
*Sanitary Sewer Overflow (SSO) Control
and Wastewater Facilities Program*

Requirements for Engineers

City of Baton Rouge/Parish of East Baton Rouge
Department of Public Works



Submitted by

CH2MHILL

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1 Introduction

This document provides the requirements for the preparation of contract documents associated with the City of Baton Rouge/Parish of East Baton Rouge (C-P) Sanitary Sewer Overflow (SSO) Control and Wastewater Facilities Program. The term Engineer is defined as an engineering design firm under contract with the C-P and producing work on the Program. These requirements are provided to encourage consistency in the design approach used by various Engineers.

While the purpose of these requirements is to assure uniformity, it is not intended to stifle Engineer's creativity, design innovation, and ingenuity. Engineers shall review these requirements and adapt them for design of the facilities for which they are responsible. Engineers are ultimately responsible for their design, and this responsibility is in no way diluted or absolved by these requirements.

It may be necessary for the Engineer to deviate from these requirements. In such cases, the Engineer shall immediately bring this matter to the attention of the Program Manager (PM) by completing and submitting the form included as Attachment A. The PM reserves the right to allow or disallow the deviation from the requirements. If the deviation will impact design contract terms, then a Supplemental Agreement will be negotiated between the Engineer, the PM, and the C-P.

2 Quality Assurance

2.1 Quality Assurance Goals

The following items represent the minimum quality assurance (QA) goals for this Program:

- Projects that are well-coordinated with one another
- Cost-effective design and construction Cost-effective, operable and maintainable projects
- Contract compliance
- Early identification and control of scope of work expansion
- Performance according to project schedule
- Application of sound engineering in plans and specifications
- Use of consistent processes and procedures
- Public disruption minimized during design and construction
- Documented information in accordance with Program processes and procedures
- Complete dissemination of information to all involved staff members

2.2 Quality Assurance Plan

A project-specific QA plan shall be submitted with the Engineer's Work Plan, including team assignments and the Engineer's standard QA procedures. The Engineer shall appoint a QA Manager and Quality Control (QC) team members for the project. The QA Manager shall:

- Be available to the project engineers and project managers as well as the Program Project Manager for meetings, consultations, and discussions
- Provide technical direction to the project team
- Review documents prior to submittal to the PM or the C-P, sign letters or memoranda stating that the QC review has occurred and the document meets the Engineer's quality standards, and sign Design Checklists where applicable
- Be solely responsible for the quality of the work

2.3 Review Processes

QA reviews will occur at each design milestone. The Engineer shall:



- Review documents prior to submittal to the PM or the C-P, sign letters or memoranda stating that the QC review has occurred and the document meets the Engineer's quality standards, and sign Design Checklists where applicable
- Understand PM and C-P comments, which will be presented on a standard review form
- Respond to comments on the standard review form
- Adjudicate differences between the author of the document and the reviewer
- Document the final results

2.4 Calculations and Notebooks

Calculations shall be prepared, checked, and reviewed. Calculations shall be made available to the PM for informational purposes, if requested.

Project notebooks shall be kept by the Engineer's project manager and discipline leads. Project notebooks shall contain correspondence, engineering calculations, engineering assumptions and directions, and completed checklists with review comments. Project notebooks are part of the project documents and may be archived by the PM at the end of the project.

3 Design Codes and Standards

Designs prepared as part of the Program shall conform to the Program Design Requirements and the latest adopted version of all applicable local, state, and federal regulations. Applicable codes and standards and their editions shall be verified at the time of final design work. Requirements include, but are not limited to:

- Program Design Requirements including SCADA Master Plan (http://www.brprojects.com/sewer/pages/contractor_guidelines.htm)
- United States Environmental Protection Agency (EPA)
- Louisiana Department of Environmental Quality (DEQ)
- Louisiana Department of Health and Hospitals (DHH), Office of Public Health
- Louisiana Department of Public Safety, Office of State Fire Marshal
- Hydraulic Institute Standards
- Recommended Standards for Wastewater Facilities, Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers (1990 Edition)
- Design of Wastewater and Storm water Pumping Stations, Manual of Practice FD-4, Water Environment Federation
- American Society of Civil Engineers (ASCE) and Water Pollution Control Federation, ASCE Manual and Report on Engineering Practice No. 60 - Gravity Sanitary Sewer Design and Construction
- American Society of Civil Engineers (ASCE) and Water Pollution Control Federation, ASCE Manual and Report on Engineering Practice No. 76 - Design of Municipal Wastewater Treatment Plants
- Occupational Safety and Health Act (OSHA)
- City of Baton Rouge/East Baton Rouge Parish, Department of Public Works (DPW) Engineering Division, Standard Specifications for Public Works Construction (latest adopted edition)
- City of Baton Rouge/East Baton Rouge Parish, Louisiana, Unified Development Code (UDC)
- City of Baton Rouge/East Baton Rouge Parish, DPW Engineering Division, Standard Details for Public Works Construction (latest adopted edition)
- State of Louisiana Department of Transportation (DOT), Standard Specifications for Roads and Bridges (latest adopted edition)



- Stormwater Best Management Practices for the City-Parish – Master Development Program, City of Baton Rouge/East Baton Rouge Parish Planning Commission
- International Building Code (IBC), 2006 Edition
- International Fuel Gas Code (IFGC), 2006 Edition
- International Mechanical Code (IMC), 2006 Edition
- Louisiana State Plumbing Code, 2000 Edition
- International Fire Code (IFC), 2006 Edition
- International Energy Conservation Code, 2006 Edition
- NFPA 1 Fire Code, 2006 Edition
- NFPA 70, National Electrical Code, 2005 Edition
- NFPA 101 Life Safety Code, 2006 Edition
- NFPA 820 Standard for Fire Protection in Wastewater Treatment and Collection Facilities, 2008 Edition
- ICC/ANSI 117.1 American National Standard Accessible and Useable Buildings and Facilities, 2003 Edition
- Americans with Disabilities Act (ADA), January 26, 1992
- American Concrete Institute (ACI) 350-01, Code Requirements for Environmental Engineering Concrete Structures
- ACI 318, Building Code Requirements for Reinforced Concrete
- ACI 530, Building Code Requirements for Concrete Masonry Structures
- American Institute for Steel Construction (AISC), Steel Construction Manual
- ASCE 7, Minimum Design Loads for Buildings and Other Structures
- ANSI/AWWA D110, Wire- and Strand-Wound, Circular, Concrete Water Tanks
- Steel:
 - AISC Specifications for Structural Joints Using ASTM A 325 or A 490 Bolts
 - AWS Structural Welding Code AWS D1.1
 - AISC Manual of Steel Construction, Thirteenth Edition
 - AISC 341-05 Seismic Provisions for Structural Steel Buildings, Including Supplement No. 1 dated 2006
- Aluminum: Aluminum Association Specifications for Aluminum Structures
- Open-Web Steel Joists: Steel Joist Institute Standard Specifications



- Metal Deck: AISI Specifications for the Design of Light-gauge, Cold-formed Steel Structural Members
- Light Gauge Metal Framing: AISI Specifications for the Design of Light-gauge, Cold-formed Steel Structural Members
- Metal Grating: National Association of Architectural Metal Manufacturers Metal Grating Manual and Heavy Duty Metal Grating Manual
- Fiberglass: Extren Glass Reinforced Structural Engineering Manual, Morrison Molded Fiber Glass Company
- American Water Works Association (AWWA) Standards
- Applicable American Society for Testing and Materials (ASTM) and American Water Works Association (AWWA) pipe standards
- Uni-Bell Plastic Pipe Association, Handbook of PVC Pipe, Design and Construction
- Applicable requirements of the Brick Institute of America
- Instrument Society of America (ISA)
- National Electrical Manufacturers' Association (NEMA)
- American National Standards Institute (ANSI)
- Institute of Electrical and Electronics Engineers (IEEE)
- ANSI/IEEE Standard 141 for Motor Control Equipment
- IEEE 519-1992 Recommended Practices for Harmonic Control in Electrical Power Systems
- IEEE Standard 142 for Grounding
- IEEE C62 for application of Transient Voltage Surge Suppression
- Air Moving and Conditioning Association (AMCA)
- Associated Air Balance Council (AABC)
- Sheet Metal and Air Conditioning Contractors National Association (SMACNA)
- American Society of Mechanical Engineers (ASME)
- American Welding Society (AWS)
- American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE)

4 Engineer Selection

4.1 Engineer Selection Process

A Program Project Manager (PPM) will be assigned by the PM to each design project. The PM will develop the design scope of work for use in the selection of Engineers.

An Engineer will be selected for each project identified in the Program through the C-P Engineer's and Surveyor's Selection Board. The PM will negotiate the contract terms with the Engineer on behalf of the C-P.

4.2 Request for Qualifications and Advertisement

The DPW will publicly advertise Request for Qualifications (RFQs) on the Program website (<http://www.brprojects.com/rfqmanager/>). Interested engineering firms shall register through the web-based RFQ manager. The RFQ package will include a preliminary scope of work to assist the Engineers in selecting the appropriate team, sub-consultants and specialty sub-consultants.

The preliminary scope of services included in the RFQ will include:

- Project scope description, quantities, limits, and boundaries
- Reference to standards, codes, regulations, and specifications
- Anticipated project construction cost budget
- Delivery schedule required for the project

The Engineer's response to the RFQ shall address all scope issues and provide the following information:

- Qualifications and number of staff assigned to the project
- Engineer's current workload and qualifications of individuals proposed to do the work

4.3 Minority Business Requirements

Minority business requirements may be stated in the RFQ.

5 Pre-Proposal Meeting and Contract Negotiation

5.1 Pre-Proposal Meeting and Scope of Engineering Services

A pre-proposal meeting will be held between the DPW, PM, and the Engineer. At the pre-proposal meeting, the Engineer will be provided a Project Definition, Contract for Engineering Services (Attachment B), and Standard Scope of Engineering Services (Attachment C). As part of the pre-proposal meeting, a site visit will also be made to familiarize the project team with the project site and to review the project scope.

Primary information included in the Project Definition will include:

- Detailed project description, layout sketches, limits, and boundaries
- Design criteria and requirements
- Special design, coordination or construction requirements
- Type of construction contract preferred (e.g., lump sum, unit price)

Any changes in scope resulting from the fee negotiations shall be included under Section 11.0, Modifications to Scope of Services, in the Standard Scope of Engineering Services.

5.2 Contract Negotiations

To evaluate the reasonableness of the proposed fee and facilitate progress payments, it is required that proposals be written in such a manner that provide adequate cost breakdown details. The Engineer shall provide a drawing list at each design phase along with the associated man-hours.

Attachment D includes a Fee Proposal Form to be used by the Engineer. The Fee Proposal Form provides a standardized breakdown of items to be included in the cost proposal. Detailed descriptions of the proposal items can be found in the Standard Scope of Engineering Services. In addition to the fee proposal, the Engineer shall prepare and submit a detailed list of assumptions that were used to develop the fee proposal.

