

Natural Resources  
Conservation Service

# BS-24 Terracing and Marsh Creation South of Big Mar - Scoping Meeting Report



**Lonnie G. Harper & Associates, Inc.**

*CIVIL ENGINEERING AND LAND SURVEYING CONSULTANTS*

2746 Hwy 384  
Bell City, Louisiana 70630  
337.905.1079

[www.harper-group.com](http://www.harper-group.com)

2015

# PRELIMINARY SCOPING MEETING REPORT

## Terracing and Marsh Creation South of Big Mar (BS-24) Plaquemines Parish, Louisiana

January 2015

Prepared for:

Natural Resources Conservation Service  
3737 Government Street  
Alexandria, La 71302

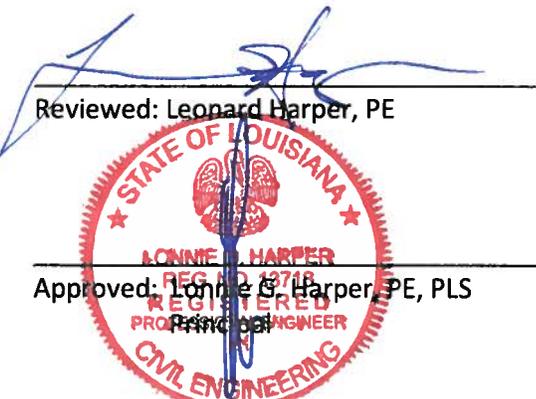
Attention: Ms. Vicki Supler, Contracting Officer

Prepared by:

Lonnie G. Harper & Associates, Inc.  
2746 Hwy 384  
Bell City, La 70630  
337.905.1079

  
Author: Christopher L. Wheat, PE

  
Reviewed: Leonard Harper, PE

  
Approved: Lonnie G. Harper, PE, PLS  
Principal



**Table of Contents**

**PROJECT OVERVIEW AND UNDERSTANDING** ..... 3

**PROJECT DATA REVIEW**..... 3

**SCOPE OF SERVICES - SUMMARY** ..... 4

    Preliminary Design (30% Design) Phase:..... 4

    Design Phase (95% Design): ..... 5

    Construction Phase (Construction Support): ..... 5

**TIMELINE** ..... 6

**PERMITS** ..... 6

**LIMITATIONS ON AUTHORITY OF THE DESIGNER** ..... 7

**APPENDIX A** .....13 pages

**APPENDIX B** ..... 1 page

**APPENDIX C** .....3 pages

**APPENDIX D** ..... 3 pages

## SCOPING REPORT: (BS-24) TERRACING AND MARSH CREATION PROJECT

### PROJECT OVERVIEW AND UNDERSTANDING

Lonnie G. Harper & Associates, Inc. (LGH) has been requested to provide a proposal for professional design services based on the scope of work outlined in the “*Scope of Services for Design Services*”<sup>1</sup> dated December 2014, as provided by the Natural Resources Conservation Service (NRCS) for the BS-24 Terracing and Marsh Creation project. This project consists of constructing approximately 65,000 linear feet of shallow water earthen terraces and the creation of approximately 334 acres of marsh in the Caernarvon Diversion outfall area, west of Lake Lery. The terraces are intended to reduce wave fetch within the large open water bodies, as well as promote the growth of submerged aquatic vegetation (SAVs) and marsh vegetation and to capture suspended sediments with the watershed. The 334 acre marsh creation area will be constructed using hydraulically dredged and pumped spoil material from an existing borrow area on the western end of Lake Lery. The marsh creation area will utilize traditional earthen containment dikes to contain the dredged material and to facilitate drainage of the area.

### PROJECT DATA REVIEW

The NRCS has provided LGH with the following documentation relative to the BS-24 project for review which will be incorporated into the design phase(s) as necessary.

1. BS-16 and BS-24 Fact Sheets and Maps;
2. BS-24 Project Information Sheet for Wetland Value Assessment (WVA) dated 10/10/2012;
3. Preliminary cost estimates;
4. BS-24 Project features (shape file);
5. Magnetometer survey report collected by T. Baker Smith dated 06/02/2014;
6. Topographical/bathymetric data collected by NRCS dated 02/21/2014 thru 05/17/2014;
7. Updated project control monument (BS16-SM-02) data sheet;
8. BS-24 Project geotechnical investigation report completed by GeoEngineers, Inc., dated 09/23/2014;
9. Soil borings from USACE;
10. Borrow Site Impact Analysis report by FTN Associates, Ltd., dated 05/05/2011;
11. CWPPRA Standard Operating Procedures (SOP), dated August 2014;
12. Right of Entry letters from Delacroix Corporation and Mr. Lester Evans, both dated 09/13/2013;
13. Design Technical Specification for Architect-Engineer Design Services

Upon further review of the abovementioned documents, the NRCS provided the following documentation at the request of LGH.

14. BS-16 geotechnical investigation reports completed by GeoEngineers, Inc., dated 07/02/2010, 01/21/2011, 07/01/2011, 07/21/2011, and 09/30/2011;
15. BS-16 survey data, report, and plans completed by T. Baker Smith, dated 01/12/2011.

After reviewing the data provided by the NRCS and further discussions held with NRCS personnel during the scoping meeting on January 15, 2015, LGH has determined the following items will need to be provided by NRCS as soon as possible.

---

<sup>1</sup> “*Scope of Services for Design Services*” has been included in Appendix A for reference.

### Survey/Project Site Data

1. Provide a copy of the BS-16 bid documents (plans and specifications) for reference.
2. Provide geographical boundaries of borrow area "A" in the form of a georeferenced shape file (\*.shx) or actual survey data (comma delimited ASCII format) defining the limits of excavation.
3. Provide the magnetometer survey data (point number, northing, easting, elevation, description) of the BS-24 and BS-16 project sites in comma delimited, ASCII format.
4. Provide adjusted topographic/bathymetric survey data of borrow areas referenced to GEOID12A.
5. Provide as-built drawings and/or survey data of the restored lake rim (west end) and borrow area "A" from the BS-16 project (when they become available but prior to commencement of the 95% design phase).
6. Applicable Land Rights agreements from the pipeline companies with infrastructure in the project area.
7. A copy of the environmental permit drawings and applicable agency correspondence outlining the terms and conditions of the environmental permits associated with the BS-16 project.
8. NOTE: Any survey data provided shall be referenced to the following: Horizontal Datum – NAD83, Vertical Datum – NAVD 88, **GEOID12A**.

### Geotechnical Data

1. LGH is unaware of any missing data necessary for the design phase(s) of the BS-24 project; therefore no additional information is needed at this time.

