damage to the work or unnecessary fracturing of the underlying rock materials and shall conform to any special requirements in section 10 of this

specification. When specified in section 10, the contractor shall furnish the engineer, in writing, a blasting plan before blasting operations begin.

4. Use of excavated material

Method 1—To the extent they are needed, all suitable material from the specified excavations shall be used in the construction of required permanent earthfill or rockfill. The suitability of material for specific purposes is determined by the engineer. The contractor shall not waste or otherwise dispose of suitable excavated material.

Method 2—Suitable material from the specified excavations may be used in the construction of required earthfill or rockfill. The suitability of material for specific purposes is determined by the engineer.

5. Disposal of waste materials

Method 1—All surplus or unsuitable excavated materials are designated as waste and shall be disposed of at the locations shown on the drawings.

Method 2—All surplus or unsuitable excavated materials are designated as waste and shall be disposed of by the contractor at sites of his own choosing away from the site of the work. The disposal shall be in an environmentally acceptable manner that does not violate local rules and regulations.

6. Excavation limits

Excavations shall comply with OSHA Construction Industry Standards (29CFR Part 1926) Subpart P, Excavations, Trenching, and Shoring. All excavations shall be completed and maintained in a safe and stable condition throughout the total construction phase. Structure and trench excavations shall be completed to the specified elevations and to the length and width required to safely install, adjust, and remove any forms, bracing, or supports necessary for the installation of the work. Excavations outside the lines and limits shown on the drawings or specified herein required to meet safety requirements shall be the responsibility of the contractor in constructing and maintaining a safe and stable excavation.

7. Borrow excavation

When the quantities of suitable material obtained from specified excavations are insufficient to construct the specified earthfills and earth backfills, additional material shall be obtained from the designated borrow areas. The extent and depth of borrow pits within the limits of the designated borrow areas shall be as specified in section 10 or as approved by the engineer.

Borrow pits shall be excavated and finally dressed to blend with the existing topography and sloped to prevent ponding and to provide drainage.

8. Overexcavation

Excavation in rock beyond the specified lines and grades shall be corrected by filling the resulting voids with portland cement concrete made of materials and mix proportions approved by the engineer. Concrete that will be exposed to the atmosphere when construction is completed shall meet the requirements of concrete selected for use under Construction Specification 31, Concrete for Major Structures, or 32, Structure Concrete, as appropriate.

Concrete that will be permanently covered shall contain not less than five bags of cement per

cubic yard. The concrete shall be placed and cured as specified by the engineer.

Excavation in earth beyond the specified lines and grades shall be corrected by filling the resulting voids with approved, compacted earthfill. The exception to this is that if the earth is to become the subgrade for riprap, rockfill, sand or gravel bedding, or drainfill, the voids may be filled with material conforming to the specifications for the riprap, rockfill, bedding, or drainfill. Before correcting an overexcavation condition, the contractor shall review the planned corrective action with the engineer and obtain approval of the corrective measures.

9. Measurement and payment

For items of work for which specific unit prices are established in the contract, the volume of each type and class of excavation within the specified pay limits is measured and computed to the nearest cubic yard by the method of average cross-sectional end areas or by methods outlined in section 10 of this specification. Regardless of quantities excavated, the measurement for payment is made to the specified pay limits except that excavation outside the specified lines and grades directed by the engineer to remove unsuitable material is included. Excavation required because unsuitable conditions result from the contractor's improper construction operations, as determined by the engineer, is not included for measurement and payment.

Method 1—The pay limits shall be as designated on the drawings.

Method 2—The pay limits shall be defined as follows:

- a. The upper limit shall be the original ground surface as it existed before the start of construction operations except that where excavation is performed within areas designated for previous excavation or earthfill, the upper limit shall be the modified ground surface resulting from the specified previous excavation or earthfill.
- b. The lower and lateral limits shall be the neat lines and grades shown on the drawings.

Method 3—The pay limits shall be defined as follows:

- a. The upper limit shall be the original ground surface as it existed before the start of construction operations except that where excavation is performed within areas designated for previous excavation or earthfill, the upper limit shall be the modified ground surface resulting from the specified previous excavation or earthfill.
- b. The lower and lateral limits shall be the true surface of the completed excavation as directed by the engineer.

Method 4—The pay limits shall be defined as follows:

- a. The upper limit shall be the original ground surface as it existed before the start of construction operations except that where excavation is performed within areas designated for previous excavation or earthfill, the upper limit shall be the modified ground surface resulting from the specified previous excavation or earthfill.
- b. The lower limit shall be at the bottom surface of the proposed structure.
- c. The lateral limits shall be 18 inches outside of the outside surface of the proposed structure or shall be vertical planes 18 inches outside of and parallel to the footings, whichever gives the larger pay quantity, except as provided in d below.
- d. For trapezoidal channel linings or similar structures that are to be supported upon the sides of the excavation without intervening forms, the lateral limits shall be at the underside of

the proposed lining or structure.

- e. For the purposes of the definitions in b, c, and d, above, any specified bedding or drainfill directly beneath or beside the structure will be considered to be a part of the structure.

All methods—The following provisions apply to all methods of measurement and payment.

Payment for each type and class of excavation is made at the contract unit price for that type and class of excavation. Such payment will constitute full compensation for all labor, materials, equipment, and all other items necessary and incidental to the performance of the work except that extra payment for backfilling overexcavation will be made in accordance with the following provisions.

Payment for backfilling overexcavation, as specified in section 8 of this specification, is made only if the excavation outside specified lines and grades is directed by the engineer to remove unsuitable material and if the unsuitable condition is not a result of the contractor's improper construction operations as determined by the engineer.

Compensation for any item of work described in the contract, but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in section 10 of this specification.

10. Items of work and construction details

10. Items of Work and Construction Details

Items of work to be performed in conformance with this specification and the construction details therefore are:

a. Bid Item 3, Excavation, Marsh Creation Dredging

The contractor will be allowed to perform hydraulic dredging operations 24 hours per day, 7 days per week. This work schedule provision change is an exception to the Clause in AGAR 452.236-75 H.3 MAXIMUM WORKWEEK - CONSTRUCTION SCHEDULE (NOV 1966). **The contractor is encouraged to perform a magnetometer investigation of the dredge borrow area before beginning the dredge excavation.** In Section 2, **Classification**, the classification will be Unclassified Excavation. There is no knowledge of existing rock in the borrow area. However, this does not imply with certainty that rock does not exist in the borrow area. Some known existing Magnetic Anomalies are as shown on the plans.