Once the Engineer has submitted the fee proposal, the C-P and the PM will review the proposal to ascertain the following:

- Compliance with the requested scope of work, completeness, and understanding
- Clarification of ambiguity in the draft proposal especially related to deliverables at each phase of the work
- Consistency with the proposed schedule or milestones



- The fee proposal is fair and within the normal range for work of this type and within the funds set aside in the Program Delivery Plan

Contract negotiations will proceed as follows:

- Following review of the initial fee proposal, a negotiation meeting between the Engineer, the C-P, and the PM will be held
- The Engineer will re-submit their fee proposal based on comments received.
- The PM and C-P will review the revised fee proposal, and a second negotiation meeting will be held
- The Engineer will submit a final fee proposal
- The PM will send the final fee proposal to the C-P with or without endorsement

The C-P will either accept the recommendation and send the contract amount to the Metro Council for contract authorization or will begin negotiations with another Engineer.

6 Design, Bidding, and Construction Assistance Services

6.1 Design and Bidding Services

The Engineer shall provide engineering design and bidding services as described in Attachment C, Standard Scope of Engineering Services. In addition, engineering services shall be in accordance with the Project Definition and all other applicable Program Requirements.

The Engineer shall utilize the land, utilities, and permits checklist provided in Attachment E.

6.2 Engineering Services During Construction

The Engineer will scope and price engineering services during the construction phase as described in Attachment C, Standard Scope of Engineering Services when Final Documents have been received for Bidding. The C-P may authorize construction phase services as a Supplemental Agreement.

Attachment A
Deviation from Program Requirements

Deviation from Program Requirements

Request No.:

Date:

Project:

Engineer:

Affected Documents:

[Please provide full description of the Program Requirements element from which deviation or change is requested. Include affected specification section and/or subsection, equipment number, drawing number, etc., to enable the City/Parish and Program Manager to fully and easily understand the element from which deviation is proposed.]

Proposed Change:

[Please provide a detailed description of proposed change. Attach sketches, specification or other applicable material which fully describes the scope of your proposal.]

Reason for Request:

[Please provide complete documentation and justification for this Request. Include cost-effectiveness analysis if applicable, and any other supporting data and analysis that will facilitate evaluation.]

Date by Which Approval is Requested: [Please explain why]

Impact of Proposal On:

a: Design Schedule & Cost

[Please explain as necessary]

b: Construction Schedule & Cost

[Please explain as necessary]



Remarks

[Please include any other information and/or concerns not covered above.]

SIGNED:

APPROVED:

[Project Manager]

[Name of Engineer]

[Program Manager]

DENIED:

[Program Manager]

Additional Information/Explanation from Program Manager:

Attachment B
Contract for Engineering Services

Account No. _____

Purchase Order No. _____

CONTRACT FOR ENGINEERING SERVICES

This Contract, made and entered into at Baton Rouge, Louisiana, effective this _____ day of _____, 20_____, by and between the **East Baton Rouge Sewerage Commission (EBROSCO)**, an agency and instrumentality of the City of Baton Rouge and Parish of East Baton Rouge, herein referred to as Parish and _____, herein referred to as Engineer.

Engineer shall provide the services as described herein for _____, **DPW Project Number** __ as authorized by Resolution # _____ of the Metropolitan Council for the City of Baton Rouge and Parish of East Baton Rouge adopted on __.

Engineer agrees to proceed, upon written notice of the Director of Public Works, with all services necessary for the performance, in proper sequence and in the time specified, of the items of work for the Project as hereinafter set forth. Services by Engineer will be subject to review and administration by the Engineering Division - Sewer Administration, Department of Public Works, unless designated otherwise by the Director of Public Works. All the services required hereunder will be performed by Engineer or under his supervision and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under Louisiana State and local law to perform such services.

SCOPE OF SERVICES: The services to be rendered by Engineer for this contract shall be divided into various phases covering all investigations, preliminary design, detailed design, bidding services and engineering services during construction. These phases of work are described more fully in the attached Exhibit A. Additional project specific information and requirements are available in the _____ Project Definition.

The Parish may from time to time request changes in the scope of the services of Engineer to be performed hereunder. Such changes including any increase or decrease in the amount of the Engineer's compensation which are mutually agreed upon by the Parish and Engineer shall be incorporated in written amendments to this Contract.

GENERAL REQUIREMENTS: With the exception of the data specifically listed to be furnished by the Parish, Engineer shall, for the agreed fees, obtain all data and furnish all services and materials required to fully develop and complete the project through the design phases as described herein, including any and all work beyond the limits of the project that may be necessary to make proper connections at the beginning and end of the project, and provide assistance during the construction phase. All items required to accomplish these results, whether or not specifically mentioned in this contract, including attendance by Engineer at meetings and public hearings, are to be furnished at the expense of Engineer.



SERVICES TO BE PERFORMED BY PARISH: The Parish will furnish, upon request in writing of Engineer, without charge, the services and data applicable to the Parish and to the Project as specified in Exhibit A.

COMPENSATION AND PAYMENT: The Parish shall pay and Engineer agrees to accept the following as full compensation for the engineering services to be performed under this contract as follows:

Basic Engineering Design Services:

Phase I, General Requirements	\$ _ Lump Sum
Phase II, Preliminary Engineering (30%)	\$ _ Lump Sum
Phase III, 60% Engineering Design	\$ _ Lump Sum
Phase IV, Final Design & Contract Documents	\$ _ Lump Sum

Additional Engineering Services:

Phase V, Bid Phase Services	\$ _ Lump Sum
Phase VI, Construction Phase Services	<u>To Be Negotiated</u>
Surveying - Topographic	\$ _ Lump Sum
Surveying - Right of Way Acquisition	<u>To Be Negotiated</u>
Geotechnical Services	\$ _ Lump Sum
Environmental Services	\$ _ Lump Sum
Wetland Determination and Delineation	\$ _ Lump Sum
Hydraulic Analysis	\$ _ Lump Sum
Physical Modeling	\$ _ Lump Sum
Electrical Services	\$ _ Lump Sum
Architectural Services	\$ _ Lump Sum
Landscape Architect Services	\$ _ Lump Sum

Total Contract Amount Authorized To Date \$ Not To Exceed

Note: Phase I, General Requirements services to be provided throughout the duration of the contract.

Monthly invoices for services completed to date may be submitted by Engineer, and subject to the approval of the Director of Public Works, will be paid within 30 days after approval. Under no circumstances will Associated Project Costs be allowed. Under no circumstances will any mark-up be allowed on any subconsultant's, vendor's costs or any other direct costs, other than what has been negotiated and agreed to as represented in the attached Exhibit and Costs Schedules.

CONTRACT TIME: The services to be performed under each phase of this contract shall be commenced promptly by Engineer upon receipt of specific notice from the Director of Public Works or his authorized representative to proceed with that phase, and shall be completed as follows:

The engineering services as required under Phases II, III, and IV shall be completed within _ calendar days.

The engineering services during bidding and construction, as required by Phases V and VI shall be completed within ___ calendar days.

OWNERSHIP OF DOCUMENTS: All data collected by Engineer and all documents, notes, drawings, tracings, GIS files, and other files and data collected or prepared in connection with the services, except



Engineer 's personal and administrative files, shall become the property of Parish and Parish shall not be restricted in any way whatsoever in its use of such material. The Parish assumes full responsibility for the use of this material on any project.

No public news releases, technical papers or presentations concerning this project may be made without prior written approval of the Parish, except that the Engineer may make reference to this project when presenting its experience and qualifications to other parties.

DELAYS AND EXTENSIONS: Engineer will be given an extension of time for delays beyond their control such as weather or those caused by tardy approvals of work in progress, but no additional compensation shall be allowed for such delays.

TERMINATION OR SUSPENSION: This contract may be terminated by mutual agreement and consent of the parties hereto or by either party upon failure of the other party to fulfill its obligations as set forth in this contract, proper allowance being made for circumstances beyond the control of either party.

If terminated, Engineer shall deliver to the Department of Public Works all drawings and records of the work compiled to the date of termination and the Parish shall pay in full for all work accomplished up to the date of termination, including any retained percentage earned to date.

Should the Parish find it necessary to suspend or terminate any portion of the work for lack of funding or other circumstances beyond its control, this may be done by ten (10) days notice given by the Parish in writing to that effect. If suspended, the work may be reinstated and resumed in full force and effect upon receipt from the Parish of thirty (30) days notice in writing to that effect.

This agreement shall ipso-facto terminate three years after the date of any suspension of the work as provided above if the work has not been reinstated and resumed by notice from the Parish during the three year period, and neither party shall have any further obligation to the other party.

DISPUTES: Any dispute concerning a question of fact in connection with the work not disposed of by agreement between the parties shall be referred to the Director of Public Works or his duly authorized representative for determination, whose decision in the matter shall be final and conclusive as to the parties to this contract. This disputes clause does not foreclose the rights of the parties with respect to questions of law in connection with decisions provided for in the foregoing sentence.

INDEPENDENT CONTRACTOR OBLIGATION: Engineer shall be an independent contractor under this contract and shall assume all of the rights, obligations and liabilities applicable to him as an independent contractor hereunder. Engineer shall perform all details of the services in a manner consistent with that level of care and skill ordinarily exercised by other professional consultants under similar circumstances at the time the services are performed, with the Parish interested only in the results of the work.

COMPLIANCE WITH APPLICABLE LAWS: Engineer shall procure all permits and licenses applicable to the services to be performed and shall comply with any and all Local, State and Federal laws including those regarding age, citizenship, hours, wages and conditions of employment affecting the service covered by this agreement. Engineer shall pay the contributions measured by wages of his employees required by the Federal Unemployment Tax Act, Federal Insurance Contributions Act, and any other payroll tax as required by law.



ENVIRONMENTAL REQUIREMENTS: Engineer agrees and Engineer shall obtain Engineer’s Subconsultants agreement that the work and duties required to be performed in accord with the Contract shall meet and comply with all environmental requirements to include the laws and regulations of the United States and the State of Louisiana, and shall satisfy and be in accord with the provisions of the Consent Decree with attachments entered into by and between the City of Baton Rouge/Parish of East Baton Rouge, the DEQ, the EPA and the United States in the matter entitled, “ United States of America and State of Louisiana v. City of Baton Rouge and Parish of East Baton Rouge”, No. 01-978-B-M3, United States District Court, Middle District of Louisiana.

Engineer specifically acknowledges that the Parish has made the Consent Decree with attachments available for review and Engineer and Engineer’s Subconsultants have read the Consent Decree with attachments or the pertinent parts thereof and are familiar with the terms and conditions thereof, and will pay any fines or penalties that will be assessed against the Parish or the City of Baton Rouge (or reimburse them therefore) which are imposed by the terms of said Consent Decree with the attachments resulting from the actions of Engineer and/or Engineer’s Subconsultants in their performance of or their failure to perform its duties under this Contract.