LGH believes all information listed above is readily available, or will become available during the BS-16 construction phase, and should not require any significant additional expenditure.

### **SCOPE OF SERVICES - SUMMARY**

Preliminary Design (30% Design) Phase: (Reference Appendix A, Section 6.1 and all sub-sections)

Project Feature Alternatives: Upon approval of this proposal by the NRCS and receipt of a Notice to Proceed, LGH will begin the 30% Design Phase of the BS-24 project. Based on the proposal request provided by NRCS and the discussions held at the scoping meeting on January 15, 2015, the 30% Design phase will consist of developing the project features; along with multiple alternatives (minimum of two) and an in-depth review of the documentation originally provided by the NRCS. LGH will establish the basic layout/size of the project based on the information provided and advise the NRCS on potential conflicts with existing infrastructure, existing hydraulic features, land rights, etc. LGH will present the design features with alternatives to the NRCS, CPRA, and USFWS (referred to as "Agencies"), along with preliminary construction cost estimates for each scenario. LGH will provide recommendations for the best suitable alternative for the project and address any questions or concerns posed by the Agencies responsible for the BS-24 project. After the alternatives have been presented to the Agencies, they will direct LGH on which design alternative to pursue for this project. After making their selection, the NRCS will authorize LGH to commence the Project Feature Design.

Project Feature Design: Upon approval of the Feature Alternative, LGH will begin developing the selected alternative project. This phase will focus on the actual design of the project features;

incorporating the project goals and objectives, along with comments or recommendations provided by the Agencies. The Project Feature Design will provide preliminary schematics and material quantities of the design features along with proposed alignments, elevations, cross-sections, etc. All documentation shall be presented to the Agencies in the form of a Preliminary Project Feature Design Report presentation, after which the Agencies will provide their comments and recommendations.

30% Design: After reviewing the Preliminary Project Feature Design Report, the NRCS will provide comments to LGH to be incorporated into the 30% Design Report. NRCS will also provide additional information such as land ownership documentation, potential oyster lease impacts, cultural resources assessments, monitoring, and administrative cost estimates, and updated information regarding project benefits; all of which shall be incorporated in the 30% Design Report. The 30% Design Report shall be prepared as outlined in the CWPPRA Standard Operating Procedures. Once completed, LGH will submit the report to the NRCS for review and commentary. The 30% Design Report will then be presented to the Agencies by LGH at the 30% Design meeting. Any comments received from the NRCS, will be incorporated into the report and re-submitted to NRCS as final deliverables.

Design Phase (95% Design): (Reference Appendix A, Section 6.2 and all sub-sections)

95% Design: Once the final 30% Design Report has been distributed to the NRCS and associated agencies for review and concurrence, LGH will then move into the 95% Design Phase of the project. This phase will focus on the final preparation of construction drawings and specifications; as well as, assessing the constructability of the project and estimated construction costs. LGH will participate in at least one progress meeting, to keep the NRCS abreast of any issues encountered, pending deadlines, and progress of the design. LGH will submit a Preliminary 95% Design Report to the NRCS for their review and commentary, which will be incorporated into the final draft of the report. The preliminary report will include details of the project, description of any data collected by LGH, all calculations, detailed description of any variations from the Phase 0, draft construction drawings and specifications, and an updated construction cost estimate.

After attending the 95% design meeting and receiving comments from the NRCS on the Preliminary 95% report, LGH will prepare the final draft of the report, construction drawings and specifications, and other deliverables, which will be submitted to the NRCS, so that funding can be secured for the construction phase of the BS-24 project.

Construction Phase (Construction Support): (Reference Appendix A, Section 7.0 and all sub-sections)

During the public bidding process, LGH will be required to attend a pre-bid meeting and site showing. The design engineer, along with any other required LGH personnel, shall attend both meetings to assist the NRCS in addressing any questions which may arise from potential bidders. Following the bid process, LGH will be required (as needed) to assist the NRCS in the evaluation of proposals from prospective bidders, highlighting the strengths, weaknesses, constructability, etc. of each proposal. LGH will play the role of an advisor in the process of selecting a contractor but shall not participate in the overall ranking of proposals as outlined in Section 7.2 of Appendix A.

During the construction phase of the project, LGH shall attend several conferences to assist the NRCS in addressing questions posed by the construction contractor. It is anticipated there will be a total of twelve (12) conferences throughout the construction phase of the project. LGH will also review all applicable submittals provided by the construction contractor for compliance with the construction

documents, constructability, approval/disapproval, etc. Also included in LGH's scope of work is to assist the NRCS with the preparation of any construction contract modifications. Modifications may require additional engineering drawings, specifications, data collection, etc. which shall be performed by LGH. All work performed by LGH to complete a modification shall be done so in accordance with Section 7.5 of Appendix A. In addition to the previous items, LGH will provide general assistance and communication, as well as attend pre-final and final inspections as stipulated by Sections 7.6 and 7.7 of Appendix A.

## TIMELINE

After reviewing the proposed scope of work and discussing the projected timeline (with NRCS personnel) for the design phases of the BS-24 project; it has been recommended by all parties that the 2015 Timeline (provided by NRCS) be adhered to through the 30% Design Phase. Due to close proximity and relationship of the BS-24 and BS-16 projects, it is imperative that the BS-24 timeline be re-evaluated at the end of the 30% Design Phase; incorporating the progress of the BS-16 project. As mentioned previously, borrow area "A" is a feature associated with both projects and modifications to the size and/or location of the borrow area may be required after the BS-16 project is complete. The BS-16 as-built drawings/survey will also play a vital role in the 95% Design Phase of the BS-24 project, thus likely requiring an extension of the timeline into 2016.

LGH has slightly altered the suggested 2015 Timeline provided by NRCS through the 30% Design Phase as shown in Appendix B.

## PERMITS

The responsibility of LGH to obtain and/or renew any permits necessary to complete the design phase of the BS-24 project has been clarified to mean that LGH will prepare the necessary environmental permit drawings (coastal use permit and USACE permits) for the project. The NRCS will be responsible for submitting the permit application and drawings to the associated regulatory agencies and provide any additional correspondence needed to obtain these permits. It is our understanding that LGH will not be responsible for the following items, which are commonly associated with the environmental permitting process:

- Acquisition of land rights
- Wetland Delineation
- Water Bottom Assessment (oyster fisheries resources)
- Hydrologic and Hydraulic (H&H) Impact Analysis
- Storm Surge Analysis/Impacts
- DOTD Permits
- U.S. Coast Guard Permits

LGH does not anticipate any additional permits will be required to complete the design phase of the BS-24 project.