- (1) This item shall consist of the excavation necessary to provide and place the material needed to fill the Marsh Creation Area to the lines and grades as shown on the construction drawings, and provide and install any required effluent discharge water control structures, and/or any other items or work required for performing and completing this item.
- (2) All fill shall be placed by a hydraulic cutterhead dredge. The method of transport and hydraulic placement will be at the discretion of the contractor. However, methods and equipment shall comply with all permit, production, environmental and contractual requirements.
- (3) Hydraulic dredge excavation shall be confined to the designated borrow area as shown in the drawings. If any dredging occurs outside the limits of the borrow area, the contractor shall immediately notify the CO.
- (4) **No equipment shall be allowed to operate on the existing Raccoon Island land mass beyond the containment dike limits.**
- (5) The contractor shall submit his dredging operations plan to meet the requirements of the construction drawings and specifications to the CO for his/her concurrence at least 30 days prior to the commencement of work. All items in the dredging operations plan are subject to the concurrence of the CO. The plan shall include but not be limited to the following items:
 - Dredge size and its discharge rates
 - Proposed dredging operation hours
 - Proposed dredging sequence, including but not limited to, depth and width of cut in the borrow area
 - Proposed route and location of discharge pipes and safety measures to be utilized to notify the boating public of the lines
 - Proposed types and location of effluent discharge structures

- Placement plan to include the discharge point locations, management of effluent discharge structures, and any other items necessary to ensure placement of material will be in compliance with the specifications
 - Proposed method for determining fill elevations in both decanted and flooded states
 - Containment dike parameters and means and methods of construction of containment dikes
 - Containment dike maintenance plan
 - The plan shall define the method of excavation, access routes, equipment (marsh buggy, barge dredge, etc.) to be utilized and shall show the location of submerged and floating discharge lines.
- (6) If a pipeline is used to transport material, the pipeline seaward of the beach landing shall be submerged except at the dredge, booster pump (if required), and at oil and gas infrastructure crossings. In these instances, the pipeline shall be floated unless written permission has been obtained from the pipeline owner to lay the submerged pipeline on the ocean floor. A copy of this permission shall be provided to the CO.
- (7) The contractor shall have on site the required length of dredge discharge pipe to reach the furthest point in the marsh creation placement area before the dredging operation can commence. When the target elevation has been reached in the furthest point of the marsh creation area and is concurred in by the COR and that length of discharge pipe is no longer needed, then that length of pipe may be removed from the jobsite.
- (8) In the event high wind conditions or any other factors cause overtopping or failure of the containment dikes or the discharge water control structures, the contractor shall cease pumping in the associated containment area until the overtopping or failure situation has been alleviated or corrected as concurred in by the COR.
- (9) The dredge slurry elevation shall meet the lines and grades of the construction drawings at each grade stake (staff gauge unit). At the time the fill height (as concurred in by the COR) has reached the target elevation mark of a grade stake, that placement area shall be considered as complete as concurred in by the COR. Foundation settlement (drag down) has been accounted for relative to the fill target elevation. Once the fill operation begins and should drag down occur at the stakes; the target elevation will be the original +3.0 feet NAVD 88 mark on the stakes at the dragged down position.

The Marsh Creation Area shall have the dredged fill material placed to a target elevation of +3.0 feet NAVD 88. The fill elevation tolerance shall be plus 0.6 feet or minus 0.3 feet. **See Construction Specification 93, Identification Markers or Plaques for grade stake (staff gauge unit) requirements.** The intent of this specification is to have a fill height on average at the target elevation of +3.0 feet NAVD 88. The contractor shall not consistently place fill material at the high or low tolerance. Should the contractor consistently place the material at the high or low tolerance values as stated above, the fill tolerances will be changed to a plus 0.3 feet and a minus 0.3 feet for the duration of the fill placement as concurred in by the COR.

- (10) Section 5, Disposal of Waste Materials, is deleted in its entirety and replaced as follows. All excavated material shall be placed in the Marsh Creation Area as

shown on the drawings or as concurred in by the COR. In the event woody debris is discovered during the hydraulic dredging operation, the woody debris may be disposed of in the marsh creation area provided it is completely covered by the dredge fill material. Otherwise any woody material shall be removed and disposed of offsite.

- (11) The dredged material shall be transported and deposited in such a manner as to insure that no damage will occur to the marsh outside the work limits or pipelines and utilities within the project area.
- (12) The dredge discharge pipe shall be located within the pipeline corridor route, access routes and work limits of the project area as shown on the plans. Only minimal use of marsh buggy or land equipment shall be allowed for pipeline movement and hookup outside the marsh creation area. All equipment shall stay within the work limits as shown in the drawings.
- (13) Prior to the commencement of dredged material placement, the contractor shall install the discharge control structures to insure the confinement of dredged material to the Marsh Creation Area.

If the discharge control structures fail for any reason during dredging operations, the contractor shall immediately cease pumping into the area affected until the failure is repaired and proper function of the structure is restored as concurred in by the COR. If such a failure occurs and fill slurry is spilled outside the containment area, the contractor shall recover the spilled material and return it to the associated containment area or as concurred in by the COR.

- (14) The effluent discharge water control structures shall be managed daily in a manner to maintain a minimum pond water elevation of +3.0 feet NAVD 88 **or an elevation as concurred in by the COR**. The *maximum* elevation of the ponded water shall be +3.5 feet NAVD 88 **or an elevation as concurred in by the COR**. The effluent discharge water control structures shall also be managed to be kept clear of debris.

Upon completion and acceptance of the fill placement within the marsh creation area, the contractor shall remove all effluent discharge structures within that area. The structure shall be removed in its entirety and removed from the job site at no additional cost.

- (15) The contractor shall take the necessary actions to prevent excessive leakage of the discharge pipe or seepage at the discharge control structures as concurred in by the COR.