INDEMNITY: Engineer agrees that it shall indemnify and hold the Parish free and harmless from any and all claims of whatsoever kind or nature, including but not limited to, damages to persons or property and any and all costs and expense relating to the defense of any such claims, including reasonable attorney’s fees incident thereto, that may arise out of, or by reason of, the performance of professional services under this contract by Engineer to the extent due to any negligent act, error or omission of Engineer , Engineer ’s employees or sub-contractors.

ENGINEER’S AND SUB-CONSULTANT’S INSURANCE: Engineer and any sub-consultants shall carry and maintain at least the minimum insurance as specified below until completion and acceptance of the work covered by this contract. Engineer shall not commence work under this contract until certificates of insurance have been provided to and approved by the City-Parish Purchasing Division. Insurance companies listed on certificates must have industry rating of A-, Class VI, according to Best's Key Rating Guide. Engineer is responsible for assuring that its sub-consultants meet these insurance requirements.

- A. Commercial General Liability on an occurrence basis as follows:

General Aggregate	\$2,000,000.
Each Occurrence	\$1,000,000.

- B. Business Auto Policy

Any Auto; or Owned, Non-Owned & Hired:	Combined Single Limit \$300,000.
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- C. Standard Workers Compensation - Full statutory liability for State of Louisiana with Employer's Liability Coverage.

- D. The City of Baton Rouge and Parish of East Baton Rouge must be named as additional insured on all general liability policies described above.

- E. The Engineer’s Professional Liability coverage for errors and omissions at least equal to the fee for each phase of this Contract and any and all amendments to this Contract, and in no case shall the limits be less than \$1,000,000.00 (One Million and 00/100 Dollars), is required. The Subconsultant’s Professional Liability coverage for errors and omissions at least equal to the fee of the Subconsultant for each phase



of the Contract and any and all amendments to this Contract, and in no case shall the limits be less than \$1,000,000.00 (One Million and 00/100 Dollars), is required.

- F. Certificates must provide for thirty (30) days written notice to Certificate Holder prior to cancellation or change.
- G. The Certificate Holder should be shown as: City of Baton Rouge and Parish of East Baton Rouge, Attn: Purchasing Division, Post Office 1471, Baton Rouge, Louisiana 70821.

PERSONAL INTEREST: Engineer covenants that he presently has no interest and shall not acquire any interest, direct or indirect, in the above described Project Area or any parcels therein or any other interest which would conflict in any manner or degree with the performance of his services hereunder. Engineer further covenants that in the performance of his contract no person having any such interest shall be employed.

AFFIDAVIT AND CORPORATE RESOLUTION: Engineer shall attest by Affidavit, a sworn statement that this contract was not secured through employment or payment of a solicitor. If Engineer is a corporation, a corporate resolution is furnished as evidence of authority to execute the contract.

RIGHT TO AUDIT: Engineer shall permit the authorized representative of the City-Parish to periodically inspect and audit all data and records of the Engineer relating to his performance under this contract.

ASSIGNMENT: Engineer shall not sub-contract any of the services covered by this contract nor assign any interest in the contract or transfer any interest in same (whether by assignment or notation) without the prior written approval of the Parish.

IN WITNESS WHEREOF, the Parish and Engineer have executed this contract effective as of the date first written above.

**WITNESSES
(EBROSCO)**

EAST BATON ROUGE SEWERAGE COMMISSION

Parish

By _____
Melvin L. "Kip" Holden
Mayor-President

Engineer

By _____
(Typed Name)
(Title)

Attachment C
Exhibit A – Standard Scope of
Engineering Services

Exhibit A
Standard Scope of Engineering Services

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1.0 Phase I: General Requirements

The Engineering Design Consultant (Engineer) shall provide engineering services for the City of Baton Rouge/Parish of East Baton Rouge Department of Public Works (OWNER), as described by this scope of services for the:

- [Project Name]

The Engineer shall perform all design activities under the supervision of the OWNER's Program Manager (PM), CH2M HILL in accordance with the following standards and criteria:

- Baton Rouge SSO Program Requirements
 - Requirements for Engineers
 - Conveyance Design Requirements
 - Pump Station Design Requirements
 - Storage Tank Design Requirements
 - Sewer Rehabilitation Design Requirements
 - CAD Requirements
 - Geotechnical Investigation Requirements
 - Topographic Survey Requirements
 - Right of Way Map/Real Estate Standards
 - Equipment and Instrument Tagging Requirements
 - Design Deliverables Checklists (Note that the checklists contain the minimum requirements for each submittal and the Engineer shall submit information in addition to the items included in the checklists if requested by the PM)
- OWNER Standard Specifications and Standard Details (SS&D)
- [Project Name] Project Definition

The Engineer shall use the version of the above-referenced standards and criteria in effect on the date of execution of this Agreement. These standards and criteria may not be bound herein, but copies are available from the issuing organizations. Program Requirements are available on the Program web site at www.brprojects.com/sewer/pages/contractor_guidelines.htm.

2.0 Kick-Off Meeting

The Engineer shall attend a kick-off meeting scheduled by the PM to identify key personnel, define responsibilities and discuss procedures, standards, schedules, and program guidelines to be followed for:

- Development of the preliminary design
- Review of project-specific technical issues
- Review of project-specific land acquisition, permitting and utility conflict issues, and permit application requirements
- Discussion of alternative solutions to be evaluated

The Engineer shall prepare a draft memorandum of decisions and action items resulting from the meeting and distribute to all meeting participants within one week after the meeting. Comments from meeting participants will be addressed in a final record



memorandum, and distributed to all meeting participants within two weeks after the draft memorandum submittal.

3.0 Planning, Scheduling, and Project Management

The Engineer shall provide project management and coordination activities during all phases of the Project. Specific requirements are as detailed below.

4.0 Work Planning and Coordination

The Engineer shall provide the following project management activities:

- Establish the Project Work Plan for the preliminary design, final design, and bidding of the project.
 - Submit the Work Plan to the PM for review within 30 days of the notice to proceed and prior to submission of the Engineer's first invoice. No payments will be made to the Engineer until the Work Plan is reviewed and accepted by the PM.
 - The Project Work Plan shall include project organization and staffing, communication, project cost control procedures, document control, quality assurance, health and safety considerations, change management, and other project management requirements. The Project Work Plan shall include the proposed project schedule which shall show the proposed dates for design milestones as outlined in the Contract. The Work Plan shall also include a list of anticipated required permits and proposed dates for permit application submittals. The Project Work Plan shall be kept up-to-date, and changes to the Work Plan shall be submitted to PM with the monthly invoice.
- Plan and monitor project budgets and schedules.
 - Manage the efforts of project team members and sub-consultants.
 - Assign manpower and delegate responsibilities.
- Review work progress.
- Monitor quality and conformance to the Program Requirements.
- Coordinate the design with other ongoing infrastructure work including other Program projects and other OWNER projects such as road infrastructure projects included in the Green Light Program.
- Maintain project documents.
- Execute and coordinate subconsultant contracts.
- Notify the PM immediately if the Engineer believes that action required by directions, clarifications, or other communication from the OWNER and/or PM will cause the Engineer to deviate from the Scope of Engineering Services, fees, or schedule agreed to herein.
- Perform project close-out.



5.0 Project Schedule and Progress Reports

The Engineer shall prepare and submit a detailed project schedule and submit it to the PM for comment and approval in a mutually agreed upon format. The schedule shall show dates for:

- Design meetings including milestone, coordination and progress meetings
- Design milestones
- Permit application submittals and approvals
- Required deliverables
- Engineer's internal QC review
- PM and OWNER review
- Engineer's time to address review comments
- Bid advertisement

The project schedule shall be kept up-to-date, and changes shall be submitted to the OWNER and PM with the monthly progress report and invoice.

Progress reports shall include:

- The current status and percent complete of each activity noted in the Contract including work by subconsultants
- Activities and deliverables completed in the current reporting month
- Activities and deliverables planned for next month
- Any anticipated variances from the project schedule
- Any issues of concern

Progress reports will be used by the PM to determine percent complete of work by the Engineer as a basis for payment. Therefore, they shall include adequate detail for the PM to confirm that the invoice amount is commensurate with the work completed.

Any variances from the project schedule identified in the progress reports shall be addressed in writing by the Engineer, noting a recovery schedule plan, additional staffing needs, or proposed schedule modifications.

6.0 Project Correspondence and Point of Contact

The Engineer shall reference the OWNER project title and OWNER project number on all correspondence and submittals. All contractual correspondence shall be addressed to the OWNER and copied to the PM. All technical correspondence shall be addressed to the PM and copied to the OWNER.

The Engineer shall communicate with the PM through a single point of contact known as the Program Project Manager (PPM). The PPM will in turn communicate with the OWNER. The Engineer's Project Manager will be the contact person for the Engineer. Prior to start of each project the name and address of the point of contact for each party for that project shall be established.

Progress meeting frequency with the OWNER and PM shall be as outlined below. The Engineer will be responsible for preparing and delivering a record memorandum of decisions and action items to the meeting attendees within one week after each progress



meeting. Comments from meeting participants will be addressed in a final record memorandum, and distributed to all meeting participants within two weeks after the draft memorandum submittal. The Engineer shall notify the PM immediately if the Engineer believes that action required by directions, clarifications or other communications from the OWNER and/or PM will cause the Engineer to deviate from the Scope of Engineering Services, fees, or schedule agreed to herein.

The OWNER and PM will conduct all communications with regulatory agencies, including U.S. Environmental Protection Agency (EPA), Department of Health and Hospitals (DHH) and Louisiana Department of Environmental Quality (LDEQ). The Engineer may be asked to participate in regulatory agency meetings.

7.0 Design Meetings

7.1 Design Milestone Meetings

Following a two week review period by the OWNER and PM of the 15 (if applicable), 30, 60, and 90 percent deliverables, design milestone meetings shall be held by the Engineer to discuss the design packages and receive and resolve comments. For conveyance projects, a 15 percent design meeting shall be held to approve horizontal alignment for pipelines when the route analysis is complete. If a 15 percent submittal is required by the Project Definition for a pump station project, a 15 percent design review meeting will be held.

Activities during the design milestone meetings will include review of design and process equipment data packages, design drawings and specifications, and quantities for cost estimates. The design milestone meetings will also address operability and maintainability of the completed facility.

Within one week after a milestone meeting, the Engineer will prepare and deliver a record memorandum of decisions and action items to the meeting attendees.

7.1.1 Design Coordination Meetings

Engineer shall participate in a series of coordination meetings with the OWNER and PM to discuss and coordinate technical elements of the design and scope of services, design criteria, design alternatives, site issues and other relevant topics.