#### LIMITATIONS ON AUTHORITY OF THE DESIGNER

LGH has reviewed Section 8.0 of Appendix A, and understands completely the terms and conditions of the Designer's responsibility and authority pertaining to the BS-24 project.

**APPENDIX A**  
**“SCOPE OF SERVICE FOR DESIGN SERVICES”**

## **Scope of Services for Design Services**

### **BS-24 Terracing and Marsh Creation South of Big Mar Plaquemines Parish, LA**

**December 2014**

#### **1.0 INTRODUCTION**

The Terracing and Marsh Creation South of Big Mar Project has been approved for engineering and design and is funded through the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) on Project Priority List 22. The United States Fish and Wildlife Service (USFWS) has entered into an agreement to have the United States Department of Agriculture Natural Resources Conservation Service (NRCS) provide engineering services on this project. The Louisiana Coastal Protection and Restoration Authority (CPRA) is also a cost share partner with the USFWS on this project.

#### **2.0 LOCATION**

The project site is located in Plaquemines Parish, Louisiana in the broken marshes south of Big Mar, and west of Lake Lery, as shown on the project map provided in the Phase 0 materials furnished by NRCS. Borrow material for the marsh creation feature will be taken from the western end of Lake Lery in an area that has already been located.

#### **3.0 DESCRIPTION**

The primary goal of the project is to create approximately 65,000 linear feet of terraces in the shallow open water areas within the Caernarvon Diversion outfall area. The terraces will reduce wave fetch in the large open water areas and promote conditions conducive to growth of marsh vegetation and submerged aquatic vegetation. Additional benefits may be achieved through capturing suspended sediments. Creation of 334 acres of marsh is also proposed to reestablish the western shoreline of Lake Lery in association with the Lake Lery Shoreline Restoration and Marsh Creation Project (BS-16). The aforementioned features are subject to change during the design process depending upon the economics and physical site conditions determined by the geotechnical investigation. Additional information on the project history, background and features can be found in the Phase 0 government furnished materials.

#### **4.0 PROPOSED WORK**

This task order consists of the work necessary to design the terraces and marsh creation components of this project. The marsh creation area will be designed as a traditional marsh creation area utilizing earthen containment dikes to contain hydraulically dredged and pumped material from a borrow source located in Lake Lery.

All work shall conform to the NRCS-LA Technical Specification, Architect-Engineer Design Services, Project Design attached hereto. This task order consists of all the work necessary to design and assure a quality project is completed by a construction contractor.

Work shall consist of furnishing all labor, materials, equipment, transportation, facilities, and any other incidentally related elements required to prepare preliminary design, final design, estimates, and construction assistance services for the BS-24 Terracing and Marsh

Creation South of Big Mar in Plaquemines Parish, LA. This work will include providing services as required to accomplish the development of all phases of the project from preliminary engineering to final completion and acceptance as outlined in this scope of work.

All field work will be conducted in coordination with NRCS and the landowner and will be restricted to the permissions granted in the Right of Entry provided by Delacroix Corp. This Right of Entry will be supplied to the A/E firm by NRCS. The A/E firm shall strictly adhere to the permissions (with time, equipment, and seasonal restrictions) granted for property access.

## **5.0 REQUIREMENTS**

Under the following tasks, the A/E firm shall provide basic services as required to accomplish the development of this project from initial planning to final acceptance of the completed project per the plans and specifications. This work will include the A/E firms efforts between the Notice to Proceed (with this contract) from the Contracting Officer and final inspection of all construction work for the project (performed under a construction contract by a construction contractor) and “as built” documents by all parties. Engineering services are characterized into design and construction assistance services. The design services are characterized into data review, preliminary phase (30% design), and design phase (95% and final designs). Work shall begin within one week of the Notice to Proceed. All the tasks shall be certified and stamped by a professional civil engineer that is licensed in the State of Louisiana.

## **6.0 SCOPE OF SERVICES FOR DESIGN**

The services to be provided by the A/E firm under this task are detailed in the NRCS-LA Technical Specification, Architect-Engineer Design Services, Project Design with specific requirements for this task further defined below:

### **6.1 Preliminary Phase (30% Design)**

The preliminary phase (30% Design) consists of development of project feature alternatives, project feature design, and the 30% design review. This phase involves the establishment of the general size and scope of the project and its location on the site as previously defined as a result of the Scoping Meeting. Services to be provided include advising the CO and COR on clarification and definition of the project requirements and reviewing of available data and discussions of general scheduling (Engineering/Design and Construction time schedules). Conferences may also be held as required with the CO and COR.

#### **6.1.1 Project Feature Alternatives**

The A/E firm shall present a minimum of two alternatives which incorporate the information below.

**6.1.1.1** The contractor shall determine the mean high and mean low tide for the spring/summer months and consider that information for the design of the intertidal marsh platform and for terrace dimensions. Marsh platform and terrace dimensions should represent as close as possible what was recommended in the geotechnical report, with consideration given to what was planned in Phase 0.

**6.1.1.2** Upon receipt of all survey and geotechnical data, the contractor shall develop the alignment of the containment dikes for the marsh creation area (MCA) and the alignment and location of terraces within the terrace fields. The contractor shall also recommend an auxiliary disposal area for hydraulically dredged spoil should it be needed to fulfill construction contract quantities. All alignments and quantities should closely resemble the work completed during the Phase 0 planning effort of this project, with consideration given to the anomalies shown on the magnetometer survey.

**6.1.1.3** Preparation of a Preliminary Alternatives Report containing narratives, schematic layouts, sketches, and conceptual design criteria with appropriate exhibits and drawing. The Preliminary Alternatives Report should include a narrative that covers any problems involved and alternative solutions available, general and special project requirements, and should state the A/E firm's findings and recommendations. This report shall also include a preliminary cost estimate that shall be developed for each alternative of project configuration. Four (4) hard copies and an electronic copy in \*.pdf format of the report and four (4) hard copies and an electronic copy in Excel format of the cost estimate shall be forwarded to the CO and COR within 2 weeks after the Notice to Proceed.

**6.1.1.4** The above information shall be presented, in person, to NRCS, CPRA, and USFW for the purpose of determining the preferred alignments, limits and extent of the project features. This presentation shall be scheduled and presented within 1 week of submitting the information above.

**6.1.1.5** Within 2 weeks of the A/E firm's presentation, the NRCS will submit comments to the A/E firm.

**6.1.1.6** The Contracting Office will notify the A/E firm within 3 week of receiving the original Preliminary Alternatives Report that the A/E firm is approved to proceed with the design.

## **6.1.2 Project Feature Design**

This phase of the project development is undertaken only after the CO has approved the Preliminary Alternatives Report as required above.

