



Coastal Engineering Consulting Services



Coastal Engineering
Consulting Services
As-Needed Parish Wide
SOQ 24-020
Resolution No. 144205

Statement of Qualifications

Infinity Engineering Consultants, LLC.

4001 Division Street
Metairie, LA 70002

P: 504.304.0548

F: 504.355.0265

Raoul V. Chauvin, III, P.E.
Principal-in-Charge
rchauvin@infinityec.com

July 16, 2024

Infinity Engineering Consultants

Letter of Interest



Louisiana Registered Engineering Firm Number

Infinity Engineering Consultants, LLC.
EF. 0001309

Office Location

4001 Division Street
Metairie, LA 70002
p. (504) 304-0548

Contact Persons



Raoul V. Chauvin, III, P.E.
Principal Partner
rchauvin@infinityec.com



William J. Thomassie, P.E.
Principal Partner
wthomassie@infinityec.com

July 16, 2024

Michelle Gonzales
Director Ecosystem and Coastal Management
1221 Elmwood Park Blvd., Suite 310
Jefferson, LA 70123
504-736-6719

Re: Coastal Engineering and Consulting Services As-
Needed Parish Wide

With reference to the above stated project, Infinity Engineering Consultants, LLC is pleased to present our statement of qualifications. Upon thoroughly reading the request for qualifications, we believe Infinity's team of engineers and designers meet and exceed the necessary qualifications to undertake any civil engineering project might be assigned to our team.

Firm Qualifications and Understanding of Scope

Infinity Engineering Consultants is a Metairie based firm, located only five miles from the Ecosystem and Coastal Management office, that provides multi-disciplinary engineering services to both the public and private sectors. As a multi-discipline firm, comprising of civil, structural, mechanical, and electrical engineering, our firm has provided complete engineering design, from conception to commissioning, on a multitude of water management and large water systems projects. Having provided engineering services across the Gulf Coast for the last 20 years, our firm has worked on many storm related projects, from emergency design repair of pumping stations to new flood protection berms.

To accomplish the requirements of any potential project, Infinity has assembled a qualified team of professionals to perform all tasks that could be assigned by the Department of Ecosystem and Coastal Management. Infinity's staff includes: eleven (11) professional engineers, three (3) engineering interns, four (4) engineering graduates, nine (9) AutoCAD designers, four (4) resident inspectors, and administrative support personnel. Additionally, Infinity has teamed with several consulting entities to ensure all environmental regulations are accurately followed and proper care is taken to preserve our Louisiana coastal ecosystems. Our engineering team consists of:

» Infinity Engineering Consultants, LLC

- Engineering Design – Civil, Structural, Mechanical, & Electrical
- Hydrologic & Hydraulic Modeling
- Shoreline Stabilization and Protection
- Project Management
- Cost Estimation
- Resident Inspection

» La Terre Engineering, LLC

- Marsh/Ridge Restoration Civil Design
- Shoreline Protection Civil Design

» Neel-Schaffer

- Coastal Grant Writing & Administration

» ELOS Environmental, LLC

- Environmental Permitting
- Wetlands Biological Assessments

- » **Gulf South Engineering & Testing**
 - Onshore & Nearshore Geotechnical Services
- » **BFM Corporation, LLC**
 - Hydrographic Surveying

Additionally, Infinity has partnered with two local leading experts in Gulf Coast coastal environmental challenges. These contract employees will help Infinity craft public outreach and provide environmental educational support.

- » Ehab Amin Meselhe, PHD, PE – Consulting Professor River-Coastal Science
 - Environmental Educational Support
- » G. Paul Kemp – Consulting Geologist & Oceanographer
 - Environmental Support and Public Outreach

Infinity Engineering steadfastly confirm the following:

- Infinity Engineering Consultants, LLC. meets the minimum qualifications
 - Principal partner William Thomassie, P.E. holds 31 years of civil engineering experience
 - Principal partner William Thomassie, P.E. holds 20 years of responsible charge in civil engineering
 - Both principal partners of Infinity are registered professionals in the State of Louisiana
- Infinity Engineering Consultants, LLC. is within good standing and does not have a history of substandard work
- Infinity Engineering Consultants, LLC. has not performed or engaged in any unethical practices
- If awarded the as-needed contract, Infinity Engineering will complete our responsibility for the entire contract, including payment of any and all charges resulting from the contract
- The firm holds all licenses necessary to legally provide the related services in the State of Louisiana

Infinity takes pride in our work and set forth to create designs that improve the livelihood of our communities. In response to the Request for Qualifications, we offer the following qualifiers for the evaluation criteria:

Professional Training and Experience in Relation to the Type of Work Required for the Engineering Services

Infinity's staff along with our teaming partners have the experience to provide Jefferson Parish with the expertise to prepare an appropriate assessment of the current coastal systems. We employ (6), full-time, licensed civil/structural engineers, many with over twenty (20) years of experience.

For coastal engineering projects, Infinity will assign Ricardo Contreras, P.E. as the Project Manager. Mr. Contreras holds more than 27 years of experience in the field of civil engineering, including 20 years of responsible charge of water system related projects; including **levee design, channel excavation, sediment removal, and embankment stabilization**. His responsibilities include project management, engineering design, preparation of plans/specifications, preparation of cost estimates, construction administration, and collaboration with owners for various construction projects. Previously, for Jefferson Parish, Mr. Contreras provided designs for channel excavation and sediment removal for the Trapp Canal project.

Additionally, one of Infinity's civil team members, Robert Haydel holds extensive experience and knowledge in the field of water resource engineering. Throughout his 17-year career, Mr. Haydel has provided analysis of water systems including hydraulic/hydrology modeling, sediment transportation, and river morphodynamics. This knowledge has been instrumental in Mr. Haydel's project experience in creating designs for storm water management, disaster recovery, channel excavation, and embankment stabilization. Mr. Haydel has provided insight and designs for numerous storm water management master plans, including for Jefferson Parish.

Our teaming partner La Terra Engineering's principal, Seneca Troussant, PE, holds 20 years' experience and specific expertise in coastal protection/restoration engineering design. Mr. Troussant's coastal engineering project experience includes marsh fill placement, earthen containment dikes, and shoreline protection. Currently, La Terre Engineering is working with the Coastal Protection and Restoration Authority on providing feasibility studies, value engineering, preparation of conceptual drawings, and computer modeling as part of an IDIQ contract.

As illustrated in the resume sections of the TEC forms, Infinity's professional engineering staff and partners are well-suited to address all needs of this project. As an engineering firm located within Jefferson Parish Infinity is familiar in all facets of design anticipated. When forming the Infinity team, special consideration was given to making sure all team members work within the Greater New Orleans to Baton Rouge area. This localized team ensures all personnel working on a project hold familiarity with the Jefferson Parish coastal soil conditions. The skill sets for Infinity's engineers are as follows:

Infinity Engineering's Key Personnel & Experience:

William Thomassie, P.E.	Principal	Civil/Structural Marine Engineering	Experience: 31 years
Raoul Chauvin, P.E.	Principal	Mechanical Drainage Pumps	Experience: 32 years
Rachel Kenney, P.E.	Chief Engineer	Civil/Structural – Marine Docks	Experience: 19 years
Louis Jackson, P.E.	Ops & QA/QC	Civil – Stormwater Management	Experience: 25 years
Ricardo Contreras, P.E.	Civil Engr Mgr.	Civil – Embankments & Sedimentation	Experience: 25 years
Robert Haydel	Proj. Engineer	Civil – Hydrology & Hydraulic	Experience: 15 years
Laura Kelly, P.E.	Proj. Engineer	Mechanical – Pumping and Piping	Experience: 12 years
John Lawrence, P.E.	Proj. Engineer	Electrical – Instrumentation & SCADA	Experience: 24 years
Matthew Torres, P.E.	Proj. Engineer	Electrical – Power and Generators	Experience: 6 years

Infinity points to past successes as a token of our reputation as a responsible and capable technical resource for Jefferson Parish on this project. To quote Ken Dugas, P.E., Plaquemines Parish Public Works Director regarding Infinity's design of the \$16.5MM Ollie Drainage Pump Station Expansion "....Infinity worked on a variety of packages for PPG, but none more so than the Ollie Pump Station Expansion. They completed a very thorough drainage study to justify expanding the station....The addition was constructed with less than 2% overruns for change orders....the station has performed, as designed, through several rain events and hurricanes...I would highly recommend Infinity for these types of projects....**They've proven to be good stewards of public funds.**"



Please refer to Section K of this form and subconsultants for specific project experience of all personnel included in this qualification package.