The contractor shall maintain a tight discharge pipeline at all times. The joints shall be constructed to preclude spillage and leakage. Leaks shall be promptly repaired. Failure to repair leaks or change the method of operation that is resulting in leakage and waste of material or excessive turbidity and non-compliance of water quality standards during transport to the discharge site will result in suspension of dredging operations. The contractor shall immediately repair or change operation to prevent leakage before resuming dredging. The contractor shall furnish any data collected during checks of the submerged pipeline in an approved format.

If the discharge pipe fails for any reason during dredging operations, the contractor shall immediately cease pumping until the pipe failure is repaired and proper function of the discharge pipe is restored as concurred in by the COR. If such a failure occurs and fill slurry is spilled outside the discharge pipe, the contractor shall recover the spilled material and return it to the associated containment area or as concurred in by the COR.

- (16) If submerged discharge pipelines are used from the borrow area to the placement area, or from pump out station to the placement area, the contractor shall obtain all easements, right-of-way, and permits required. The contractor is required to conduct any field investigations or surveys necessary to establish the pipeline corridor.
- (17) If submerged discharge pipelines are used in the Gulf, the contractor shall take the necessary actions, as concurred in by the CO, to alert the boating public of the presence of submerged discharge lines. If a discharge pipeline is less than four (4) feet deep, the contractor shall provide to the CO how he/she will properly mark the discharge pipeline and how he/she will notify the boating public of the presence of the discharge pipeline.
- (18) During placement operations, the contractor shall monitor the elevation of the placed material on a continuous basis. As soon as the contractor observes any staff gauge(s) where the placed fill material has obtained the target elevation, he/she shall immediately cease placement of material at that location and move the discharge pipe end to another location as concurred in by the COR. The contractor shall record the date, time, staff gauge number and elevation of placed fill at the staff gage and immediately provide this information to the COR. The area represented by this/these staff gauge(s) will be considered complete and no additional fill placement shall occur in that area. The entire marsh creation area shall be considered complete at the time when the target elevation of all of the staff gauges has been obtained either presently or previously within the creation area.
- (19) In the event the COR and/or his representative observes that the target elevation has been reached at staff gauge(s) that the contractor has not reported as complete, the COR and/or his representative will notify the contractor that the target elevation for that area has been reached. Upon such notification the contractor shall cease pumping in that area and immediately move the discharge pipe as stated above.
- (20) When hydraulic conditions exist that will allow dewatering of the marsh placement area, the contractor shall periodically lower the pond elevation to an elevation of +2.5 feet NAVD 88. The timing and necessity of lowering the pond water shall be concurred in by the COR. This lowering of the pond water is to allow for the determination of the elevation of the dredge fill slurry solids at gauge stakes.
- (21) The Contractor shall furnish and maintain throughout the contract, one FM ship's radio transceiver with power not in excess of 25 watts, and at least 15 watts output on the maritime frequencies of 156.800 (Channel 16) and 156.375 (Channel 67) MHz 16F3 emission, with a tolerance of plus or minus 5 kHz deviation at 100 percent modulation for communication concerning navigation in the vicinity of the dredge. The radio shall be operated in accordance with FCC rules and regulations. The contractor shall also transmit daily broadcasts

on Marine Channel 16 for dredging and construction operations for the day the broadcast is aired and for upcoming days.

- (22) The contractor shall not anchor, spud, or in any other way disturb the water bottom outside the Raccoon Island Borrow Area within the Outer Continental Shelf.
- (23) No material from the Raccoon Island Borrow Area will be extracted, transported, or placed that does not meet applicable Federal requirements.
- (24) The contractor shall notify the NRCS within 24 hours of the commencement and termination of dredging activities.
- (25) The contractor shall report the discovery of any ordnance (i.e. weapons, ammunitions armaments) that is encountered while conducting dredging activities to NRCS within 24 hours of the discovery.
- (26) The contractor shall immediately notify NRCS if any unknown historical or archeological remains or any prehistoric and/or historic aboriginal cultural materials are discovered on Raccoon Island.
- (27) The dredge operator shall immediately cease operations if the dredge operator discovers any archaeological resource while dredging. The contractor shall immediately report the discovery to NRCS.
- (28) NRCS will monitor the placed marsh fill for items of archaeological interest using standard archaeological survey procedures. If any items of archaeological interest are discovered, dredging operations shall be immediately suspended until further notice. If the find is significant, the dredge shall be relocated to another section of the borrow area.
- (29) The contractor shall establish lighted marker buoys along the perimeter of the borrow area, with a minimum of one lighted marker buoy at each point of intersection (PI).
- (30) The contractor shall maintain a GPS with an accuracy of plus or minus 3 meters (9.84 feet) on the dredge. The GPS shall be installed as close to the cutterhead as practicable.
- (31) Dredging within the borrow area shall begin at Station 11+62 and proceed south to Station 31+13. When all material has been dredged within this reach, dredging shall begin at Station 11+62 and proceed north toward Station 0+00 until project completion.
- (32) The maximum depth of cut in the borrow area is to elevation -45.5 NAVD 88. The cut tolerance shall be +/-2.0 feet.
- (33) Measurement of quantities for payment shall be as follows:
 - a. Measurement for progress payments shall be performed by the contractor in accordance with Specification 7 of this contract and in accordance with their approved hydrographic equipment and methods. All measurement and computational data utilized to determine progress payment quantities

shall be provided to the COR a minimum of seven days prior to requesting payment.

- b. The final quantities for payment shall be performed by NRCS. Surveys for this measurement shall be as defined in Specification 7 of this contract. Final surveys for final quantity computations shall be performed when the contractor completes the excavation necessary to fill the marsh creation area to the lines and grades shown on the construction drawings.

The contractor shall provide the COR a minimum of 24 hour notification of the anticipated completion of the excavation. Upon completion of excavation, NRCS will perform the after dredge survey. The quantity of material excavated will be computed to the nearest cubic yard by means of surface to surface volume computations utilizing the Philadelphia Method within Hypack. The difference in the before and after dredge surveys shall utilize the low frequency data collected.