**6.1.2.1** The contractor shall further refine project feature design based on the information provided, the selection of preferred design alternative, and obtaining any other required information not specifically provided by the NRCS. Further refinement shall also consider the information below.

**6.1.2.2** The terraces shall be designed to prevent significant wave generation between terraces. Terraces should be designed to maximize the amount of emergent land. The crest elevation of the terraces should be designed to be 1.0 foot above mean high water elevation at year 20 after construction. The terrace fields' layouts should be designed to (1) allow freshwater flows from the Caernarvon diversion structure to pass through the terrace field and (2) slow water movement enough to facilitate sediment

deposition within the terrace field. The distance between terraces should be such that wave generation between terraces does not occur. If the contractor sees the need for the centerline of the terraces to be more than 300 feet apart (300 feet is generally the maximum accepted distance between terraces among state and federal CWPPRA agencies), the contractor shall notify NRCS, in writing, immediately and provide justification for the recommended distance between terraces. NRCS, USFWS and CPRA will review and approve the recommendation prior to the contractor proceeding with any additional design work.

**6.1.2.3** The marsh creation area should be designed to, as closely as possible, represent the area and total acreage planned in Phase 0 to be created. The contractor shall recommend the optimal fill height to achieve +1.0 ft. elevation NAVD88 Geoid 12A at year 20 post construction.

**6.1.2.4** The contractor shall also design a stable containment dike configuration to contain hydraulically dredged fill material plus any required freeboard. The design should take into account all recommendations provided in the geotechnical report. A report shall be submitted to the Contracting Officer justifying any recommendations that are not incorporated.

**6.1.2.5** The containment dike will need to be gapped at some point after construction completion in order to comply with permitting requirements. The contractor shall make a recommendation of when to construct the containment dike gaps and "open the system" to the surrounding environment.

**6.1.2.6** The A/E firm will submit a Preliminary Project Feature Design Report to the the Contracting Officer within 3 weeks of approval of the Preliminary Alternatives Report. The Preliminary Project Feature Design Report shall consist of:

- Narrative (4 hard copies, 1 electronic copy in \*.pdf format) that includes:
  - Details of recommended project features
  - Description of all data collected by the A/E firm
  - Calculations performed by the A/E firm with descriptions
  - Description of how the project differs in cost, features, and environmental benefits from the project approved in Phase 0
  - Containment dike gapping recommendations and justifications
- Preliminary Typical Drawings (4 hard copies, 1 electronic copy in \*.pdf format)
- Construction Cost Estimate (4 hard copies, 1 electronic copy in Excel format)

### **6.1.3 Thirty Percent Design**

Within 2 weeks of submitting the Preliminary Project Feature Design Report, the NRCS will submit the following documents to the A/E firm:

- Comments to the Project Feature Design Report
- Land ownership investigation

- Any oyster leases potentially impacted
- Preliminary cultural resources assessment
- OMRR&R, monitoring, and administrative cost estimates
- Updated information regarding project benefits

Within 1 week of receipt of the above documents the A/E firm shall address NRCS's comments and develop the 30% Design Report as defined in the latest version of the CWPPRA Standard Operating Procedures for a 30% design review. The 30% Design Report shall incorporate all items necessary, to include information submitted by NRCS, to develop a complete package. 4 hard copies and 1 electronic copy in \*.pdf format (cost estimate shall be in Excel format) shall be submitted to the CO and COR. In addition the A/E firm shall submit an electronic copy of the presentation to be used at the 30% design meeting in Power Point format (see Section 6.2.3.1).

**6.1.3.1** Within 5 week of the A/E firm submitting the complete package, the NRCS will schedule a 30% meeting. The contractor shall be present with NRCS at the 30% design review meeting and shall be prepared to give a presentation (prepared by the A/E firm) of the 30% design task details completed to date.

**6.1.3.2** The NRCS will submit to the A/E firm all comments received from the meeting within 2 weeks of the meeting being held.

**6.1.3.3** The A/E firm shall provide to NRCS responses to comments relative to the project design within one week of receipt of comments.

## **6.2 Design Phase (95% and Final Design)**

The contractor shall develop the Final Design Report as defined in the latest version of the CWPPRA Standard Operating Procedures for a 95% design review. The contractor should assess the constructability of the project, and report on such findings in the Final Design Report.

### **6.2.1 Progress Meetings**

The A/E firm will participate in a progress meeting. This meeting should cover progress on design, issues encountered, and upcoming deadlines at a minimum. The intent of this meeting is to make sure the A/E firm and NRCS are in agreement on all aspects of the project. The A/E firm will submit the minutes of each meeting to the COR and CO within one week of this meeting.

### **6.2.2 Preliminary 95% Report**

**6.2.2.1** The A/E firm will submit a Preliminary 95% Design Report to the Contracting Officer within 4 weeks of the A/E firm submitting responses to comments received from the 30% meeting. The Preliminary 95% Design Report shall consist of:

- Narrative (4 hard copies, 1 electronic copy in \*.pdf format) that includes:
  - Details of project features
  - Description of all data collected by the A/E firm

- Calculations performed by the A/E firm with descriptions
- Description of how the project differs in cost, features, and environmental benefits from the project approved in Phase 0
- Complete set of Draft Construction Drawings (4 hard copies, 1 electronic copy in \*.pdf format)
- Complete set of Draft Construction Specifications (4 hard copies, 1 electronic copy in \*.pdf format)
- Revised Cost Estimate (4 hard copies, 1 electronic copy in Excel format)

**6.2.2.2** Within 2 weeks of submitting the Preliminary 95% Design Report, the NRCS will submit the following documents to the A/E firm:

- Comments to the Preliminary 95% Design Report
- OMR&R, monitoring, and administrative cost estimates
- Updated information regarding project benefits

### **6.2.3 Final Design Report**

Final Design means all analysis have been completed for the preferred alternative. Project plans and specifications have been developed and reviewed by the contractor as well as the project team, and the project is ready to request funding for construction. All design documentation shall be provided at the Final Design meeting (95% review).

**6.2.3.1** Within 1 week of receipt of the above documents the A/E firm shall address NRCS's comments and develop the Final Design Report as defined in the latest version of the CWPPRA Standard Operating Procedures for a 95% design review. The Final Design Report shall incorporate all items necessary, to include information submitted by NRCS, to develop a complete package. 4 hard copies and 1 electronic copy in \*.pdf format (cost estimate shall be in Excel format) shall be submitted to the CO and COR. In addition the A/E firm shall submit an electronic copy of the presentation to be used at the 95% design meeting in Power Point format (see Section 6.3.2.2).