Capacity for Timely Completion of Newly Assigned Work

Infinity's current workload is well-suited to provide engineering support services to Jefferson Parish. At the time of submittal, Infinity has seventeen projects within the 75-100% construction completion, including Group B of street repairs to the Mid-City neighborhood, the Sewerage & Water Board Static Frequency Changer Utility Rack, and Laurel St and Mistletoe Lift Station Rehabilitation. The completion of these projects will allow for Infinity's engineers to shift their focus towards any assigned coastal engineering project, as the firm currently does not have a backlog of project work.

Location of Principal Office

Infinity's office is located in the **Fat City (District 5)** neighborhood of Metairie, within a 2-hour drive from the furthest possible project site. All but one of our staff work out of this office and many live in Jefferson Parish. We as a firm and our employees hold a vested interest in the success of our communities across Jefferson Parish.

Additionally, it is important to note that Infinity is not involved in any adversarial legal proceedings with Jefferson Parish of any kind and in particularly stemming from performing professional services.

Prior Successful Completion of Projects

As illustrated in Section L of Infinity's TEC Questionnaire, we have completed various projects along large water systems involving embankment design and stabilization for Jefferson Parish and other local municipalities. Included in these projects have been special designs for scheduling and/or phasing of construction to accommodate conditions.

Infinity's team holds considerable experience in all forms of marine engineering and construction. With this marine experience, Infinity has the unique ability to integrate each of our engineering disciplines when working on projects above and under water. Much of Infinity's marine work has come working along the Mississippi River; including providing remote hydro survey services. With a portfolio ranging from bulkhead repair to building new industrial docks, Infinity has the experience and vision to manage any design challenge involving large water systems. Infinity's marine engineering services include:

- Bulkheads and Retaining Walls
- Barge Dock Design
- Breasting Dolphin Design
- Mooring Analysis and Design
- Condition and Auditing Inspections
- Dredging Packages
- Caissons and Cofferdams
- Cellular Structures
- Hydro Surveys (Bathymetry)
- Ship Dock Design

An example of Infinity providing embankment designs for Jefferson Parish is evident in the West Metairie Avenue Rehabilitation project. Infinity is the prime consultant for the restoration of (2) miles of West Metairie Avenue between Roosevelt Boulevard and David Drive. This \$7 million project required the complete street replacement of West Metairie Avenue pavement as well as adjacent canal bank stabilization. The embankment repair designs include new vinyl sheet pile wall and supplemented with rip-rap at the cap. Adjacent sidewalks were also reconstructed with side street turnout to meet ADA criteria. Infinity's designs included improvement to the drainage system along the streets that was based off hydraulic studies. The drainage improvements included the following:



- Street outfall pipe replacement
- Adjustments of longitudinal and transverse slopes
- Adjustment of existing and addition of new drain inlets

Size of Firm

Infinity's firm size is well-suited for an array of project sizes. Currently Infinity's multidisciplinary team breakdown consist of (10) civil/structural, four (4) mechanical, and four (4) electrical members on each team, as well as four (4) resident inspectors, and nine (9) designers/drafters. Infinity's total firm size is currently 38. The total Infinity team has the capacity to leverage the knowledge of close to 100 professionals.

Infinity's professional is skilled in project assessment and evaluation, producing accurate engineering designs, construction plans and specifications, and providing construction administration. Infinity staff members are dedicated to monitoring the progress of construction, while remaining conscious of the monetary budget and meeting deadlines. We have a sufficient staff with the appropriate technical knowledge and experience to complete any coastal engineering project.