- (34) In Section 9, Measurement and Payment, Method 3 shall apply. Payment shall be made at the contract unit price. Progress payments shall be based on the quantity measured by the contractor and calculated in accordance with Paragraph 10.a.33.a above. Final payment will be made at the contract unit price for the final quantity measured by NRCS as prescribed above. Such payment will constitute full compensation for all labor, material, equipment and all other items necessary and incidental to the performance of the work and for Subsidiary Item, Pollution Control.

b. Subsidiary Item, Excavation, Containment Dike

- (1) This item shall consist of the common excavation required to place and construct the containment dikes in the open marsh areas as shown on the construction drawings. The contractor shall submit a plan for this work to the CO for approval within seven days of the issuance of the Notice to Proceed. The plan shall contain the method of excavation, access routes, equipment (marsh buggy, barge dredge, etc.) to be utilized, and the construction sequence.
- (2) In Section 4, Use of Excavated Material, Method 2 shall apply. No woody material shall be placed in the earthen containment dike.
- (3) Section 5, Disposal of Waste Material, is deleted in its entirety and replaced as follows. All surplus or unsuitable excavated material not used in the construction of the containment dike shall be placed back into the borrow area shown on the construction drawings.
- (4) Section 9, Measurement and Payment, no separate payment shall be made for this item. Payment for this item shall be included in the payment for Bid Item 4, Earthfill, Containment Dike.

Construction Specification 23—Earthfill

1. Scope

The work consists of the construction of earth embankments, other earthfills, and earth backfills required by the drawings and specifications.

Earthfill is composed of natural earth materials that can be placed and compacted by construction equipment operated in a conventional manner.

Earth backfill is composed of natural earth material placed and compacted in confined spaces or adjacent to structures (including pipes) by hand tamping, manually directed power tampers or vibrating plates, or their equivalent.

2. Material

All fill material shall be obtained from required excavations and designated borrow areas. The selection, blending, routing, and disposition of material in the various fills shall be subject to approval by the engineer.

Fill materials shall contain no frozen soil, sod, brush, roots, or other perishable material. Rock particles larger than the maximum size specified for each type of fill shall be removed prior to compaction of the fill.

The types of material used in the various fills shall be as listed and described in the specifications and drawings.

3. Foundation preparation

Foundations for earthfill shall be stripped to remove vegetation and other unsuitable material or shall be excavated as specified.

Except as otherwise specified, earth foundation surfaces shall be graded to remove surface irregularities and shall be scarified parallel to the axis of the fill or otherwise acceptably scored and loosened to a minimum depth of 2 inches. The moisture content of the loosened material shall be controlled as specified for the earthfill, and the surface material of the foundation shall be compacted and bonded with the first layer of earthfill as specified for subsequent layers of earthfill.

Earth abutment surfaces shall be free of loose, uncompacted earth in excess of 2 inches in depth normal to the slope and shall be at such a moisture content that the earthfill can be compacted against them to produce a good bond between the fill and the abutments.

Rock foundation and abutment surfaces shall be cleared of all loose material by hand or other effective means and shall be free of standing water when fill is placed upon them. Occasional rock outcrops in earth foundations for earthfill, except in dams and other structures designed to restrain the movement of water, shall not require special treatment if they do not interfere with compaction of the foundation and initial layers of the fill or the bond between the foundation and the fill.

Foundation and abutment surfaces shall be no steeper than one horizontal to one vertical unless otherwise specified. Test pits or other cavities shall be filled with compacted earthfill conforming to the specifications for the earthfill to be placed upon the foundation.

4. Placement

Earthfill shall not be placed until the required excavation and foundation preparation have been completed and the foundation has been inspected and approved by the engineer. Earthfill shall not be placed upon a frozen surface nor shall snow, ice, or frozen material be incorporated in the earthfill matrix.

Earthfill shall be placed in approximately horizontal layers. The thickness of each layer before compaction shall not exceed the maximum thickness specified in section 10 or shown on the drawings. Materials placed by dumping in piles or windrows shall be spread uniformly to not more than the specified thickness before being compacted.

Hand compacted earth backfill shall be placed in layers whose thickness before compaction does not exceed the maximum thickness specified for layers of earth backfill compacted by manually directed power tampers.

Earth backfill shall be placed in a manner that prevents damage to the structures and allows the structures to assume the loads from the earth backfill gradually and uniformly. The height of the earth backfill adjacent to a structure shall be increased at approximately the same rate on all sides of the structure.

Earthfill and earth backfill in dams, levees, and other structures designed to restrain the movement of water shall be placed to meet the following additional requirements:

- (a) The distribution of materials throughout each zone shall be essentially uniform, and the earthfill shall be free from lenses, pockets, streaks, or layers of material differing substantially in texture, moisture content, or gradation from the surrounding material. Zone earthfills shall be constructed concurrently unless otherwise specified.
- (b) The surface of each layer shall be scarified parallel to the axis of the fill to a depth of not less than 2 inches before the next layer is placed.
- (c) The top surface of embankments shall be maintained approximately level during construction with two exceptions: A crown or cross-slope of about 2 percent shall be maintained to ensure effective drainage, or as otherwise specified for drainfill or sectional zones.
- (d) Dam embankments shall be constructed in continuous layers from abutment to abutment except where openings to facilitate construction or to allow the passage of streamflow during construction are specifically authorized in the contract.
- (e) Embankments built at different levels as described under (c) or (d) above shall be constructed so that the slope of the bonding surfaces between embankment in place and embankment to be placed is not steeper than 3 feet horizontal to 1 foot vertical. The bonding surface of the embankment in place shall be stripped of all material not meeting the requirements of this specification and shall be scarified, moistened, and recompactd when the new earthfill is placed against it. This ensures a good bond with the new earthfill and obtains the specified moisture content and density at the contact of the inplace and new earthfills.

5. Control of moisture content

During placement and compaction of earthfill and earth backfill, the moisture content of the material being placed shall be maintained within the specified range.

The application of water to the earthfill material shall be accomplished at the borrow areas insofar as practicable. Water may be applied by sprinkling the material after placement on the earthfill, if necessary. Uniform moisture distribution shall be obtained by disking.

Material that is too wet when deposited on the earthfill shall either be removed or be dried to the specified moisture content prior to compaction.

If the top surface of the preceding layer of compacted earthfill or a foundation or abutment surface in the zone of contact with the earthfill becomes too dry to permit suitable bond, it shall either be removed or scarified and moistened by sprinkling to an acceptable moisture content before placement of the next layer of earthfill.