**6.2.3.2** Within 2 weeks of receipt of the Final Design Report, the NRCS, USFW, and CPRA will review and NRCS will provide comments to the A/E firm.

**6.2.3.3** Within 1 week from receipt of comments, the A/E firm will submit a final copy of the complete 95% design package as described in section 6.3.3.1 above.

**6.2.3.4** Within 5 weeks of the A/E firm submitting the complete package, the NRCS will schedule a 95% meeting. The contractor shall be present with NRCS at the 95% design review meeting and shall be prepared to give a presentation (prepared by the A/E firm) of the 95% design task details completed to date. This meeting will be held on or before October 2, 2015.

**6.2.3.5** The NRCS will submit to the A/E firm all comments received from the meeting within 2 weeks of the meeting being held.

**6.2.3.6** The A/E firm shall provide to NRCS responses to comments relative to the project design within two weeks of receipt of comments.

**6.2.3.7** Within 6 weeks of receipt of the submitting responses the A/E firm shall update the Final Design. The Final Design shall incorporate all items necessary, to include information submitted by NRCS, to develop a complete package. The A/E firm shall complete the Final Design to include all items identified in the Technical Specification Architect-Engineer Design Services, Project Design. 4 hard copies and 1 electronic copy in \*.pdf format shall be submitted to the CO and COR. In addition, all drawings shall be submitted electronically in \*.dwg format in AutoCADD 2012 along with all associated support files and the cost estimate shall be submitted electronically in Excel format.

## **7.0 SCOPE OF SERVICES FOR CONSTRUCTION SUPPORT**

The services in this section will only be provided should the BS-24 project be funded for construction by the CWPPRA Task Force or another funding source currently not identified. The project currently has no funding for construction.

The following section outlines the various tasks to be performed. Each task is presented in the order in which it will be completed. Listed below are several key areas and milestones the A/E contractor will conduct for the project in accordance with FAR 52.216-22 Indefinite Quantity cited in Contract No. AG-7217-C-09-0026 Design Services.

The NRCS Construction Contracting Officer's Representative, hereinafter referred to as "CCOR" will be responsible for all coordination of necessary Government activities relative to the day-to-day field operations during construction. The CCOR will be responsible for keeping the A/E Engineer informed of current progress, status and issues associated with day-to-day field activities.

The NRCS Administrative Contracting Officer's Representative, hereinafter referred to as "ACOR", will be responsible for all coordination of necessary Government activities relative to the administrative functions during construction and provide the A/E Contractor with any contract changes that may occur and may need to be completed. Only the Contracting Officer has the authority to change any portion of the construction contractor or direct the construction contractor's work.

It shall be the responsibility of the A/E contractor to supply all necessary personnel, equipment and supplies other than those provided by the Government to perform the engineering design and construction assistance services identified within this scope.

### **7.1 Site Showing**

**7.1.1** A site showing will be scheduled for prospective bidders on the construction contract to ascertain the scope of the construction requirements. The A/E contractor shall have present at this site showing the design engineer and any other personnel, as needed, to assist the NRCS with addressing questions that arise from proposed construction contractors during the site showing.

### **7.2 Evaluation of Proposals**

- 7.2.1** The A/E contractor is to assist the NRCS, on an as needed basis, with the evaluation of proposals received through the Request for Proposals (RFP) solicitation. The A/E contractor shall:
  - 7.2.1.1** Evaluate the proposals for compliance with the plans and specifications and make a list of strengths and weaknesses of the proposed plan in written format including recommendations.
  - 7.2.1.2** Evaluate the proposals for constructability and make a list of strengths and weaknesses of the proposed plan in written format including recommendations.
- 7.2.2** The A/E contractor will be assigned as an advisor to the Technical Evaluation Board (TEB) and will not participate in the overall ranking of proposals but will serve as an advisor. The A/E contractor shall assist with questions, interpretations, and recommendations relative to the proposals received. As an advisor, all written communications will be protected as source selection information in accordance with FAR 2.101 and FAR 3.104.
- 7.2.3** The A/E contractor will be required to sign a Source Selection Non-Disclosure Agreement and Conflict of Interest Certificate as part of his assignment to the TEB.
- 7.2.4** As an advisory member of the TEB, the A/E Contractor:
  - 7.2.4.1** May not divulge the A/E Contractor's membership to casual callers.
  - 7.2.4.2** Must refer all attempted communications by Offerors' representatives to the Contracting Officer.
  - 7.2.4.3** May not accept any invitation from any representative of an Offeror for participation in any functions, regardless of how remote they may be from the evaluation process.
  - 7.2.4.4** May not discuss any aspect of the evaluation with other TEB members outside the area designated for deliberations.
  - 7.2.4.5** Shall not assume that a non-participating contractor can be told anything pertaining to the evaluation and source selection.
  - 7.2.4.6** Shall not assume that it is safe to speak about the evaluation because they are among Government employees or in Government buildings.
  - 7.2.4.7** May not discuss the substantive issues of the evaluation with any unauthorized individual even after the announcement of the winning Offeror.
- 7.2.5** It is anticipated that there will be up to eight (8) potential proposals received by Offerors in which the A/E contractor will provide advisory services for evaluation purposes.

- 7.2.6 Proposals shall be returned with recommended actions to the Contracting Officer (CO) and Technical Evaluation Board Chairman within forty-eight (48) hours, or as determined by the CO, after receipt by the A/E.

### **7.3 Conferences**

- 7.3.1 The A/E contractor is to attend and assist the NRCS during the preconstruction conference, progress meetings and other conferences with construction contractors and other NRCS on-site personnel. It is anticipated that conferences will be held for the following:
  - 7.3.1.1 Pre-Construction Conference
  - 7.3.1.2 Progress Meetings – Monthly during construction
  - 7.3.1.3 Other meetings as may be required.
- 7.3.2 It is anticipated that there will be up to twelve (12) potential conferences as a result of this construction project.

### **7.4 Construction Contractor Submittal Reviews**

- 7.4.1 The A/E contractor shall review all shop drawings, change proposals, testing results, and other submittals received from the construction contractor that the NRCS requests assistance. The A/E Contractor shall:
  - 7.4.1.1 Evaluate for compliance with the plans and specifications and make necessary recommendations for corrections and/or approvals in written format.
  - 7.4.1.2 Evaluate for constructability and make necessary recommendations in written format.
  - 7.4.1.3 Recommend approval/disapproval with justification of recommendations in writing.
  - 7.4.1.4 Review and provide recommendations on requested material variances and substitutions in writing.
- 7.4.2 Submittals shall be returned with recommended actions to the Contracting Officer (CO), CCOR and ACOR within forty-eight (48) hours after receipt by the A/E.
- 7.4.3 It is anticipated that there will be up to fifteen (15) potential submittal reviews requested as a result of this construction project.