7.1.2 Design Progress Meetings

Review of the Project will also occur with the OWNER and PM during the course of design in bi-weekly progress meetings. The Engineer will use the standard Design Progress Meeting Agenda (Attachment E of *Requirements for Engineers*) to prepare an agenda and submit it to the OWNER and PM prior to each meeting. The following items, at a minimum, shall be discussed at each bi-weekly meeting:

- Anticipated variances from the project schedule, reasons for variance and recovery schedule plan
- Anticipated variance from the Scope of Engineering Services and reasons for variance
- Status of land acquisition activities



- Status of necessary permit applications and approvals
- Status of coordination with utilities

The following items, at a minimum, shall be delivered by Engineer to PM at each bi-weekly meeting:

- Updated project schedule
- Completed “Land and Permit Status Memo” (Attachment F of *Requirements for Engineers*) documenting the status of each permit or approval necessary for the project, and the status of coordination with utilities

Within one week after each meeting, the Engineer will prepare and deliver a record memorandum of decisions and action items to the meeting attendees.

8.0 Deliverables

The Engineer shall prepare a Work Plan, a schedule, 15 (if applicable), 30, 60, and 90 percent, and Final Contract Document deliverables. Submit deliverables in electronic format and hard copy as further defined below.

The Engineer shall reference the Program *CAD Requirements* that will be followed in preparation and submittal of deliverables.

Updated Project Work Plans will be submitted with the monthly invoice whenever there are changes to the Work Plan.

8.1 Support Services

8.1.1 Permits

The Engineer shall obtain necessary permits and approvals for the project in a timely manner to be able to adhere to the project schedule. The Engineer shall also identify any railroads, pipelines, and utilities potentially impacted by the project. If the Contractor is required to obtain certain permits and approvals during construction, the Engineer shall indicate so in the construction contract documents.

It is anticipated that permits may be required from, but are not limited to:

- Louisiana Department of Health and Hospitals (DHH)
- Louisiana Department of Environmental Quality (LDEQ)
- U.S. Army Corps of Engineers (USACE) New Orleans District
- Louisiana Department of Transportation and Development (DOTD) [Utility and Driveway]
- City of Baton Rouge-Parish of East Baton Rouge Department of Public Works (DPW)
- Pontchartrain Levee Board
- State Fire Marshall’s Office

At the 15% submittal, the required permits and approvals shall be identified, and the Engineer shall inform the PM in writing which permits are required, which of the above list are not required and the rationale for either requiring or not requiring the permit. The Engineer is responsible for obtaining the latest adopted version(s) of the application forms from the identified agencies or use the SSO Program specific version provided by



the PM. Where pre-application meetings are required or advisable, both the Engineer and the PM shall attend meetings to initiate formal discussions, clarify any additional special requirements, and confirm anticipated approval schedule. The Engineer is responsible for developing and providing completed draft application or notification packages to the PM for review, and will incorporate any PM comments in a timely manner prior to finalizing the agency submittal packages. The Engineer shall reference the OWNER project title and OWNER project number on all application or notification packages, correspondence and submittals. The Engineer is responsible for submittal of three hard copies and 1 pdf of the applications to the PM. The OWNER will pay the permit fees and submit the permit applications.

The Engineer will copy the PM and OWNER on all hard copy and email correspondence and permit applications. The Engineer's efforts will include, but not be limited to, providing all necessary technical assistance and background studies to complete the documents and applications required by the agencies (for example, biological or cultural resources studies, or drainage information), development of the permitting packages including any forms and required design drawings, and development of any plans required for the permit applications. The Engineer shall develop responses to agency information requests or comments, and will submit the responses to the PM for review prior to incorporation of PM comments and finalization of the response submittal. Any meetings to facilitate resolution of agency comments or concerns will be attended by both the Engineer and the PM.

The Engineer will provide one hard copy and one electronic copy of all correspondence regarding any permitting activity to the PM. Originals of all permits will be forwarded by the Engineer to the Owner with three hard copies and one pdf provided to the PM. The Owner will keep the original permits with copies to be retained by the PM and Engineer. The Engineer shall be responsible for incorporating all requirements of the various permits and approvals into the design process and the construction contract documents.

Deliverables

- Electronic copy of memo detailing permits needed for projects and rationale for selection/omission in pdf format at 15% design
- One (1) original of all permit applications
- Three (3) hard copies of all permit applications
- Electronic copy of all permit applications in pdf format

8.1.2 ROW Crossing/Encroachment Agreements

The Engineer is responsible for identifying any ROW crossing and/or encroachment agreements necessary for the project, to include individual railroads, pipelines, and utilities potentially impacted by the project. The Engineer shall obtain a Letter of No Objection (LNO) or Agreement that covers each instance of crossing and encroachment. Any overlap of a new servitude with an existing servitude shall be deemed an encroachment. The LNO or Agreement shall be in writing and reference the project number and reference the station number and/or parcel number.

Deliverables

- Two (2) originals of all LNOs/Agreements



- Electronic copy of above items in pdf format

8.1.3 Utility Coordination

The Engineer shall coordinate with utilities in order to minimize conflicts during construction. Utilities that may be involved include:

- Potable and nonpotable water pipelines
- Gravity and forcemain sewer pipelines
- Storm drains
- Traffic control signals/control wires
- Low pressure gas pipes
- High pressure oil and gas pipes
- Telephone and telecommunications lines
- Television cables
- Power lines and facilities
- Communication lines, including fiber optic lines
- Privately-owned petrochemical pipelines

The Engineer shall investigate existing utilities in the area of the project. This investigation shall include contacting the utilities and obtaining the most current maps and description of their facilities in accordance with Louisiana Revised Statute 38:2223. The Engineer shall send the PM a copy of all information obtained. Potholing as directed by the Engineer may be necessary to confirm location and size of utilities.

The Engineer shall also submit the Major Utility Crossing Information sheet, included in the *Conveyance Design Requirements*, at each design submittal for each major utility crossing. The sheet will provide the PM with information regarding actions and correspondence to date for utility crossings at each design milestone.

Deliverables

- Electronic copy of Major Utility Crossing Information sheet in pdf format for each major crossing at each design submittal

9.0 Design Milestones

The applicable design milestones are listed in the Compensation and Payment section of the Contract, and the designation of fees associated with each design milestone shall serve as the basis for invoicing by the Engineer. A description of the activities and required deliverables associated with each design milestone is included herein. All work is to be performed based on the Project Definition and as directed by the OWNER and PM.

9.1 Quality Control

A Program Quality Assurance (QA) Management Plan that specifies the minimum QA procedures to be followed on the Program is included in the *Requirements for Engineers*. The Engineer shall appoint a QA Manager and Quality Control (QC) team members and shall prepare a project-specific QA Plan that is to be submitted to the PM for information as part of the Engineer's Work Plan.



Key 30, 60, and 90 percent design deliverables will be reviewed by the Engineer's Quality Control (QC) team prior to submission to the PM. The Engineer will submit a letter or memorandum signed by the Engineer's QA Manager that the QC review has occurred and the document meets the Engineer's quality standards. Design Checklists, where applicable, will be signed by the Engineer and the Engineer's QA Manager.

9.2 Health & Safety

The Engineer is solely responsible for the health and safety of its employees and subconsultants.

9.3 Identification

The Engineer shall supply all employees and subconsultants working on the project with photo identification cards. These cards shall be visible at all times while at the project site. The identification cards shall have at a minimum Engineer's name or subconsultant's name, employee's name, and employee's photo. The Engineer's and subconsultant's vehicles used at the project site shall have the company name, telephone number, and physical address prominently displayed at all times while on the site. The Engineer shall provide the OWNER and PM with a list of all ID badge employees; this list shall be kept current at all times.

10.0 Phase II: Preliminary Design (15% and 30%)

10.1 Conveyance Projects 15% Preliminary Route Analysis

The Engineer shall prepare a preliminary route analysis for conveyance (pipeline) projects. Preliminary route analysis will result from a field review of alternative routes and include a ranking and recommendation of alternative routes. A design milestone meeting will be held to allow the Engineer to obtain direction from the PM and OWNER regarding the preferred route. The Engineer will proceed with the selected route for design and shall determine if utility relocation and/or land acquisition including permanent and temporary servitudes are required.

Within one week after the milestone meeting, the Engineer will prepare and deliver a record memorandum of decisions and action items to the meeting attendees.

Deliverables

- Six (6) hard copies of the Preliminary Route Analysis
- Electronic copy of Preliminary Route Analysis in pdf format

10.2 Pump Stations 15% Design Deliverable

Where specified in the Project Definition, a 15 percent design submittal is required for pump station projects to show site selection, layout and land requirements.

A design milestone meeting will be held and within one week after the milestone meeting, the Engineer will prepare and deliver a record memorandum of decisions and action items to the meeting attendees.



Deliverables

- Six (6) hard copies of the 15% design submittal
- Electronic copy of 15% design submittal in pdf format

10.3 30% Design Deliverable

The Engineer shall prepare and submit for review 30% design drawings in AutoCAD and a 30% design report as outlined below. The submittal shall be prepared in accordance with the Program Requirements and the Project Definition.

The PM shall furnish the Engineer electronic copies of the title sheet template, plan sheet border template, and details. Ownership of the drawing templates and details is transferred to the Engineer upon receipt. Professional responsibility as Engineer of Record for the Contract Documents belongs to those individuals who apply their seals to the Contract Documents. The PM may issue additional details during the project. The Engineer shall be responsible for the preparation of project-specific details and specifications and verifying the appropriateness of the details provided by the PM.

The 30% design report shall consist of, as applicable, the following items:

- Narrative descriptions of each facility, including discipline-specific design criteria
- Equipment selections
- Facility layout
- Architectural floor plans and elevations
- Site plans
- Piping plans/routes including potential utility conflicts and utility relocations that may be necessary
- Operation and control concepts
- Special construction requirements
- Discussions of reliability and redundancy
- Provisions for future expansion and upgrades
- Evaluation of alternatives
- Phase I Environmental Site Assessment (ESA)
- Geotechnical investigation
- Topographic survey
- Layout of existing rights-of-way and list of properties by C-P Planning Commission Lot Identification Number that will require Phase II Abstracts, including permanent and temporary servitudes
- List of specifications and special provisions to be used on the project



- Construction quantities, including vendor quotes for major equipment

The 30% Design Report shall be sealed, signed, and dated by a Licensed Professional Engineer in the State of Louisiana in accordance with current state law.

A design milestone meeting will be held, and within two weeks after the milestone meeting, the Engineer will prepare and deliver a list of action items to the meeting attendees. The Engineer shall provide responses to comments in Excel format at this time.