6. Compaction

Earthfill—Earthfill shall be compacted according to the following requirements for the class of compaction specified:

Class A compaction—Each layer of earthfill shall be compacted as necessary to provide the density of the earthfill matrix not less than the minimum density specified in Section 10 or identified on the drawings. The earthfill matrix is defined as the portion of the earthfill material finer than the maximum particle size allowed in the reference compaction test method specified (ASTM D698 or ASTM D1557).

Class B compaction—Each layer of earthfill shall be compacted to a mass density not less than the minimum density specified.

Class C compaction—Each layer of earthfill shall be compacted by the specified number of passes of the type and weight of roller or other equipment specified or by an approved equivalent method. Each pass shall consist of at least one passage of the roller wheel or drum over the entire surface of the layer.

Earth backfill—Earth backfill adjacent to structures shall be compacted to a density equivalent to that of the surrounding in-place earth material or adjacent required earthfill or earth backfill. Compaction shall be accomplished by hand tamping or manually directed power tampers, plate vibrators, walk-behind, miniature, or self-propelled rollers. Unless otherwise specified heavy equipment including backhoe mounted power tampers or vibrating compactors and manually directed vibrating rollers shall not be operated within 3 feet of any structure. Towed or self-propelled vibrating rollers shall not be operated within 5 feet of any structure. Compaction by means of drop weights operating from a crane or hoist is not permitted.

The passage of heavy equipment will not be allowed:

- Over cast-in-place conduits within 14-days after placement of the concrete
- Over cradled or bedded precast conduits within 7 days after placement of the concrete cradle or bedding
- Over any type of conduit until the backfill has been placed above the top surface of the structure to a height equal to one-half the clear span width of the structure or pipe or 3 feet, whichever is greater, except as may be specified in section 10.

Compacting of earth backfill adjacent to structures shall not be started until the concrete has attained the strength specified in section 10 for this purpose. The strength is determined by compression testing of test cylinders cast by the contractor's quality control personnel for this purpose and cured at the work site in the manner specified in ASTM C 31 for determining when a structure may be put into service.

When the required strength of the concrete is not specified as described above, compaction of earth backfill adjacent to structures shall not be started until the following time intervals have elapsed after placement of the concrete.

Structure	Time interval (days)
Vertical or near-vertical walls with earth loading on one side only	14
Walls backfilled on both sides simultaneously	7
Conduits and spillway risers, cast-in-place (with inside forms in place)	7
Conduits and spillway risers, cast-in-place (inside forms removed)	14
Conduits, pre-cast, cradled	2
Conduits, pre-cast, bedded	1
Cantilever outlet bents (backfilled both sides simultaneously)	3

7. Reworking or removal and replacement of defective earthfill

Earthfill placed at densities lower than the specified minimum density or at moisture contents outside the specified acceptable range of moisture content or otherwise not conforming to the requirements of the specifications shall be

reworked to meet the requirements or removed and replaced by acceptable earthfill. The replacement earthfill and the foundation, abutment, and earthfill surfaces upon which it is placed shall conform to all requirements of this specification for foundation preparation, approval, placement, moisture control, and compaction.

8. Testing

During the course of the work, the contractor shall perform quality control tests, as applicable, to identify earthfill and earth backfill materials; determine the reference maximum density and optimum moisture content; and document that the moisture content of material at the time of compaction and the density of earthfill and earth backfill in place conform to the requirements of this specification.

Determining Reference Maximum Density and Optimum Moisture Content—For Class A compaction, the reference maximum density and optimum moisture content shall be determined in accordance with the compaction test and method specified on the drawings or in section 10.

Documenting Specification Conformance—In-place densities of earthfill and earth backfill requiring Class A compaction shall be measured in accordance with ASTM D1556, D2167, D2937, or D6938. Moisture contents of earthfill and earth backfill at the time of compaction shall be measured in accordance with ASTM D2216, D4643, or D6938. Values of moisture content determined by ASTM D2216 are considered the true value of the soil moisture. Values of moisture content determined by ASTM D4643 or D6938 shall be verified by comparison to values obtained by ASTM D2216. Values of in-place density and moisture content determined by these tests shall be compared to the minimum density and moisture content range specified on the drawings or in section 10.

Correction for Oversize Particles—If the materials to be used for earthfill or earth backfill contain more than 5 percent by dry weight of oversize rock particles (particles larger than those allowed in the specified compaction test and method), corrections for oversize particles shall be made using the appropriate procedures explained in ASTM D4718.

9. Measurement and payment

For items of work for which specific unit prices are established in the contract, the volume of each type and compaction class of earthfill and earth backfill within the specified zone boundaries and pay limits is measured and computed to the nearest cubic yard by the method of average cross-sectional end areas. Unless otherwise specified in section 10, no deduction in volume is made for embedded items, such as, but not limited to, conduits, inlet structures, outlet structures, embankment drains, sand diaphragm and outlet, and their appurtenances.

The pay limits shall be as defined below, with the further provision that earthfill required to fill voids resulting from overexcavation of the foundation, outside the specified lines and grades, will be included in the measurement for payment only under the following conditions:

- Where such overexcavation is directed by the engineer to remove unsuitable material, and
- Where the unsuitable condition is not a result of the contractor's improper construction operations as determined by the engineer.

Earthfill beyond the specified lines and grades to backfill excavation required for compliance with OSHA requirements will be considered subsidiary to the earthfill bid item(s).

Method 1—The pay limits shall be as designated on the drawings.

Method 2—The pay limits shall be the measured surface of the foundation when approved for placement of the earthfill and the specified neat lines of the earthfill surface.

Method 3—The pay limits shall be the measured surface of the foundation when approved for placement of the earthfill and the measured surface of the completed earthfill.

Method 4—The pay limits shall be the specified pay limits for excavation and the specified neat lines of the earthfill surface.

Method 5—The pay limits shall be the specified pay limits for excavation and the measured surface of the completed earthfill.

Method 6—Payment for each type and compaction class of earthfill and earth backfill is made at the contract unit price for that type and compaction class of earthfill. Such payment will constitute full compensation for all labor, material, equipment, and all other items necessary and incidental to the performance of the work.

Method 7—Payment for each type and compaction class of earthfill and earth backfill is made at the contract unit price for that type and compaction class of earthfill. Such payment will constitute full compensation for all labor, material, equipment, and all other items necessary and incidental to the performance of the work except furnishing, transporting, and applying water to the foundation and earthfill material. Water applied to the foundation and earthfill material is measured and payment made as specified in Construction Specification 10.