### **7.5 Modifications**

- 7.5.1 After notification by the NRCS of a possible modification to be prepared, the A/E contractor shall provide their plan of action, including timeline, and proposed modification ideology within one (1) working day (based on a 6-day workweek) for NRCS concurrence prior to work being performed.

**7.5.2** All surveys required or other data required to complete the modification shall be completed by the A/E contractor. This accumulation of data shall be initiated within one (1) day of the approval by the NRCS for the proposed plan of action and timeline for completion of accumulation of the data.

**7.5.3** The A/E contractor shall prepare supplementary drawings, specifications, and estimates that are necessary in support of modifications to the original contract drawings. Construction contract modifications shall be made on the full size and AutoCADD documents utilizing revision clouding and the revision lines in the title block and appropriately signed by a LA licensed engineer. The A/E contractor shall provide documents for construction changes within two (2) working days after receipt of supporting documentation to complete the modification.

**7.5.4** It is anticipated that there will be up to seven (7) potential modifications as a result of this construction project.

**7.5.5** All modifications will be coordinated through the ACOR.

## **7.6 General Assistance/Communications**

**7.6.1** The A/E contractor shall prepare any miscellaneous reports required to administer the construction management aspect of the contract.

**7.6.2** Shall provide on call assistance to the CO and construction COR to respond to questions. "On call" is defined as responding to typical problems that arise during the course of construction. The A/E contractor shall respond to the construction CO or COR immediately or within 4 hours after receipt of the message.

**7.6.3** Shall provide an onsite specialist of the appropriate discipline for observation, troubleshooting and assistance during critical elements of construction at the request of NRCS.

**7.6.4** It is anticipated that there will be at least two (2) on call events per week (100 total) that will require no site visit and at least ten (10) on call events (total) that will require a site visit throughout the duration of the construction activities.

## **7.7 Pre-Final and Final Inspections**

**7.7.1** The A/E contractor shall participate in pre-final inspections; assist with final inspections, and assist the NRCS in development of a detailed punch list of items needing corrected prior to final acceptance. It is anticipated that there will be at least two (2) inspections.

## **8.0 LIMITATIONS ON AUTHORITY OF THE A/E CONTRACTOR**

**8.1** The A/E contractor shall only communicate directly with the NRCS CO, CCOR and ACOR relative to the construction aspects of this project. If contacted directly by the construction contractor or one of their subcontractor's the A/E contractor shall immediately report this to the CO or COR.

8.2 The A/E contractor shall not engage in answering any technical related questions from the construction contractor or any of its respective subcontractors or proposed bidders/offerors.

8.3 The A/E contractor shall not undertake any of the responsibilities of the prime construction contractor or any subcontractors, construction contractor's superintendents or contractor quality control representative or those responsibilities of the NRCS Quality Assurance personnel.

8.4 The A/E contractor shall not expedite or accelerate the work of the construction contractor

8.5 The A/E contractor shall not advise on or issue directions to the construction contractor or his subcontractors relative to any aspect of the means, methods, techniques, sequences or procedures of construction.

## **9.0 PERFORMANCE REQUIREMENT**

The performance requirements for the work described in sections 5, 6, and 7 shall require the A/E firm to follow the performance schedule attached. The A/E firm will perform all tasks identified and will be subject to the turn-around times as described above. The A/E firm shall work diligently to follow the performance times as they are established.

9.1 A performance schedule is provided in Appendix A – Project Schedule.

9.2 The A/E firm shall perform necessary services and travel for the work as defined above.

9.3 The A/E firm shall provide all necessary equipment, including any personal protective equipment, necessary to complete the task.

## **10.0 PERMITS**

10.1 All permits that are needed will be obtained by the A/E firm and shall become the responsibility of the A/E firm to renew or revise, if and when needed. These permits will be identified during the Scoping Meeting.

## **11.0 CERTIFICATION**

All deliverables related to the design services of the scope of work shall be certified and stamped by a professional civil engineer licensed by the State of Louisiana.

## **12.0 GOVERNMENT SUPPLIED INFORMATION & MATERIALS**

This information is to be used exclusively for this task order and in no case is it to be disseminated to any other agency, contractor or persons without direct permission from the Contracting Officer.

12.1 BS-24 Phase 0 Project Fact Sheet, Map, Wetland Value Assessment, Shape files, and Engineering Cost Estimate. (PDF, .doc, and .xlsx)

12.2 NRCS completed topographical and bathymetric surveys of the marsh creation area and terrace fields. (.csv file, and PDF of field notes)

- 12.3 Magnetometer surveys completed by T. Baker Smith through AE services contract with NRCS (PDF report, electronic data files, and PDF field notes)
- 12.4 Benchmark Data Sheet used for all surveying. (PDF)
- 12.5 Final Geotechnical Report completed by GeoEngineers through AE services contract with NRCS. (PDF and .dxf)
- 12.6 Geotechnical Investigation completed by USACE. (Electronic Copy)
- 12.7 Final wave modeling analysis completed by FTN Associates through AE services contract with NRCS. (PDF report, electronic data files if needed)
- 12.8 A copy of the latest version of the CWPPRA Standard Operating Procedures. (PDF)
- 12.9 A copy of the Right of Entry for lands owned by Delacroix Corp in the BS-24 project area.
- 12.10 A copy of the NRCS-LA Technical Specification, Architect-Engineer Design Services, Project Design.
- 12.11 The following items will be provided to the A/E firm at the timeframe indicated above:
  - 12.11.1 Comments on the Project Feature Design Report
  - 12.11.2 Land Ownership information for this project (Electronic copy)
  - 12.11.3 Any oyster leases potentially impacted
  - 12.11.4 A letter from the State Historic Preservation Office (SHPO), acknowledging initiation of cultural resources coordination. (PDF)
  - 12.11.5 Revised OMRR&R, monitoring, and administrative cost estimates after receipt of the Project Feature Design Report
  - 12.11.6 Updated information regarding project benefits after receipt of the Project Feature Design Report
  - 12.11.7 Comments received from the 30% Meeting
  - 12.11.8 Comments on the Preliminary 95% Design Report
  - 12.11.9 Revised OMRR&R, monitoring, and administrative cost estimates after receipt of the Preliminary 95% Design Report
  - 12.11.10 Updated information regarding project benefits after receipt of the Preliminary 95% Design Report
  - 12.11.11 Comments received from the 95% Meeting
  - 12.11.12 Any other existing information or existing materials that may be available from NRCS deemed, by the contractor, as necessary for the purposes of

completing the scope of work included in this task order shall be requested in writing to the CO.