Past Performance on Parish Projects

Infinity Engineering Consultants is a full-service, multi-disciplinary firm with turn-key capabilities. To date, Infinity has provided civil, structural, mechanical, and electrical designs for a variety of projects for Jefferson Parish as well as several local municipalities. We are familiar with projects that have involved weekly and daily coordination meetings with public and private clients, engineers, managers, and operations personnel. Infinity maintains positive working relationships with these entities throughout the design and construction process.

Some of Infinity's notable Jefferson Parish projects include:

- Westbank Emergency Operation Center Tower Installation
- Traffic Operations Center Standby Generator
- Landfill Leachate Collection System Rehabilitation
- Glenwood Street Lighting Improvement
- Pritchard Ditch Drainage Improvements
- Gymnasium Generator Transfer Switches

Sections L of the TEC Questionnaire lists Infinity clients and contact information. Infinity has a history of providing excellent engineering services and the references provided will emphasize this commitment. The fact that our client references recommend us and return to us is the greatest affirmation of our quality of work.

Infinity completed an EOC communications tower and two major drainage projects for Jefferson Parish on the Westbank, one in District 1 and the other in District 3. Former **Capitol Projects Director Reda Youssef, P.E.** offered these affirming words of Infinity's performance, "Infinity Engineering Consultants has successfully completed the designs for the Wedmore and Bannerwood Drainage projects, as well as the design for the parish's new EOC tower. Their team is **competent, easy to work with, and communicate well. I would highly recommend Infinity for these types of projects.**"

Closing

Infinity takes pride in the engineering consulting services we provided to infrastructure projects throughout the State of Louisiana, especially when it comes to protecting our communities. We are confident that we have a team of civil and environmental engineers that can effectively and efficiently execute any project assigned by the Office of Ecosystem and Coastal Management. We respectfully request that Jefferson Parish select Infinity Engineering Consultants for this as-needed civil engineering contract so we can work to keep our Jefferson Parish communities safe during any adverse weather. If you have any questions or require additional information, please call me at (504) 304-0548.

By signing this letter, the Respondent certifies that the signatory is authorized to bind the Respondent and certifies the content of this letter.

Sincerely,

A handwritten signature in blue ink that reads "Raoul V. Chauvin, III". The signature is fluid and cursive, with the last name "Chauvin" being more prominent and the "III" written in a smaller, distinct script.

Raoul V. Chauvin, III, P.E.

Principal Partner

Infinity Engineering Consultants, LLC

(504) 304-0548

rchauvin@infinityec.com



Coastal Engineering Consulting Services
As-Needed Parish Wide



Section I

Infinity Engineering Consultants, LLC.

TEC Form

**Project Management, Civil, Structural,
Mechanical, & Electrical
Engineering Design**

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Coastal Engineering Consulting As-Needed Parish Wide
Resolution No. 144205

B. Firm Name & Address where Project work will be performed:

Infinity Engineering Consultants, LLC
4001 Division St.
Metairie, LA 70002

C. Name, title and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

Raoul V. Chauvin, III, P.E.
Principal
504-304-0548
rchauvin@infinityec.com

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline.

William J. Thomassie, P.E.
Principal
504-304-0548
wthomassie@infinityec.com

E. Please provide the number of employees whose primary function corresponds with each category:

<u>5</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u> </u> Geologists	<u>2</u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u>5</u> Graduate Engineers
<u>4</u> Civil Engineers	<u> </u> Interior Designers	<u> </u> Project Managers
<u>4</u> Construction Inspectors	<u> </u> Landscape Architects	<u>1</u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u>2</u> Electrical Engineers	<u>3</u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u>3</u> Engineer Intern	<u> </u> Environmental Engineers	<u>9</u> Drafting/Design
<u>5</u> Professional Land Surveyors		<u>38</u> TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES ☐ NO ☒

If marked "No" skip to Section I. If marked "yes" complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical and financial) for each firm. Please attach additional pages if necessary.

1.

2.