All methods—The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract, but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in section 10 of this specification.

10. Items of work and construction details

10. Items of Work and Construction Details

Items of work to be performed, in conformance with this specification and the construction details are:

a. Bid Item 4, Earthfill, Containment Dike

- 1) This item shall consist of all work necessary to place and shape the earthfill needed to complete the earthen containment dikes to be placed along the perimeter of the marsh creation area to contain the dredged fill as shown on the drawings and specified herein.
- 2) Earthfill material shall be obtained from within the containment area shown on the construction drawings. Earthfill shall be reasonably free of all organic and objectionable material, such as roots, limbs, grass and other debris.
- 3) Earthen containment dikes shall be maintained so as to contain the dredge fill for the duration of the marsh creation pumping operation. The contractor shall survey and provide to NRCS the as-built condition of the containment dike prior to beginning dredging. The drawings shall be in *.dgn or *.dxf format compatible with Microstation. A set of drawings showing all profile/cross sections shall be provided. Cross sections of the containment dike shall be taken at intervals not to exceed 200 feet with shots taken for the centerline profile taken at 25-foot intervals. All raw survey data shall be provided in *.asc or *.dat files.
- 4) The containment dikes from Station 0+00 to Station 44+76 and from Station 97+05 to Station 99+25 shall have a minimum elevation of +4.5 feet NAVD 88 and shall have a 15 foot top width. The side slopes shall be 6:1 on the marsh creation area side and 8:1 on the bay side of the containment dikes. See sheet 13 of the construction plans for containment dike layout.
- 5) The containment dikes from Station 44+76 to Station 66+61 shall be spot-filled to a minimum elevation +4.0 feet NAVD 88 and shall have a 6 foot top width and 5:1 side slopes.
- 6) The containment dikes from Station 66+61 to Station 97+05 shall have a minimum elevation of +4.5 feet NAVD 88 and shall have a 15 foot top width. The side slopes shall be 6:1 on the marsh creation area side and 5:1 on the Raccoon Island side of the containment dikes. See sheet 13 of the construction plans for containment dike layout.
- 7) No construction activities on Raccoon Island shall be performed between March 1 and August 31.
- 8) A minimum of 30 feet of clearance shall be maintained around the TBM TE-48-SM-01. During construction of the containment dikes between Station 41+71 and Station 46+92, all equipment and materials including earthfill shall maintain a distance of at least 30 feet from the TBM TE-48-SM-01. In the event that damage occurs to the TBM TE-48-SM-01, the contractor shall be responsible for the cost of replacing and resetting the TBM.
- 9) Section 3, Foundation Preparation, does not apply. No foundation preparation shall be required.
- 10) Section 5, Control of Moisture Content, does not apply.

- 11) Section 6, Compaction, does not apply.
- 12) Section 8, Testing, does not apply.
- 13) Section 9, Measurement and Payment, is deleted in its entirety. Payment for this item shall be made on a lump sum basis. Partial payment shall be made on the percentage of work complete as based on agreement between the COR and the contractor in the field. Payment shall be made at 85% of the bid price upon completion of constructing the containment dike. The remaining 15% of the bid price shall be paid at the completion of Bid Item 3, Excavation, Marsh Creation Dredging. Such payment shall constitute full compensation for all labor, material, equipment, and all other items necessary and incidental to the performance of the work and for Subsidiary Item, Excavation, Containment Dike.

Construction Specification 93—Identification Markers or Plaques

1. Scope

The work consists of furnishing and installing identification markers or plaques at the designated locations.

2. Material

The markers or plaques shall be constructed of the specified material, and shall meet all requirements for lettering, painting, finishing, and related items as shown on the drawings or as specified in section 6 of this specification.

3. Construction methods

The markers or plaques shall be installed at location(s) as shown on the drawings and in the manner or condition specified in section 6.

4. Monuments

Unless otherwise specified, the markers or plaques shall be mounted on concrete monuments, on existing structures, or on structures proposed for installation under this contract.

5. Measurement and payment

Method 1—For items of work for which specific unit prices are established in the contract, payment for each type, kind, and size of marker or plaque complete in place is made at the contract unit price for that type, kind, and size. Such payment constitutes full compensation for all labor, equipment, tools, and all other items necessary and incidental to the completion of the work.

Method 2—For items of work for which specific lump sum prices are established in the contract, payment for identification markers or plaques is made at the contract lump sum price. Such payment constitutes full compensation for all labor, equipment, tools, and all other items necessary and incidental to the completion of the work.

All methods—The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract, but not listed in the bid schedule, is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in section 6 of this specification.

6. Items of work and construction details

6. Items of Work and Construction Details

Items of work to be performed in conformance with this specification and the construction details are:

a. Bid Item 5, Staff Gauge Units

- (1) The contractor shall provide and install staff gauge units in the marsh creation areas for determining the elevation of the dredge fill material. Such staff gauge units shall not be removed at the end of construction. They shall be installed in a manner that the dredge fill operation does not disturb them either horizontally or vertically (other than foundation settlement).

The staff gauge unit shall consist of one 4" x 4" x 16' untreated post and four staff gauges. The top elevation of the posts shall be driven to an elevation of + 5.0 feet NAVD 88 prior to placing any dredge fill. If the contractor cannot drive the post to the desired elevation, at the concurrence of the COR, the post may be cut off at the desired elevation of +5.0 feet NAVD 88.

The staff gauge units shall be placed at the locations staked in the field by NRCS. The contractor shall provide a minimum of 48 hours advanced notice prior to installation of the staff gauge units. During the installation of the staff gauge posts, NRCS will be on site to mark the elevation to attach the gauges to the posts.