### **13.0 PERFORMANCE TIME**

The performance time for deliverables required under this task order shall be from the task order award date until the final deliverables of the As-Builts have been submitted and approved by the NRCS.

### **14.0 ADDITIONAL INFORMATION**

Ms. Vicki Supler will be the CO on this task order and may be reached at 318-473-7645 or [vicki.supler@la.usda.gov](mailto:vicki.supler@la.usda.gov).

Mr. Brandon Samson, P.E. will be the COR for the Design Services and the ACOR for the Construction Support Services on this task order and may be reached at 318-473-7793 or [brandon.samson@la.usda.gov](mailto:brandon.samson@la.usda.gov). Questions relative to the design requirements of this task order should also be directed to Mr. Samson.

The CCOR and TEB Chairman will be assigned at a later date. The A/E firm will be notified in writing from the CO when this decision has been made.

**ONLY THE CONTRACTING OFFICER MAY AUTHORIZE CHANGES TO THIS TASK ORDER.**

## **APPENDIX B**

### **TIMELINE**

Weeks Elapsed	Date	Task Item
	Monday, January 26, 2015	Preliminary Scoping meeting report due
1	Monday, February 02, 2015	NRCS comments on preliminary scoping report due to contractor
0	Friday, February 06, 2015	NTP Design Task
<b>PRELIMINARY PHASE (30% DESIGN) - (Item 6.1)</b>		
<b>PROJECT FEATURE ALTERNATIVES - (Item 6.1.1)</b>		
2	Thursday, February 19, 2015	Preliminary Alternatives Report Due (Item 6.1.1.3)
1	Thursday, February 26, 2015	Presentation of Preliminary Alternatives (Item 6.1.1.4)
2	Friday, March 13, 2015	NRCS, USFW, CPRA Comment due (Item 6.1.1.5)
0	Friday, March 13, 2015	Permission to begin Project Feature Design (Item 6.1.1.6)
<b>PROJECT FEATURE DESIGN - (Item 6.1.2)</b>		
3	Thursday, April 02, 2015	Preliminary Project Feature Design Report due (Item 6.1.2.6)
<b>30% Design - (Item 6.1.3)</b>		
2	Friday, April 17, 2015	NRCS, USFWS, CPRA comments, ownership, oyster, CR, etc. due to contractor (Item 6.1.3)
1	Friday, April 24, 2015	30% Design Report Package due (Item 6.1.3)
1	Friday, May 01, 2015	NRCS will announce 30% Design Meeting (Item 6.1.3.1)
2	Friday, May 15, 2015	NRCS will post 30% Design Materials (Item 6.1.3.1)
2	Thursday, May 28, 2015	30% Design Meeting
2	Friday, June 12, 2015	Comments from 30% design meeting due back to contractor (Item 6.1.3.2)
1	Friday, June 19, 2015	Contractor answers to 30% design comments and questions due (Item 6.1.3.3)
<b>DESIGN PHASE (95% DESIGN) - (Item 6.2)</b>		
<b>PROGRESS MEETINGS - (Item 6.2.1)</b>		
	TBD	Project Team Meeting to Review Design Progress
	TBD	Meeting Minutes Due
<b>PRELIMINARY 95% REPORT (Item 6.2.2)</b>		
	TBD	Preliminary 95% design package due (Item 6.2.2.1)
	TBD	NRCS comments on the Preliminary 95% package due back to the contractor (Item 6.2.2.2)
<b>FINAL DESIGN REPORT (Item 6.2.3)</b>		
	TBD	Final Design Report Package (95% Design) due (Item 6.2.3.1)
	TBD	NRCS, USFW, CPRA comments due (Item 6.2.3.2)
	TBD	Final Complete 95% package due (Item 6.2.3.3)
	TBD	Announce 95% design meeting (Item 6.2.3.4)
	TBD	Post 95% design package (Item 6.2.3.4)
	TBD	<b>95% Design Meeting</b>
	TBD	Comments from 95% Design Meeting due to the contractor (Item 6.2.3.5)
	TBD	95% comments addressed by contractor due (Item 6.2.3.6)
	TBD	Final Design due to NRCS (Item 6.2.3.7)

**APPENDIX D**  
**MINUTES FROM SCOPING MEETING**

Site Showing Date/Time	15-Jan-15					
Site Name	BS-24 Terracing & Marsh Creation Project - Design Scope of Services					
Contractor/Company	Street Address	City, State	Phone	Email		
1	Vicki Supler, NRES 3737 Govt Street	Alexandria, LA	318-473-7645	Vicki.Supler@la.usda.gov		
2	Chris Wheat, LGH 2746 Hwy 384	Bell City, LA	337-905-1079	chris@harper-group.com		
3	Leonard Harper, LGH "	"	"	Leonard Harper - group.com		
4	Ed Kuntz, NRES 907 Florida Blvd SW	Denham Springs, LA	225-665-4753	Edward.Kuntz@la.usda.gov		
5	Lolma Broussard LAFAYETTE LA 70506 646 CASWORTH BLVD	LAFAYETTE, LA	337-291-3069	loicand.broussard @la.usda.gov		
6	ANGELA TRAHAN "	"	337-291-3137	Angela.Trahan @FWS.gov		
7	Garrin Pittman / CPRA 450 Laurel, B.R. LA	Baton Rouge	225-229-3569	Garrin.Pittman @LA.gov		
8	Douglas Baker 105 Taber	Thibodaux	985-447-6050	doug.baker@la.usda.gov		
9	Brandon Samsone 3737 Govt St	Alexandria, LA	318-473-7793	brandon.samsone @la.usda.gov		
10						
11						
12						
13						
14						



## Lonnie G. Harper & Associates, Inc.

CIVIL ENGINEERING AND LAND SURVEYING CONSULTANTS

2697 GRAND CHENIER HIGHWAY • GRAND CHENIER, LOUISIANA • 70643-0229 • PHONE: 337.538.2574 • FAX: 337.538.2596  
2746 LOUISIANA HIGHWAY 384 • GRANDLAKE COMMUNITY BRANCH, BELL CITY, LA • 70630-5127 • 337.905.1079 • FAX: 337.905.1076

### MEETING MINUTES

<b>Project</b>
<b>Name:</b> Terracing and Marsh Creation South of Big Mar (BS-24)
<b>Agency:</b> Natural Resource Conservation Service (NRCS)
<b>Location:</b> Plaquemines Parish, Louisiana

<b>Meeting Details</b>	
Title	A/E Scoping Meeting
Location	NRCS Watershed Office, Thibodaux, Louisiana
Date	01/15/2015
Time	8:00 AM