**H. Has this JOINT-VENTURE previously worked together? Please check:
YES ☐ NO ☐**

I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. La Terre Engineering, LLC 343 Third Street, Suite 511B Baton Rouge, LA 70801	- Marsh/Ridge Restoration - Shoreline Protection	Yes
2. Neel-Schaffer 1340 Poydras Street, Suite 1950 New Orleans, LA 70112	- Coastal Grant Writing & Administration	Yes
3. ELOS Environmental, LLC 607 W. Morris Avenue Hammond, LA 70403	- Environmental Permitting - Wetlands Biological Assessments	Yes
4. Gulf South Engineering 15 Veterans Memorial Blvd. Kenner, LA 70062	- Onshore & Nearshore Geotechnical Services	Yes
5. BFM Corporation, LLC 15 Veterans Memorial Blvd. Kenner, LA 70062	- Hydrographic Surveying	Yes
6.		
7.		

J. Please specify the total number of support personnel that may assist in the completion of this Project:

65+

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

William J. Thomassie, P.E.
Principal

Project Assignment:

Principal-in-Charge

Name of Firm with which Associated:



Infinity Engineering Consultants, LLC.

Years' experience with this Firm:

20

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1992 / Civil/Structural Engineering

Active registration: Year first registered/discipline:

Professional Engineer – Civil Engineering

AL/2009/Civil	AR/2016/Civil	IA/2018/Civil	IL/2018/Civil
IN/2018/Civil	KY/2018/Civil	LA/1997/Civil	MI/2018/Civil
MN/2018/Civil	MS/2006/Civil	OH/2006/Civil	PA/2007/Civil
TN/2018/Civil	TX/2002/Civil	WV/2004/Civil	

Other experience and qualifications relevant to the proposed Project:

As Principal Partner of Infinity Engineering Consultants, William J. Thomassie, P.E. is one of the registered Supervising Professionals for the firm and is responsible for the management of all engineering production. Included in those responsibilities is the oversight of staff managers. Mr. Thomassie's 30+ year career has typically included supervision of multi-disciplinary projects. With many of these projects requiring up to \$45,000,000 for installation or modifications, his guidance and shaping of project designs, along with construction support, enabled completion on schedule and with minimal adverse impact on commerce in the area. Mr. Thomassie's experience which would be relevant to Jefferson Parish's need for drainage conveyance and roadway rehabilitation includes:

U.S. Coast Guard's Bucktown Station – New Orleans, LA

Principal for the design engineering and hydrographic survey for the **maintenance dredging of the U.S. Coast Guard's Bucktown Station** in New Orleans, LA. Project included the GPS survey and layout of 2000 linear feet of channel to be dredged, as well as the design engineering of the fill placement area and dredge discharge.

Sewerage & Water Board East Bank Wastewater Treatment Flood Berm Protection System – New Orleans, LA

Provided civil and structural designs for a **new flood protection berm** at the Florida Avenue Wastewater Treatment Plant. For the \$30 Million Construction project, plans and specifications were provided for the design of secure flood gates, flood walls, electrical transmission and road and piping crossings for plant flood protection.

Venice Port Complex Permitting & Design – Venice, LA

Principal for the design engineering and regulatory permitting for several sheet pile bulkhead rehabilitation projects on Tiger Pass (Mississippi River) in Venice, LA. Project included the design of over **3,500 linear feet of sheet pile bulkhead** at an estimated construction cost of \$10 million.

TEC Professional Services Questionnaire

Washington Group (URS) Hatfield's Ferry Power Station – Masontown, PA

Principal for the design engineering of the new limestone barge offloading facility at Allegheny Energy's Hatfield's Ferry Power Station on the Monongahela River in Masontown, PA. Project included the design of **1000 linear feet of sheet pile bulkhead and rock anchors** at a total estimated cost of \$7.2 million.