Deliverables

- Six (6) hard copies of the 30% Design Report
- Six (6) hard copies of the 30% design drawings
- Electronic copy of 30% construction quantities in Excel format
- Electronic copy of 30% Design Report in pdf format
- Electronic copy of 30% design drawings in pdf format
- Electronic scanned copy of completed 30% design checklists in pdf format
- Electronic copy of responses to comments in Excel format

10.4 Land Acquisition Review

When the potential need for land acquisition is identified as part of the 30% design, a meeting will be held with the Engineer, PM and OWNER to review anticipated land acquisition requirements. A site visit will be made to inspect the proposed properties requiring land acquisition. The meeting will include the Program Land Manager and will be the basis for establishing the project land acquisition needs in accordance with the Program *Right of Way Map/Real Estate Requirements*.

10.5 Support Services

10.5.1 Topographic Surveys

Topographic surveys shall comply with the Program *Topographic Survey Requirements*, and DOTD's *Location and Survey Manual* and shall include all topographic information and the location of all surface features necessary for the detailed design of the project. This work shall include, for the control of field survey and later use, the establishment of reference points along the project to define the proposed alignment and of a reference system of benchmarks. The Engineer shall make sufficient field ties to existing property corners to establish the location of existing rights-of-way and servitudes. The Engineer shall coordinate with LA One Call and all utility services to identify and mark all utilities that may be affected by construction.

10.5.2 Phase I Environmental Site Assessment

The Engineer shall prepare and submit for review a draft Phase I Environmental Site Assessment (ESA) Report. The Phase I ESA shall follow the procedures established in the current version of ASTM E1527 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. In addition to the Standard Environmental Record Sources and Additional Environmental Record Sources listed in the ASTM standard, the following shall also be included:



- Wetland Inventory database inventory search
- FEMA flood plain information
- Water Well inventory information (DOTD)

The PM will review the Draft Phase I ESA and provide comments subject to resolution by the Engineer. Resolution of the comments shall be incorporated in the Final Phase I ESA Report.

Should recognized environmental condition(s) be identified during the Phase I ESA, the Engineer shall prepare and submit to the PM a Technical Memorandum and cost proposal noting specifics of the identification of the recognized environmental condition(s), and including recommendations that a Phase II ESA be performed during the 60% design.

Deliverables

- Three (3) hard copies of the Draft ESA Report
- Three (3) hard copies the Final ESA Report
- Electronic copy of above items in pdf format

10.5.3 Geotechnical Report

The Engineer shall prepare and submit for review a Geotechnical Report, in accordance with the Program *Geotechnical Investigation Requirements*. If it is not feasible to complete the Geotechnical Report prior to completion of the 30% design, a specific schedule for completion shall be included in the project schedule as part of the initial Project Work Plan.

The PM will review the report and provide comments to the Engineer. The Geotechnical Report will be available to Bidders but will not be part of the Contract Documents. The bidders shall be responsible for interpretation of the technical data contained in the Geotechnical Report.

Deliverables

- Three (3) hard copies of the draft Geotechnical Report
- Three (3) hard copies the final Geotechnical Report
- Electronic copy of above items in pdf format

11.0 Phase III: 60% Engineering Design

11.1 60% Design Deliverable

The Engineer shall prepare and submit for review the 60% design documents as outlined below. The submittal shall be prepared in accordance with the Program Requirements and Project Definition. The documents shall be prepared to obtain either lump sum or unit price contracts or a combination of the two, as appropriate. The construction contract shall be bid as one contract package, unless otherwise directed by the OWNER.

Construction drawings shall be prepared in accordance with the Program *CAD Requirements* and shall be organized by technical discipline, including civil/site, architectural, structural, process mechanical, yard piping, HVAC, plumbing, electrical, and instrumentation and controls. Standard specifications have been prepared by the OWNER to include the requirements, features, materials of construction, and related



items desired by the OWNER based on their experience and needs. Construction General and Supplemental Conditions and technical specifications shall be the OWNER's standard. Ownership of the OWNER's specifications transfers to the Engineer upon receipt, and professional responsibility as Engineer of Record for the Contract Documents belongs to those individuals who apply their seals to the Contract Documents.

The Engineer shall review each standard specification and prepare special provisions as necessary to address project-specific requirements. Special provisions shall be prepared in accordance with the format adopted by the OWNER. Electronic versions of the standard specifications are available on the Program website. Additional special provisions may be issued by the PM during the project. Special provision sections shall be substantially complete and submitted along with a complete table of contents of the specifications and special provisions to be used for the project.

The Engineer shall not revise the text of the Instructions To Bidders or General Conditions, which will be issued by the PM to the Engineer, except by Supplemental Instructions To Bidders and Supplemental Conditions, respectively, subject to the review and acceptance by the PM.

The 60% design submittal shall be released in draft form under the authority of a Licensed Professional Engineer in the State of Louisiana in accordance with current state law. The PM and OWNER will review the submittal for the purposes of determining changes or revisions to be made in completing the final plans. The PM will provide review comments to the Engineer prior to the design milestone meeting. The Engineer shall attend the design milestone meeting with the OWNER and PM in accordance with the design meeting requirements outlined above to discuss and agree on all review comments. The Engineer shall revise plans and specifications based upon the agreed upon review comments.

Within two weeks after the milestone meeting, the Engineer will prepare and deliver a list of action items to the meeting attendees. At this time, the Engineer shall provide responses to comments in Excel format.

As part of the 60% design submittal, the Engineer shall prepare updated estimates of construction quantities based on the 60% design documents. The Engineer shall also obtain updated vendor quotes, as necessary for major equipment. The PM will prepare an updated construction cost estimate based on the information provided by the Engineer.

Deliverables

- Five (5) 11" x 17" hard copies of the drawings
- Five (5) hard copies of the specification and special provisions table of contents, and draft special provisions and specifications
- Electronic copy of the construction quantity take offs and equipment cost quotes in Excel format
- Electronic copy of drawings in pdf format



- Electronic copy of the specification and special provisions table of contents, and draft special provisions and specifications in Microsoft Word format
- Electronic scanned copy of completed 60% design checklists in pdf format
- Electronic copy of the responses to comments in Microsoft Excel format

11.2 Plan In Hand Review

As part of the 60% design submittal review, the Engineer will perform a “plan in hand” review in the field with the OWNER and PM. The Engineer will notify the OWNER and the PM as well as any affected utility companies three weeks in advance of the review. The Engineer will discuss with the PM the results of the field review within one week after the review has been completed. The PM will review the project for constructability and identification of land, utility and permitting issues with the OWNER following the plan-in-hand review.

11.3 Support Services

11.3.1 Phase II Environmental Site Assessment

If authorized by Supplemental Agreement, upon written authorization and approval from the OWNER, the Engineer shall prepare and submit a work plan for investigation of the recognized environmental condition(s) as identified in the Final Phase I ESA. The Phase II ESA shall follow the procedures established in the current version of ASTM E1903 *Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process*. The work plan shall include a task for defining investigation objectives during a meeting with the OWNER and the PM in order to refine the scope of the work and provide for an appropriate level of inquiry given the nature of the property and the project needs. The Engineer shall prepare and submit for review a Draft Phase II ESA. The PM will review the Draft Phase II ESA and provide comments subject to resolution by the Engineer. Resolution of the comments shall be incorporated in the Final Phase II ESA report.

Deliverables

- Three (3) hard copies of the Draft Phase II ESA Report
- Three (3) hard copies the Final Phase II ESA Report
- Electronic copy of above items in pdf format

12.0 Phase IV: Final Design and Contract Documents

12.1 90% Design

The Engineer shall prepare full size drawings released by a Licensed Professional Engineer in the State of Louisiana in accordance with current state law. The 90% Design shall be complete with all special provisions, details, and drawings fully coordinated, and shall be ready for bidding subject to final review by the OWNER and PM. The Engineer will develop and coordinate the schedule of unit price work with the standard specifications and requirements of the project.



The Engineer will prepare the required documents to obtain approval of applicable governmental authorities (including any building permit applications) having jurisdiction over the design and/or operation of the project and public and private utilities affected by this project.

The Engineer shall prepare final estimates of construction quantities. The Engineer shall also obtain updated vendor quotes, as necessary, for major equipment. The PM will prepare an updated construction cost estimate based on the information provided by the Engineer.

The PM and OWNER will review the 90% design submittal and provide review comments to the Engineer prior to the design milestone meeting. The Engineer shall attend the design milestone meeting with the OWNER and PM in accordance with design meeting requirements outlined above to discuss and agree on all review comments. The Engineer shall revise plans and specifications based upon the agreed upon review comments.

Within two weeks after the milestone meeting, the Engineer will prepare and deliver a list of action items to the meeting attendees. At this time, the Engineer shall provide responses to comments in Excel format. The Engineer shall note whether any comments were not incorporated. Any comments not incorporated shall have a complete justification provided.

Deliverables

- Five (5) 11" x 17" hard copies of the drawings
- Five (5) hard copies of the specification and special provisions table of contents, and draft special provisions and specifications
- Electronic copy of the construction quantity take offs and equipment cost quotes in Excel format
- Electronic copy of drawings in pdf format
- Electronic copy of the specification and special provisions table of contents, and draft special provisions and specifications in Microsoft Word format
- Electronic scanned copy of the completed 90% design checklists in pdf format
- Electronic copy of the responses to comments in Microsoft Excel format

12.2 Final Contract Documents

The Engineer shall modify the 90% drawings and required special provisions solely based on the resolution of all review comments from the 90% submittal. The Engineer shall not make any other changes to the documents unless those changes are specifically reviewed with the PM and agreed to by the PM.

The Engineer shall seal, sign and date all of the Contract Documents as Engineer of Record in the State of Louisiana in accordance with current state law. The Engineer will be directed in writing by the OWNER or PM to proceed with bid phase services.



Deliverables

- One (1) full size (24" x 36") mylar of the cover sheet
- One (1) set of original full size (24" x 36") mylar right-of-way drawings, as applicable
- One (1) sets of full size (24" x 36") bond copy of the drawings
- One (1) un-bound copy of the required special provisions
- Electronic copy of the final construction quantity take offs and equipment cost quotes in Excel format
- Electronic copy of drawings in pdf format
- Electronic copy of drawings in AutoCAD
- Electronic copy of the special provisions including specifications in Microsoft Word format
- One original, three (3) hard copies and electronic copy in pdf format of all permit applications

13.0 Phase V: Bid Phase Services

The PM will take the lead in performing bid phase services, with tasks and assistance by the Engineer as follows:

- Attend the Pre-Bid Conference if required and assist the PM in conducting the conference. The PM will prepare the Pre-Bid Conference meeting minutes.
- The PM will be the primary point of contact during bid phase services, and will receive contractor questions. The Engineer shall prepare written responses to contractor questions and other required changes in addendum format to interpret, clarify, and amend the Contract Documents in accordance with current state law. The PM will prepare final addendums.
- The PM will tabulate and evaluate bids and prepare a written recommendation on award of Contract to the OWNER in accordance with current state law.
- The Engineer shall prepare six (6) sets of original Conformed Documents (Contract Drawings and required Special Provisions, with addenda and formalized contract incorporated into the original documents with changes noted) for use during Construction in accordance with current state law. The Conformed Documents shall be stamped as "CONFORMED" by the OWNER or the PM after the checked bid tabulations are attached.