<b>Attendees</b>		
Vicki Supler	Natural Resource Conservation Service (NRCS)	318-473-7645
Brandon Samson	Natural Resource Conservation Service (NRCS)	318-473-7793
Ed Kantz	Natural Resource Conservation Service (NRCS)	225-665-4253
Loland Broussard	Coastal Protection and Restoration Authority (CPRA)	337-291-3069
Angela Trahan	U.S. Fish and Wildlife Service (USFWS)	337-291-3137
Carrin Pittman	Coastal Protection and Restoration Authority (CPRA)	225-229-3569
Doug Baker	Natural Resource Conservation Service (NRCS)	985-447-6050
Chris Wheat	Lonnie G. Harper & Associates, Inc. (LGH) – A/E Contractor	337-905-1079
Leonard Harper	Lonnie G. Harper & Associates, Inc. (LGH) – A/E Contractor	337-905-1079

The minutes of this meeting were recorded and published by Chris Wheat (LGH) and distributed to NRCS. Please notify of any errors or omissions.

- (1) Following introductions, Brandon Samson and Vicki Supler gave a brief overview of the document titled "Scope of Services" for the BS-24 project. Throughout the review of the document the following questions/comments were presented:
  - a. During the meeting it was stated that any questions directed to other NRCS consultants must be channeled through Ms. Vicki Supler.
  - b. Will a water bottom assessment of Lake Lery be required to locate existing oyster resources and quantify potential impacts to those resources caused by construction activities? NRCS and USFWS stated that the project area was not an oyster seed ground; therefore LGH will not be required to perform a water bottom assessment.
  - c. Scope of services state that LGH will be responsible for all permitting. NRCS provided further clarification that LGH will be responsible for preparing the environmental permit drawings (i.e., Coastal Use and USACE permits), but NRCS will actually submit the permit application and acquire the permits.
  - d. LGH stressed concern about using the current survey data associated "Borrow Area A" for the development of the BS-24 drawings. Currently the BS-16 project is underway and could potentially remove spoil from "Borrow Area A", making the existing data useless with regards to determining potential borrow volumes. NRCS stated that as-



## **Lonnie G. Harper & Associates, Inc.**

*CIVIL ENGINEERING AND LAND SURVEYING CONSULTANTS*

*2697 GRAND CHENIER HIGHWAY • GRAND CHENIER, LOUISIANA • 70643-0229 • PHONE: 337.538.2574 • FAX: 337.538.2596  
2746 LOUISIANA HIGHWAY 384 • GRANDLAKE COMMUNITY BRANCH, BELL CITY, LA • 70630-5127 • 337.905.1079 • FAX: 337.905.1076*

- built drawings of the borrow area would be provided if the BS-16 contractor dredged material from this area. If the area is dredged during the BS-16 project and there is not enough material to satisfy the BS-24 fill volume, then the acreage of "Borrow Area A" may have to be increased. If the borrow area is expanded, additional geotechnical investigations may be required. This item(s) will have to be addressed at a later date.
- e. LGH also requested the as-built drawings of the lake rim restoration work associated with BS-16 project (when it becomes available) that occurs in the BS-24 project area (western portion of Lake Lery).
  - f. It was stated that NRCS would provide LGH with a copy of the BS-16 project drawings and specifications in the week(s) to come for reference.
  - g. USFWS stated there was a delta formation near the mouth of Bayou Mandeville and implied it would be best to avoid expanding the borrow area to this area of the lake. LGH has noted the request and will incorporate that information into any potential alterations to the borrow area, should it be required.
  - h. NRCS stated there are no defined access routes for construction equipment through Lake Lery. The BS-16 drawings and specifications may provide some suggested draft depths for vessels transporting construction equipment.
  - i. LGH inquired about which party will be responsible for obtaining land rights from the various pipeline companies. It was stated that NRCS will obtain all land rights for the BS-24 project and provide all land rights information to LGH.
  - j. LGH inquired about the target marsh elevation (year 20) based on the elevations of existing "healthy" marshes in the project area. As stated in the "Scope of Services", NRCS recommends a finished elevation of +1.0 ft NAVD 88, Geoid 12A at year 20. This elevation seems appropriate for this project and LGH will agree with this recommendation unless a more suitable elevation is determined at a later date.
  - k. LGH also inquired about Relative Sea Level Rise (RSLR) in the project area and if the NRCS had a specific rate which they felt would be best for the project. RSLR rates vary across the Louisiana Gulf Coast, therefore this issue will have to be investigated further. It was recommended by USFWS to present a low, average, and high RSLR rate in the 30% design report, along with our recommendations.
  - l. Due to the close proximity of the BS-16 and BS-24 projects, LGH and NRCS agreed it may be best to provide LGH with a copy of all pertinent contract modifications through the BS-16 construction project. Applicable modifications can then be incorporated into the BS-24 contract documents. NRCS will provide all necessary documentation to LGH as construction (BS-16) progresses.
  - m. NRCS informed LGH that Colonial Pipeline would be installing a new line in the near future within the project area. If Colonial cannot provide as-built survey data of this new line; additional survey work may be required to incorporate this new line into the contract documents.
  - n. Lastly, the 2015 and 2016 project timelines were discussed in detail. Based on the discussions held, an agreement was reached that LGH would adhere to the 2015 timeline through the 30% design meeting. After the 30% design meeting, the timeline for the BS-24 project will have to be re-evaluated.



## **Lonnie G. Harper & Associates, Inc.**

*CIVIL ENGINEERING AND LAND SURVEYING CONSULTANTS*

*2697 GRAND CHENIER HIGHWAY • GRAND CHENIER, LOUISIANA • 70643-0229 • PHONE: 337.538.2574 • FAX: 337.538.2596  
2746 LOUISIANA HIGHWAY 384 • GRANDLAKE COMMUNITY BRANCH, BELL CITY, LA • 70630-5127 • 337.905.1079 • FAX: 337.905.1076*

- (2) After completing the "Scope of Service" review, all attendees departed from the Thibodaux NRCS office and traveled to the boat launch in Braithwaite, Louisiana.
- (3) All parties reconvened at approximately 11:30 a.m. at the boat launch and departed to the various work sites associated with the BS-24 project. There were no unexpected site conditions discovered during the site visit.
- (4) All parties returned to the boat launch at approximately 1:00 p.m., at which time the meeting/site visit ended, and all attendees departed from the site.

This concludes the minutes for the BS-24 scoping meeting and site visit. If any items were omitted or are incorrect, please feel free to contact our firm at your convenience.

Regards,

Chris Wheat, PE  
Lonnie G. Harper & Associates, Inc.