Ollie Drainage Pump Station – Jesuit Bend, LA

Principal in Charge and Project Manager for the drainage study of the Ollie drainage basin. Developed designs and specifications for the upgrade and expansion of the Ollie Pumping Station. This included: permit drawings as required to apply for a **U.S. Army Corps of Engineers Section 10/404 permit**, topographic and hydrographic surveys of the suction and discharge basins, a geotechnical survey of the site with soil borings, pump building foundation and framing, discharge piping supports, modification, and replacement of the retaining walls to connect to the existing levee (steel sheet pile, concrete at building), new access roads and (3) bridges, two (2) new 300 cfs pumps, diesel engines, and design of fuel delivery system.

Raw Water Pump Intake Structure Design – Lake Charles, LA

Principal and lead engineer for structural engineering design for a new fire water system on behalf of Conoco Phillips for their Clifton Ridge Terminal along the Calcasieu River. The foundation structure designs (slabs, walls, bracing, etc.) included steel-reinforced piles and decking. Designs also included a sluice gate for water intake and steel grated walkway for pedestrian use.

Meco and Southern Scrap Pumping Stations – New Orleans LA

Project manager for the structural design of the replacement of these two sewerage pumping stations, which replace those destroyed by Hurricane Katrina. The buildings are pile supported with concrete basement slab below grade. Concrete walls extend to grade and support CMU walls and a steel stud framed, standing seam metal roof.

Port of New Orleans Industrial Canal Evaluation - New Orleans, LA

Principal for the condition evaluation and assessment of all Industrial Canal Properties for the Port of New Orleans following Hurricane Katrina. Assessments included all structural, electrical, and mechanical components of over 40 buildings located on 12 different properties. Project involved coordination of all assessments with FEMA.

Port of New Orleans Coastal Dock Assessment & Repair – New Orleans, LA

Principal for the evaluation and engineering design for the repair of a Port of New Orleans cargo dock on the Mississippi River. Services included the condition inspection report, cost saving measures, and construction observation on the collapsed Napoleon Avenue Wharf "C" Transit Shed deck slab. Approximately 33' by 50' of concrete deck and steel support structure collapsed under the weight of 30 steel coils of varying size and weight.

IMTT Terminal New Dock 4 – Geismar, LA

Principal for the engineering design and specification of a new ship/barge dock on the Mississippi River in Geismar, LA. Marine berth was designed to load and offload ships and barges with liquid products and valued at \$24.0 million. Design was multi-disciplinary, including civil, structural, mechanical, and electrical systems.

River Transport Barge Dock Replacement – Jefferson, LA

Principal for the damage assessment and engineering design of a new replacement barge dock on the Mississippi River in Jefferson, LA. The dock was completely destroyed following an allision with the vessel M/V NORDBAY requiring replacement of the dock structure and four breasting dolphins.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Rachel Kenney, P.E.
Chief Engineer

Project Assignment:

Chief Engineer

Name of Firm with which Associated:



Infinity Engineering Consultants, LLC.

Years' experience with this Firm:

13

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 2001 / Civil Engineering

Active registration: Year first registered/discipline:

Professional Engineer – Civil Engineering
LA / 2013 / Civil

Other experience and qualifications relevant to the proposed Project:

As a Civil/Structural Engineer, Ms. Kenney is responsible for structural and civil design, site inspection, cost estimating, permitting, project management, specification development, and bid package development. Specific major project relevant to Jefferson Parish's need for drainage conveyance and roadway rehabilitation includes:

Sewerage and Water Board of New Orleans East Bank Wastewater Flood Protection System – New Orleans, LA

Provided civil and structural designs for a **new flood protection berm** at the wastewater treatment plant. For the \$30 million construction project, plans and specifications were provided for the design of secure flood gates, flood walls, electrical transmission and road and piping crossings for plant flood protection.

Port Ship Service Dock Design – Plaquemines Port Harbor & Terminal

Managed project team to **design relocated dock facility**. The new dock included a USACE levee crossing leading to an elevated platform and loading dock. Capture piles were provided for the relocated barge dock. A new terminal building was included, as well as a forklift shed, 4,000gal fuel tank, and crane platform. All structures were supported by **steel piles and steel framing**. Gravel parking lots were provided on the protected side of the levee and on the batture.