Deliverables

- Six (6) hard copy full-size (24" x 36") sets of Conformed Documents
- Electronic copy of drawings in pdf format
- Electronic copy of drawings in AutoCAD
- Electronic copy of the special provisions in Microsoft Word format



14.0 Phase VI: Construction Phase Services

If requested by the OWNER, the Engineer shall provide engineering services during the construction phase, which may include the following:

- Attend the Pre-Construction meeting and provide Engineer's input at the meeting.
- Review shop-drawings and O&M manual submittals
- Provide responses to design-related Contractor requests for information (RFIs)
- Develop design changes as required and as requested by PM or OWNER
- Attend and provide input for Final Inspection and project closeout
- Develop Record Drawings per Section 6.1

15.0 Record Drawings

The Engineer shall develop Record Drawings in AutoCAD format from Contractor's construction drawing mark-ups, inspector's notes/logs and/or Engineer's site reviews as follows:

- Use the original bid set as the base for the Record Drawings and retain all features of the original drawings
- Mark through objects on the original bid set that were not constructed as shown, using X's to mark through the objects
- Modify the original bid set by drawing objects as they were actually constructed
 - Modify the drawings that show the constructed conditions most fully and accurately
 - Depict concealed elements that would be difficult to measure or record at a later date
 - Note related change-order numbers where applicable
- Label each drawing with the words "Record Drawings"

Deliverables

- One (1) set of full size (24" x 36") mylar original Record Drawings to OWNER
- Electronic copy of Record Drawings in pdf format to OWNER and PM
- Electronic copy of Record Drawings in AutoCAD format to OWNER and PM

16.0 Right-of-Way Survey and Maps

If authorized by Supplemental Agreement, Engineer shall provide all services required for the completion of right-of-way surveys and maps for the project in accordance with the Program *Right of Way Map/Real Estate Standards*. All necessary abstract and title work will be provided by the OWNER.



17.0 Services to be Performed by the Owner and PM

The OWNER or the PM shall furnish the Engineer without charge the following services and data:

- All information that the OWNER and PM have in their files as to survey plans and studies within the area of the project that may be useful to Engineer in carrying out this work, as well as assistance in securing data from others to the extent available.
- All previously completed soil investigations and analysis, including core drillings and borings with laboratory reports, as may be necessary for the design of the project.
- Reproductions of any standard form plan sheets, such as Title Sheet, and prints of typical construction and right-of-way plans for use by Engineer as a guide.
- Prints of standard plans of facilities where available. Upon determination of the standard plans to be used for the final contract plans, the OWNER shall furnish the standard plans required for use in the final set of drawings.
- Ownership of all property and any necessary title abstracts will be supplied by the OWNER to the Engineer.

18.0 Revision of Drawings

OWNER and/or PM directed changes to the Engineer's scope of work which are not incidental will be negotiated as a Supplemental Agreement to the lump sum contract of the Engineer.

19.0 Approval of Plans

The Engineer shall approve and sign, seal, and date all plans, reports, design calculations, specifications and other documents as required by and in conformance with the Rules of the Louisiana Professional Engineering and Surveying Board.

20.0 Modifications to Scope of Services

[List any changes to the standard scope of engineering services or Project Definition that are identified during the pre-proposal meeting and fee negotiation process. If there are none, state that there are no changes.]

Attachment C
Exhibit B – Standard Design Progress
Meeting Agenda



Design Progress Meeting Agenda

DPW Project Name:

DPW Project Number:

Date:

- 1. Introductions**
- 2. Approval of Previous Meeting Minutes**
- 3. Project Scope of Engineering Services**
 - a. Status
 - b. Anticipated variance from Scope
 - c. Specific reasons for variance
- 4. Project Schedule**

Deliverable – Updated schedule

 - a. Status
 - b. Anticipated variance from previous project schedule
 - c. Specific reasons for variance
 - d. Recovery schedule plan
- 5. Permit Status**

Deliverable – Permit Status Memo

 - a. Status of permit applications and approvals
 - b. Status of coordination with utilities
- 6. Land Acquisition Status**
 - a. Status of land acquisition activities
- 7. Project Specific Items**

Attachment C
Exhibit C – Permit Status Memo

Permit Status Memo¹

DPW Project Name:	
DPW Project Number:	
Prepared For:	<CH2MHILL Project Manager>
Prepared By:	<Design Consultant>
Date:	<To be updated for each Design Progress Meeting>

The purpose of this memo is to document actions and correspondence related to permits, approvals, utility crossings, corridor encroachments, other coordination with utilities and related land acquisition activities in order to identify potential issues, ensure that progress is made on resolving the issues and that the potential for project delays is minimized.

A. US Army Corps of Engineers Permits

Type of Permit	<Section 404; levee; geotechnical investigation, etc.>
Location	
Crossing or Corridor	<does the alignment cross or run parallel>
Number of Crossings or Length of Corridor Encroachment	
Coordination to Date	<give detailed explanation of Agency contact(s) including name of person(s) contacted, summary of discussion, action items, etc. Attach or provide electronic documentation such as meeting summaries, emails, etc. if available. Provide dates of permit application transmittal, receipt, etc.>
Outstanding Action Items and Schedule	<give detailed explanation of any outstanding action items, person(s) responsible for next steps, and schedule to resolve>
Potential Impact to Project Schedule	<estimate potential time delays or acceleration>

B. LADOTD Permits

Location	
Crossing or Corridor	<does the alignment cross or run parallel>
Number of Crossings or Length of Corridor Encroachment	
Coordination to Date	<give detailed explanation of Agency contact(s) including name of person(s) contacted, summary of discussion, action items, etc. Attach or provide electronic documentation such as meeting summaries, emails, etc. if available. Provide dates of permit application transmittal, receipt, etc.>

¹ Complete one table for each permit or approval needed

	etc. if available. Provide dates of permit application transmittal, receipt, etc.>
Outstanding Action Items and Schedule	<give detailed explanation of any outstanding action items, person(s) responsible for next steps, and schedule to resolve>
Potential Impact to Project Schedule	<estimate potential time delays or acceleration>

C. DHH Permits

Type of Permit	
Location	
Coordination to Date	<give detailed explanation of Agency contact(s) including name of person(s) contacted, summary of discussion, action items, etc. Attach or provide electronic documentation such as meeting summaries, emails, etc. if available. Provide dates of permit application transmittal, receipt, etc.>
Outstanding Action Items and Schedule	<give detailed explanation of any outstanding action items, person(s) responsible for next steps, and schedule to resolve>
Potential Impact to Project Schedule	<estimate potential time delays or acceleration>

D. Other Permits or Approvals

Utility Owner	
Utility Type	<gas pipeline, railroad, electric transmission, etc.>
Crossing or Corridor	<does the alignment cross or run parallel to utility>
Number of Crossings or Length of Corridor Encroachment	
Coordination Effort to Date	<give detailed explanation of utility company contact(s) including name of person(s) contacted, summary of discussion, action items, etc. Attach or provide electronic documentation such as meeting summaries, emails, etc. if available. Provide dates of permit application or approval request transmittal, receipt, etc.>
Outstanding Action Items and Schedule	<give detailed explanation of any outstanding action items, person(s) responsible for next steps, and schedule to resolve>
Potential Impact to Project Schedule	<estimate potential time delays or acceleration>

¹ Complete one table for each permit or approval needed

Attachment D
Fee Proposal Form

DESIGN FEE PROPOSAL
FOR
"Design Consultant Name"

PROJECT NAME
"[SERVICE AREA] XXX-X-XXXX"

PROJECT NUMBER
"DPW Project No. XX-XX-XX-XXXX"

INPUT TODAY'S DATE

Project Information

BTRSSO Project Name & Number
DPW Project Number
Design Consultant - Firm Name

"[SERVICE AREA] XXX-X-XXXX"
"DPW Project No. XX-XX-XX-XXXX"
"Design Consultant Name"

Manhour Rates and Classifications

Clerical/Admin.	@	\$0.00 /hr
CADD Tech	@	\$0.00 /hr
Engineer Intern	@	\$0.00 /hr
Electrical Engineer	@	\$0.00 /hr
Engineer	@	\$0.00 /hr
Senior Engineer	@	\$0.00 /hr
Project Manager	@	\$0.00 /hr
Classification A	@	\$0.00 /hr
Classification B	@	\$0.00 /hr
Classification C	@	\$0.00 /hr
Classification D	@	\$0.00 /hr

Overhead

Percentage 0.00%

DRAWING NAMES AND QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY - DESIGN CONSULTANT SHALL ADJUST THESE LINE ITEMS ACCORDINGLY TO COMPLY WITH THEIR PROPOSED SHEET NAMES AND QUANTITIES

SANITARY SEWER SYSTEM UPGRADES
 [SERVICE AREA] XXX-X-XXXX
 DPW Project No. XX-XX-XX-XXXX
 CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE
 DEPARTMENT OF PUBLIC WORKS

Design Consultant Name

	Estimated Duration (Calendar days)	MANHOURS								Classification				Sub-Consultants		Total
		Project Manager	Senior Engineer	Engineer	Electrical Engineer	Engineer Intern	Admin	Cad Technician	Classification A	Classification B	Classification C	Classification D	Geotechnical	Survey	Manhours	
General Requirements																
Project Management		0	0	0	0	0	0	0	0	0	0	0	0		0	
Coordination Meetings (List number Assumed)		0	0	0	0	0	0	0	0	0	0	0	0		0	
Quality Assurance Oversight		0	0	0	0	0	0	0	0	0	0	0	0		0	
Total Manhours		0	0	0	0	0	0	0	0	0	0	0	0		0	
Preliminary Engineering- 30%	0 Days															
Conceptual Layouts		0	0	0	0	0	0	0	0	0	0	0	0		0	
Utility Location & Conflicts		0	0	0	0	0	0	0	0	0	0	0	0		0	
Property Servitude Location & Requirements		0	0	0	0	0	0	0	0	0	0	0	0		0	
Total Manhours		0	0	0	0	0	0	0	0	0	0	0	0		0	
60% Design Submittal	0 Days															
Property Survey Legal Descriptions		0	0	0	0	0	0	0	0	0	0	0	0		0	
Drawings																
Cover		0	0	0	0	0	0	0	0	0	0	0	0		0	
Index to Drawings		0	0	0	0	0	0	0	0	0	0	0	0		0	
Abbreviations and General Notes		0	0	0	0	0	0	0	0	0	0	0	0		0	
Key Alignment Map		0	0	0	0	0	0	0	0	0	0	0	0		0	
Horizontal and Vertical Control Map		0	0	0	0	0	0	0	0	0	0	0	0		0	
Pipeline Plan and Profile - 8 sheets		0	0	0	0	0	0	0	0	0	0	0	0		0	
Traffic Control Plans - 4 sheets		0	0	0	0	0	0	0	0	0	0	0	0		0	
Pipeline Details - 2 sheets		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Demolition Plan		0	0	0	0	0	0	0	0	0	0	0	0		0	
Demolition Details		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Civil Legend		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Civil Site Plan		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Civil Details - 2 sheets		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Structural Legend		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Foundation Plan		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Upper Level Plan		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Structural Sections		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Vault Structural Plan and Sections		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Structural Details - 2 sheets		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Mechanical Legend		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Lower Mechanical Plan		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Upper Mechanical Plan		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Mechanical Sections		0	0	0	0	0	0	0	0	0	0	0	0		0	
Lift Station Mechanical Details - 2 sheets		0	0	0	0	0	0	0	0	0	0	0	0		0	