- (2) The staff gauge posts shall be 4" x 4" x 16' untreated southern pine post. Each staff gauge post shall have a staff gauge placed on all four sides. The staff gauges shall be numbered at the top end and on each side of the post with the corresponding number as presented in the table below. Only the numerical designation is required. The material for the number shall be the same as that of the staff gauge material as stated below. The color of the number shall be transparent yellow over black lettering. The staff gauge material shall be a follows:
 - Engineer-Grade Reflective Sheeting applied to a substrate of 0.120 inch Fiberglass Reinforced Plastic (FRP).
 - The sheeting shall be Engineer-Grade reflective sheeting with pressure-sensitive urethane adhesive applied with pressure rollers to a rigid substrate of FRP. The sheeting shall have an outdoor durability of seven (7) years. The depth gauge elevation marks and numbers shall be screen printed with Black ink on White Engineer-Grade reflective sheeting.
 - The FRP Substrate shall be fiberglass reinforced thermoset polyester laminate which is acrylic modified and UV stabilized for outdoor weatherability. The FRP shall be 0.120 inch thick with a tensile strength exceeding that of 0.0050 inch aluminum. The FRP shall be white or gray in color and be totally dielectric and non-conductive. The FRP panel strength and impact resistance shall not be appreciably affected over a temperature range of -65 degrees F to 212 degrees F.
 - The staff gauge shall be painted with Transparent inks over the White reflective sheeting in Green, Yellow, Red, Blue and Brown. The Transparent ink shall color the sheeting yet still allow the reflective

properties to be retained. The black numbers shall be two and one half inches (2.5”) in height. The depth gauge shall be two (2) feet high and three and one half inches (3½”) wide. The top 0.4 feet of the depth gauge shall be painted Green with the bottom of the Green marked and numbered with elevation 3.6 feet NAVD 88. Adjoining the Green shall be 0.6 feet of painted Yellow with the bottom of the Yellow marked and numbered with elevation 3.0 feet NAVD 88. Adjoining the Yellow shall be 0.3 feet of painted Red with the bottom of the Red marked and numbered with the elevation 2.7 feet NAVD 88. Adjoining the Red shall be 0.3 feet of painted Blue with the bottom of the Blue marked and numbered with the elevation 2.4 feet NAVD 88. Adjoining the Blue shall be 0.4 feet of painted Brown with the bottom of the Brown marked and numbered with the elevation 2.0 feet NAVD 88. A schematic of the staff gauge is included in the construction drawings.

- Each staff gauge shall be attached to the 4” x 4” untreated southern pine post with a minimum of two ¼” x 2” stainless steel wood screws with ¼” stainless steel backing washers. The staff gauge shall be set to the appropriate elevation on the post when it is attached.
- (3) The location of the posts shall be as shown in the following table. The contractor shall place the posts at these locations. Location and elevations shall be set by NRCS.

CONTAINMENT AREA STAFF GAUGE LOCATIONS		
POINT NUMBER	NORTHING	EASTING
1	201730	3408986
2	201651	3409194
3	201576	3409433
4	201501	3409671
5	201426	3409910
6	201352	3410148
7	201277	3410387
8	201202	3410625
9	201127	3410864
10	201052	3411102
11	200977	3411341
12	200902	3411579
13	200827	3411818
14	200753	3412056
15	200678	3412295
16	200603	3412533
17	200528	3412772
18	201113	3410073
19	201038	3410312
20	200963	3410550
21	200814	3411027

22	200742	3411267
23	200664	3411504
24	200589	3411743
25	200514	3411981
26	200439	3412220
27	200364	3412459
28	200289	3412697

- (4) The contractor shall submit a sample of the staff gauge to be used to the CO for approval.
- (5) In Section 5, Measurement and Payment, Method 1 shall apply.

Construction Specification 94—Contractor Quality Control

1. Scope

The work consists of developing, implementing, and maintaining a quality control system to ensure that the specified quality is achieved for all materials and work performed.

2. Equipment and materials

Equipment and material used for quality control shall be of the quality and condition required to meet the test specifications cited in the contract. Testing equipment shall be properly adjusted and calibrated at the start of operations and the calibration maintained at the frequency specified. Records of equipment calibration tests shall be available to the engineer at all times. Equipment shall be operated and maintained by qualified operators as prescribed in the manufacturer's operating instructions, the references specified, and as specified in section 10 of this specification. All equipment and materials used in performing quality control testing shall be as prescribed by the test standards referenced in the contract or in section 10.

All equipment and materials shall be handled and operated in a safe and proper manner and shall comply with all applicable regulations pertaining to their use, operation, handling, storage, and transportation.

3. Quality control system

Method 1—The contractor shall develop, implement, and maintain a system of quality control to provide the specified material testing and verification of material quality before use. The system activities shall include procedures to verify adequacy of completed work, initiate corrective action to be taken, and document the final results. The identification of the quality control personnel and their duties and authorities shall be submitted to the contracting officer in writing within 15 calendar days after notice of award.

Method 2—The contractor shall develop, implement, and maintain a system adequate to achieve the specified quality of all work performed, material incorporated, and equipment furnished before use. The system established shall be documented in a written plan developed by the contractor and approved by the contracting officer. The system activities shall include the material testing and inspection needed to verify the adequacy of completed work and procedures to be followed when corrective action is required. Daily records to substantiate the conduct of the system shall be maintained by the contractor. The quality control plan shall cover all aspects of quality control and shall address, as a minimum, all specified testing and inspection requirements. The plan provided shall be consistent with the planned performance in the contractor's approved construction schedule. The plan shall identify the contractor's onsite quality control manager and provide an organizational listing of all quality control personnel and their specific duties. The written plan shall be submitted to the contracting officer within 15 calendar days after notice of award. The contractor shall not proceed with any construction activity that requires inspection until the written plan is approved by the contracting officer.

All methods—The quality control system shall include, but not be limited to, a rigorous examination of construction material, processes, and operation, including testing of material and examination of manufacturer's certifications as required, to verify that work meets contract requirements and is performed in a competent manner.

4. Quality control personnel

Method 1—Quality control activities shall be accomplished by competent personnel. A competent person is: One who is experienced and capable of identifying, evaluating, and documenting that materials and processes being used will result in work that complies with the contract; and, who has authority to take prompt action to remove, replace, or correct such work or products not in compliance. Off-site testing laboratories shall be certified or inspected by a nationally recognized entity. The Contractor shall submit to the Contracting Officer, for approval, laboratory certification or inspection information. The Contractor shall submit to the Contracting Officer, for approval, the names, qualifications, authorities, certifications, and availability of the competent personnel who will perform the quality control activities.