SANITARY SEWER SYSTEM UPGRADES															
[SERVICE AREA] XXX-X-XXXX															
DPW Project No. XX-XX-XX-XXXX															
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE															
DEPARTMENT OF PUBLIC WORKS															
Design Consultant Name															
	Estimated Duration (Calendar days)	Project Manager	MANHOURS										Sub-Consultants		Total
			Senior Engineer	Engineer	Electrical Engineer	Engineer Intern	Admin	Cad Technician	Classification A	Classification B	Classification C	Classification D	Geotechnical	Survey	Manhours
Lift Station Electrical Legend		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station MCC One Line Diagram		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station Process Power and Lighting Plan		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station Control Diagrams		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station Conduit and Luminaire Schedule		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station Electrical Details - 2 sheets		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station I&C Legend - 2 sheets		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station P&ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station Block Diagram		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station Typical Wiring Diagram		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station Telemetry System Diagram		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station I&C Details		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Specifications		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Manhours		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Design 90% to 100%	0 Days														
Drawings - List each final drawing separately (See Note 1)															0
Cover		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Index to Drawings		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Abbreviations and General Notes		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Key Alignment Map		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Horizontal and Vertical Control Map		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline Plan and Profile		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline Plan and Profile		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline Plan and Profile		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline Plan and Profile		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline Plan and Profile		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline Plan and Profile		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline Plan and Profile		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline Plan and Profile		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline Plan and Profile		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Traffic Control Plan		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Traffic Control Plan		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Traffic Control Plan		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Traffic Control Plan		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline Details		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline Details		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station Demolition Plan		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demolition Details		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station Civil Legend		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lift Station Civil Site Plan		0	0	0	0	0	0	0	0	0	0	0	0	0	0

SANITARY SEWER SYSTEM UPGRADES															
[SERVICE AREA] XXX-X-XXXX															
DPW Project No. XX-XX-XX-XXXX															
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE															
DEPARTMENT OF PUBLIC WORKS															
Design Consultant Name															
	Estimated Duration (Calendar days)	Project Manager	MANHOURS								Sub-Consultants				Total Manhours
			Senior Engineer	Engineer	Electrical Engineer	Engineer Intern	Admin	Cad Technician	Classification A	Classification B	Classification C	Classification D	Geotechnical	Survey	
Lift Station Civil Details			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Structural Legend			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Foundation Plan			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Upper Level Plan			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Structural Sections			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Vault Structural Plan and Sections			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Structural Details			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Mechanical Legend			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Lower Mechanical Plan			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Upper Mechanical Plan			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Mechanical Sections			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Mechanical Details			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Electrical Legend			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station MCC One Line Diagram			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Process Power and Lighting Plan			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Control Diagrams			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Conduit and Luminaire Schedule			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Electrical Details			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station I&C Legend			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station P&ID			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Block Diagram			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Typical Wiring Diagram			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station Telemetry System Diagram			0	0	0	0	0	0	0	0	0	0	0		0
Lift Station I&C Details			0	0	0	0	0	0	0	0	0	0	0		0
Specifications			0	0	0	0	0	0	0	0	0	0	0		0
Bid Proposal Form with Quantities Required			0	0	0	0	0	0	0	0	0	0	0		0
Permits (List permits required)			0	0	0	0	0	0	0	0	0	0	0		0
Special Provisions Specifications			0	0	0	0	0	0	0	0	0	0	0		0
Other tasks (specify)			0	0	0	0	0	0	0	0	0	0	0		0
Total Manhours			0	0	0	0	0	0	0	0	0	0	0		0
Bid Phase															
Prebid Meeting			0	0	0	0	0	0	0	0	0	0	0		0
Prepare Technical Addenda			0	0	0	0	0	0	0	0	0	0	0		0
Bid Opening			0	0	0	0	0	0	0	0	0	0	0		0
Total Manhours			0	0	0	0	0	0	0	0	0	0	0		0
Construction Phase															
Preconstruction Conference			0	0	0	0	0	0	0	0	0	0	0		0
Review /Design Changes			0	0	0	0	0	0	0	0	0	0	0		0
Review Submittals			0	0	0	0	0	0	0	0	0	0	0		0

SANITARY SEWER SYSTEM UPGRADES															
[SERVICE AREA] XXX-X-XXXX															
DPW Project No. XX-XX-XX-XXXX															
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE															
DEPARTMENT OF PUBLIC WORKS															
Design Consultant Name															
	Estimated Duration (Calendar days)	MANHOURS										Sub-Consultants		Total	
		Project Manager	Senior Engineer	Engineer	Electrical Engineer	Engineer Intern	Admin	Cad Technician	Classification A	Classification B	Classification C	Classification D	Geotechnical	Survey	Manhours
RFI Review RFI's		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Closeout Inspection		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Record Drawings		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Manhours		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Manhours by Classification		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Number of Final Drawings		47													
Notes:	1. When modifying spread sheet to add drawings, copy an existing drawing row(s) and insert it.														

SUMMARY

SANITARY SEWER SYSTEM UPGRADES						
"[SERVICE AREA] XXX-X-XXXX"						
"DPW Project No. XX-XX-XX-XXXX"						
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE						
DEPARTMENT OF PUBLIC WORKS						
"Design Consultant Name"						
Phase I, General Requirements						
	Project Manager		0 hours	@	\$0.00	= \$0.00
	Sr. Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer		0 hours	@	\$0.00	= \$0.00
	Electrical Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer Intern		0 hours	@	\$0.00	= \$0.00
	Administration		0 hours	@	\$0.00	= \$0.00
	CAD Technician		0 hours	@	\$0.00	= \$0.00
	Classification A		0 hours	@	\$0.00	= \$0.00
	Classification B		0 hours	@	\$0.00	= \$0.00
	Classification C		0 hours	@	\$0.00	= \$0.00
	Classification D		0 hours	@	\$0.00	= \$0.00
		DIRECT PAYROLL COST				\$0.00
		Overhead	0.00%			\$0.00
		Total Estimated Cost				\$0.00
		Profit @ 15%				\$0.00
		Direct Expenses (see below)				\$0.00
		LUMP SUM FEE - THIS PHASE				\$0.00
		DIRECT EXPENSES				
		(List those items not included as part of Overhead)				\$0.00
						\$0.00
				Sub-Total		\$0.00

SUMMARY

SANITARY SEWER SYSTEM UPGRADES						
"[SERVICE AREA] XXX-X-XXXX"						
"DPW Project No. XX-XX-XX-XXXX"						
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE						
DEPARTMENT OF PUBLIC WORKS						
"Design Consultant Name"						
Phase II, Preliminary Engineering (30%)						
	Project Manager		0 hours	@	\$0.00	= \$0.00
	Sr. Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer		0 hours	@	\$0.00	= \$0.00
	Electrical Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer Intern		0 hours	@	\$0.00	= \$0.00
	Administration		0 hours	@	\$0.00	= \$0.00
	CAD Technician		0 hours	@	\$0.00	= \$0.00
	Classification A		0 hours	@	\$0.00	= \$0.00
	Classification B		0 hours	@	\$0.00	= \$0.00
	Classification C		0 hours	@	\$0.00	= \$0.00
	Classification D		0 hours	@	\$0.00	= \$0.00
	DIRECT PAYROLL COST					\$0.00
	Overhead	0.00%				\$0.00
	Total Estimated Cost					\$0.00
	Profit @ 15%					\$0.00
	Direct Expenses (see below)					\$0.00
	LUMP SUM FEE - THIS PHASE					\$0.00
	DIRECT EXPENSES					
	(List those items not included as part of Overhead)					\$0.00
						\$0.00
	Sub-Total					\$0.00

SUMMARY

SANITARY SEWER SYSTEM UPGRADES						
"[SERVICE AREA] XXX-X-XXXX"						
"DPW Project No. XX-XX-XX-XXXX"						
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE						
DEPARTMENT OF PUBLIC WORKS						
"Design Consultant Name"						
Phase II - Part A, Surveying				"Input Survey Firm Name Here"		
	GPS Crew		0 hours	@	\$0.00	\$0.00
	Survey Crew		0 hours	@	\$0.00	\$0.00
	P.L.S.		0 hours	@	\$0.00	\$0.00
	Survey Technician		0 hours	@	\$0.00	\$0.00
	Administration		0 hours	@	\$0.00	\$0.00
	CAD Technician		0 hours	@	\$0.00	\$0.00
		DIRECT PAYROLL COST				\$0.00
		Overhead	0.00%			\$0.00
		Total Estimated Cost				\$0.00
		Profit @ 15%				\$0.00
		Direct Expenses (see below)				\$0.00
		LUMP SUM FEE - THIS PHASE				\$0.00
		DIRECT EXPENSES				
		(List those items not included as part of Overhead)			\$0.00	
					\$0.00	
			Sub-Total		\$0.00	

SUMMARY

SANITARY SEWER SYSTEM UPGRADES						
"[SERVICE AREA] XXX-X-XXXX"						
"DPW Project No. XX-XX-XX-XXXX"						
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE						
DEPARTMENT OF PUBLIC WORKS						
"Design Consultant Name"						
Phase II - Part B, Geotechnical				"Input Geotechnical Firm Name Here"		
				"Input General Description of Scope of Services, for example: Number of Borings, Depth of Borings, Special Equipment Req'd, etc."		
	Field Crew		0	hours	@	\$0.00 = \$0.00
	Project Manager		0	hours	@	\$0.00 = \$0.00
	Engineer		0	hours	@	\$0.00 = \$0.00
	Technician		0	hours	@	\$0.00 = \$0.00
	Administration		0	hours	@	\$0.00 = \$0.00
	CAD Technician		0	hours	@	\$0.00 = \$0.00
		DIRECT PAYROLL COST				\$0.00
		Overhead	0.00%			\$0.00
		Total Estimated Cost				\$0.00
		Profit @ 15%				\$0.00
		Direct Expenses (see below)				\$0.00
		LUMP SUM FEE - THIS PHASE				\$0.00
		DIRECT EXPENSES				
		(List those items not included as part of Overhead)				\$0.00
						\$0.00
				Sub-Total		\$0.00

SUMMARY

SANITARY SEWER SYSTEM UPGRADES						
"[SERVICE AREA] XXX-X-XXXX"						
"DPW Project No. XX-XX-XX-XXXX"						
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE						
DEPARTMENT OF PUBLIC WORKS						
"Design Consultant Name"						
Phase III, 60% Engineering Design						
	Project Manager		0 hours	@	\$0.00	= \$0.00
	Sr. Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer		0 hours	@	\$0.00	= \$0.00
	Electrical Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer Intern		0 hours	@	\$0.00	= \$0.00
	Administration		0 hours	@	\$0.00	= \$0.00
	CAD Technician		0 hours	@	\$0.00	= \$0.00
	Classification A		0 hours	@	\$0.00	= \$0.00
	Classification B		0 hours	@	\$0.00	= \$0.00
	Classification C		0 hours	@	\$0.00	= \$0.00
	Classification D		0 hours	@	\$0.00	= \$0.00
	DIRECT PAYROLL COST					\$0.00
	Overhead	0.00%				\$0.00
	Total Estimated Cost					\$0.00
	Profit @ 15%					\$0.00
	Direct Expenses (see below)					\$0.00
	LUMP SUM FEE - THIS PHASE					\$0.00
	DIRECT EXPENSES					
	(List those items not included as part of Overhead)					\$0.00
						\$0.00
	Sub-Total					\$0.00

SUMMARY

SANITARY SEWER SYSTEM UPGRADES						
"[SERVICE AREA] XXX-X-XXXX"						
"DPW Project No. XX-XX-XX-XXXX"						
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE						
DEPARTMENT OF PUBLIC WORKS						
"Design Consultant Name"						
Phase IV, Final Design & Contract Documents (90-100%)						
	Project Manager		0 hours	@	\$0.00	= \$0.00
	Sr. Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer		0 hours	@	\$0.00	= \$0.00
	Electrical Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer Intern		0 hours	@	\$0.00	= \$0.00
	Administration		0 hours	@	\$0.00	= \$0.00
	CAD Technician		0 hours	@	\$0.00	= \$0.00
	Classification A		0 hours	@	\$0.00	= \$0.00
	Classification B		0 hours	@	\$0.00	= \$0.00
	Classification C		0 hours	@	\$0.00	= \$0.00
	Classification D		0 hours	@	\$0.00	= \$0.00
	DIRECT PAYROLL COST					\$0.00
	Overhead		0.00%			\$0.00
	Total Estimated Cost					\$0.00
	Profit @ 15%					\$0.00
	Direct Expenses (see below)					\$0.00
	LUMP SUM FEE - THIS PHASE					\$0.00
	DIRECT EXPENSES					
	(List those items not included as part of Overhead)					\$0.00
						\$0.00
	Sub-Total					\$0.00

SUMMARY

SANITARY SEWER SYSTEM UPGRADES						
"[SERVICE AREA] XXX-X-XXXX"						
"DPW Project No. XX-XX-XX-XXXX"						
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE						
DEPARTMENT OF PUBLIC WORKS						
"Design Consultant Name"						
Phase V, Bid Phase Services						
	Project Manager		0 hours	@	\$0.00	= \$0.00
	Sr. Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer		0 hours	@	\$0.00	= \$0.00
	Electrical Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer Intern		0 hours	@	\$0.00	= \$0.00
	Administration		0 hours	@	\$0.00	= \$0.00
	CAD Technician		0 hours	@	\$0.00	= \$0.00
	Classification A		0 hours	@	\$0.00	= \$0.00
	Classification B		0 hours	@	\$0.00	= \$0.00
	Classification C		0 hours	@	\$0.00	= \$0.00
	Classification D		0 hours	@	\$0.00	= \$0.00
		DIRECT PAYROLL COST				\$0.00
		Overhead	0.00%			\$0.00
		Total Estimated Cost				\$0.00
		Profit @ 15%				\$0.00
		Direct Expenses (see below)				\$0.00
		LUMP SUM FEE - THIS PHASE				\$0.00
		DIRECT EXPENSES				
		(List those items not included as part of Overhead)				\$0.00
						\$0.00
				Sub-Total		\$0.00

SANITARY SEWER SYSTEM UPGRADES
 "[SERVICE AREA] XXX-X-XXXX"
 "DPW Project No. XX-XX-XX-XXXX"
 CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE
 DEPARTMENT OF PUBLIC WORKS

"Design Consultant Name"

Design Summary - Phases I-IV

Project Manager	0 hours	@	\$0.00	=	\$0.00
Sr. Engineer	0 hours	@	\$0.00	=	\$0.00
Engineer	0 hours	@	\$0.00	=	\$0.00
Electrical Engineer	0 hours	@	\$0.00	=	\$0.00
Engineer Intern	0 hours	@	\$0.00	=	\$0.00
Administration	0 hours	@	\$0.00	=	\$0.00
CAD Technician	0 hours	@	\$0.00	=	\$0.00
Classification A	0 hours	@	\$0.00	=	\$0.00
Classification B	0 hours	@	\$0.00	=	\$0.00
Classification C	0 hours	@	\$0.00	=	\$0.00
Classification D	0 hours	@	\$0.00	=	\$0.00

DIRECT PAYROLL COST	\$0.00
Overhead 0.00%	\$0.00
Total Estimated Cost	\$0.00
Profit @ 15%	\$0.00
Direct Expenses (see below)	\$0.00
LUMP SUM FEE - ALL PHASES	\$0.00

DIRECT EXPENSES	
Sum of direct expenses from all phases	\$0.00
Printing and Miscellaneous	\$0.00
Geotechnical (with 10% markup for Prime DC)	\$0.00
Surveying (with 10% markup for Prime DC)	\$0.00
Sub-Total	\$0.00

Design Cost Metrics

Total Number of Drawings	0
Total Design Hours	0
Average Hours per Drawing	#DIV/0!
Average Cost per Drawing	#DIV/0!

Contract Time

Preliminary Design (30%)	0 Days
60% Design Submittal	0 Days
Final Design (90-100%)	0 Days

SUMMARY

SANITARY SEWER SYSTEM UPGRADES						
"[SERVICE AREA] XXX-X-XXXX"						
"DPW Project No. XX-XX-XX-XXXX"						
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE						
DEPARTMENT OF PUBLIC WORKS						
"Design Consultant Name"						
Phase VI, Construction Phase Services						
	Project Manager		0 hours	@	\$0.00	= \$0.00
	Sr. Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer		0 hours	@	\$0.00	= \$0.00
	Electrical Engineer		0 hours	@	\$0.00	= \$0.00
	Engineer Intern		0 hours	@	\$0.00	= \$0.00
	Administration		0 hours	@	\$0.00	= \$0.00
	CAD Technician		0 hours	@	\$0.00	= \$0.00
	Classification A		0 hours	@	\$0.00	= \$0.00
	Classification B		0 hours	@	\$0.00	= \$0.00
	Classification C		0 hours	@	\$0.00	= \$0.00
	Classification D		0 hours	@	\$0.00	= \$0.00
	DIRECT PAYROLL COST					\$0.00
	Overhead		0.00%			\$0.00
	Total Estimated Cost					\$0.00
	Profit @ 15%					\$0.00
	Direct Expenses (see below)					\$0.00
	LUMP SUM FEE - THIS PHASE					\$0.00
	DIRECT EXPENSES					
	(List those items not included as part of Overhead)				\$0.00	
					\$0.00	
	Sub-Total				\$0.00	

SUMMARY

SANITARY SEWER SYSTEM UPGRADES							
"[SERVICE AREA] XXX-X-XXXX"							
"DPW Project No. XX-XX-XX-XXXX"							
CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE							
DEPARTMENT OF PUBLIC WORKS							
"Design Consultant Name"							
Composite Summary - All Phases							
	Project Manager		0	hours	@	\$0.00	= \$0.00
	Sr. Engineer		0	hours	@	\$0.00	= \$0.00
	Engineer		0	hours	@	\$0.00	= \$0.00
	Electrical Engineer		0	hours	@	\$0.00	= \$0.00
	Engineer Intern		0	hours	@	\$0.00	= \$0.00
	Administration		0	hours	@	\$0.00	= \$0.00
	CAD Technician		0	hours	@	\$0.00	= \$0.00
	Classification A		0	hours	@	\$0.00	= \$0.00
	Classification B		0	hours	@	\$0.00	= \$0.00
	Classification C		0	hours	@	\$0.00	= \$0.00
	Classification D		0	hours	@	\$0.00	= \$0.00
	DIRECT PAYROLL COST						\$0.00
	Overhead	0.00%					\$0.00
	Total Estimated Cost						\$0.00
	Profit @ 15%						\$0.00
	Direct Expenses (see below)						\$0.00
	LUMP SUM FEE - ALL PHASES						\$0.00
	DIRECT EXPENSES						
	Sum of direct expenses from all phases					\$0.00	
	Printing and Miscellaneous					\$0.00	
	Geotechnical (with 10% markup for Prime DC)					\$0.00	
	Surveying (with 10% markup for Prime DC)					\$0.00	
	Sub-Total					\$0.00	
Contract Time							
	Preliminary Design (30%)		0	Days			
	60% Design Submittal		0	Days			
	Final Design (90-100%)		0	Days			

Attachment E
Land/Utilities/Permits PM Checklist

PM Land/Utility/Permit Checklist

Project Definition

- Phase I Abstracts will no longer be provided
- Identify potential problem areas
- Identify potential permits
 - Pull together applications

15% Design Submittal (Design NTP + 2 months)

- Provide any requested Phase I Abstracts /Property information
- Begin Utility Coordination
 - AT&T, BR Water, Entergy Gas
- Pump Station Projects – Land PIH

30% Design Submittal (Design NTP + 6 months)

- Request Phase II Abstracts
- Negotiate ROW Mapping fees
- Wetland Delineation due
- Phase I Environmental due
- Geotechnical Report due
- Pipeline Projects - Land PIH

60% Design Submittal (Design NTP + 9 months)

- Base Maps Submitted
- Submit DOTD Permit Applications
- Identify utility relocation, bracing, etc.
- Submit Corps Permit Application
- Submit RR Permit Application
- Request pipeline LNOs
- Initiate Articles of Agreement
- Constructability/Utility PIH
- Request Pump Station Power Cost Estimate

90% Design Submittal (Design NTP + 11 months)

- Preliminary Acquisition Map Submittal
- Begin scoping appraisals
- Finalize PS Electrical Cost

Final Plans (Design NTP + 1 year)

- Wetlands/Corps Permit received
- DHH Permit application submittal

Advertise for Construction

- Appraisal contracts in hand
- All permits in hand

Pre-Bid & Pre-Construction

- Make sure Utility Coordinator is invited

Construction NTP

- Own land
- Pay Entergy/DEMCO for Pump Station Power

Construction

- Utility Support