Method 2—Quality control activities shall be accomplished by competent personnel who are separate and apart from line supervision and who report directly to management. A competent person is one who is experienced and capable of identifying, evaluating, and documenting that material and processes being used will result in work that complies with the contract, and who has authorization to take prompt action to remove, replace, or correct such work or products not in compliance. Offsite testing laboratories shall be certified or inspected by a nationally recognized entity. The Contractor shall submit to the Contracting Officer, for approval, laboratory certification or inspection information. The contractor shall submit to the contracting officer, for approval, the names, qualifications, authorities, certifications, and availability of the competent personnel who will perform the quality control activities.

5. Post-award conference

The contractor shall meet with the contracting officer before any work begins and discuss the contractor's quality control system. The contracting officer and the contractor shall develop a mutual understanding regarding the quality control system, including procedures for correcting quality control issues.

6. Records

The contractor's quality control records shall document both acceptable and deficient features of the work and corrective actions taken. All records shall be on forms approved by the contracting officer, be legible, and be dated and signed by the competent person creating the record.

Unless otherwise specified in section 10 of this specification, records shall include:

- a. Documentation of shop drawings including date submitted to and date approved by the contracting officer, results of examinations, any need for changes or modifications, manufacturer's recommendations and certifications, if any, and signature of the authorized examiner.
- b. Documentation of material delivered including quantity, storage location, and results of quality control examinations and tests.
- c. Type, number, date, time, and name of individual performing quality control activities.
- d. The material or item inspected and tested, the location and extent of such material or item, and a description of conditions observed and test results obtained during the quality control activity.
- e. The determination that the material or item met the contract provisions and documentation that the engineer was notified.
- f. For deficient work, the nature of the defects, specifications not met, corrective action taken, and results of quality control activities on the corrected material or item.

7. Reporting results

The results of contractor quality control inspections and tests shall be communicated to the engineer immediately upon completion of the inspection or test. Unless otherwise specified in section 10, the original plus one copy of all records, inspections, tests performed, and material testing reports shall be submitted to the engineer within one working day of completion. The original plus one copy of documentation of material delivered shall be submitted to the engineer before the material is used.

8. Access

The contracting officer and the engineer shall be given free access to all testing equipment, facilities, sites, and related records for the duration of the contract.

9. Payment

Method 1—For items of work for which lump sum prices are established in the contract, payment is made as the work proceeds, after presentation by the contractor of invoices showing related costs and evidence of charges by suppliers, subcontractors, and others for furnishing supplies and work performed. If the total of such payments is less than the lump sum contract price for this item, the remaining balance is included in the final contract payment. Payment of the lump sum contract price constitutes full compensation for completion of the work.

Payment is not made under this item for the purchase cost of material and equipment having a residual value.

Method 2—For items of work for which lump sum prices are established in the contract, payment is prorated and paid in equal amounts on each monthly estimate. The number of months used for prorating shall be the number estimated to complete the work. The final month's prorate amount is made with the final payment. Payment as described above constitutes full compensation for completion of the work.

Payment is not made under this item for the purchase cost of material and equipment having a residual value.

All methods—Compensation for any item of work described in the contract, but not listed in the bid schedule, is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in section 10.

10. Items of work and construction details

10. Items of Work and Construction Details

Items of work to be performed, in conformance with this specification and the construction details are:

a. Bid Item 6, Contractor Quality Control

- (1) This item shall consist of providing all equipment, materials, labor and services necessary to insure that the specified quality is maintained on all work performed.
- (2) The Contractor shall provide evidence that any and all materials have been tested and meet the requirements for the applicable specification.
- (3) At least two weeks before dredging begins, the contractor shall contact Transcontinental Gas Pipeline (TGP) so that TGP may mark their pipeline Segment No. 1536 if they choose to do so. Contact Mr. Chris Mason, Transcontinental Gas Pipeline Corporation, at (713) 215-2750 or chris.mason@williams.com. Notify NRCS on the outcome of the communication.
- (4) Before dredging, the contractor shall coordinate with the Federal On-Scene Coordinator (FOOSC) or the Coast Guard Incident Commander for the MC-252 oil spill to ensure construction does not interfere with spill response actions. The contractor shall comply with any communications schedule or reporting criteria established by the FOOSC or Coast Guard Incident Commander to ensure activities in the spill area are compatible with spill response actions. NRCS shall be informed of the results of the communication.
- (5) The contractor shall allow prompt access to any authorized Federal Inspector and shall provide NRCS and BOEMRE any documents/records on occupational or public health, safety, or environmental protection, as requested.
- (6) The contractor shall submit to NRCS a **biweekly** report including:
 - a. A summary of dredge head-track lines, outlining any deviations from the original plans and specifications. A color-coded plot of the cutterhead shall be submitted showing any horizontal or vertical dredge violations. The map shall be in PDF format.
 - b. Construction progress updates including estimated volumetric production rates
- (7) The contractor shall submit one copy of quality control reports by the end of the day following the previous day's work to the inspector. The contractor shall submit one copy of quality control reports to the COR on the first work day of each week for the work performed during the previous week. In addition to the items specified in Section 6 of this specification, the following items shall be included in the quality control reports:
 - (a) Report Number, Date, and Work Period
 - (b) Contract Number and Name
 - (c) Contractor and Sub-Contractor Names
 - (d) Daily Weather and Water Elevation
 - (e) Description of Work Completed during work period
 - (f) Bid Items and Quantities placed during work period

- (g) Number of personnel and classification as skilled or unskilled and hours each work during work period
 - (h) List of equipment and hours worked during work period
 - (i) List of visitors on job site
 - (j) Safety and Pollution Control Inspections and Violations
 - (k) All the above information for any sub-contractors on site
 - (l) Daily dredge report
 - (m) Daily unit quantity and unit location of placed hydraulically dredged material
 - (n) Daily water elevations of the marsh creation units
 - (o) Daily invert elevation of the control structures in the marsh creation units
 - (p) Daily invert elevation of the dredge discharge pipe
 - (q) Daily settled slurry fill height when the settled slurry fill height elevation is at +2.0 feet NAVD 88 or higher
 - (r) Report signed by QC Manager
- (8) The contractor shall provide any information necessary for NRCS to compile final reports within ten (10) calendar days of the request.
- (9) In Section 3, Quality Control System, Method 1 shall apply.
- (10) In Section 4, Quality Control Personnel, Method 1 shall apply. The contractor shall make submission of the requirements of Method 1 within seven (7) days of the contract award.
- (11) In Section 9, Payment, Method 2 shall apply.