Washington Group Allegheny Energy Hatfield – Masontown, PA

Assistant engineer for the design engineering of the new limestone barge offloading facility at Allegheny Energy's Hatfield's Ferry Power Station on the Monongahela River in Masontown, PA. Project included the design of **1000 linear feet of sheet pile bulkhead and rock anchors** at a total estimated cost of \$7.2 million.

Meco and Southern Scrap Sewer Pumping Stations – New Orleans, LA

Responsible for the structural design of the replacement of two sewer pumping stations. The buildings are pile supported with concrete basement slab below grade. Concrete walls extend to grade and support CMU walls and a steel stud framed, standing seam metal roof. Foundation design included review of geotechnical reports.

RTA Canal Street Ferry Terminal CMAR – New Orleans, LA

Managed a multidisciplinary team of designers working with the Owner's Contractor to determine the most cost-effective design that would satisfy project and grant requirements. The project included: a steel pile supported wharf with concrete beams and hollow core concrete panels; a timber pile supported, steel framed terminal building; captive barge dock; and temporary berth with steel platform, temporary captive barge dock, and steel monopiles.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Louis Jackson, P.E.
Operations and Quality Control Manager
Civil Engineer

Project Assignment:

Project Manager
Sub Consultant Liaison

Name of Firm with which Associated:



Infinity Engineering Consultants, LLC.

Years' experience with this Firm:

4

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1995 / Civil/Structural Engineering

Active registration: Year first registered/discipline:

Professional Engineer – Civil Engineering
LA/2001/Civil

Other experience and qualifications relevant to the proposed Project:

As the Operations & QA/QC Manager, Louis Jackson, P.E. ensures all designs and deliverables achieve Infinity's high expectations of effective and efficient engineering. Mr. Jackson holds more than 27 years of engineering design, project management, and quality control experience. Among that experience, Mr. Jackson held the position of Director of Engineering for the Port of New Orleans.

Mr. Jackson holds substantial experience in disaster recovery planning and response. After Super Storm Sandy, Mr. Jackson provided 404 & 406 mitigation support services for a year and half in Nassau County, New York. With Mr. Jackson's extensive work in producing stormwater management planning and design, Mr. Jackson has become a credible resource to both governmental and non-governmental organizations seeking to further stormwater management across the Gulf Coast Region.

Pontilly Stormwater HMGP Project - New Orleans, LA

Served as the senior project manager as well as task leader for the **environmental assessment, permitting, cost estimating, and community outreach** tasks for the Pontilly Stormwater HMGP Project. Responsibilities included development of initial and updated project budgets and schedules, completion of a preliminary and final Draft Environmental Assessment, participation in multiple formal and informal community meetings, and completion of required permit applications and cost estimates. Because of the nature of the project close coordination has been required across multiple agencies and departments who have a stake in the success of the project.

St. Tammany Wastewater Consolidation Program - St. Tammany, LA

Led a diverse group of professionals in the development of a program to provide centralized wastewater collection and treatment in select areas of St. Tammany Parish. Responsibilities included **formulation of a project master plan including projecting funding needs and expenditures for program implementation.**

CMOM Baseline Assessments - Meridian, Gulfport, and Biloxi, MS

Responsible for the performance of Capacity Management Operations & Maintenance (CMOM) baseline assessments for three different wastewater agencies in the State of Mississippi. The baseline assessment was used to **identify compliance gaps regarding EPA Region 4** CMOM recommendations and to determine cost effective measures to reach compliance.

City-Wide Drainage Master Plan - New Orleans, LA

TEC Professional Services Questionnaire

Served as the project manager for the **\$2M City of New Orleans Drainage Master Plan Project**. Project Management responsibilities included development of a detailed budget for completion of the project along with development of a detailed project work plan which addressed a multitude of project aspects, including communications and coordination of efforts and quality management. Post project activities have involved becoming a noticeable and credible resource to both governmental and non-governmental organizations seeking to further stormwater management in the New Orleans Metropolitan Region.

Site Inspection and Cost Estimating Task Leader, Hurricane Harvey Recovery Project - Houston, TX

Served as the single point of responsibility for coordination, performance, and documentation of damage inspections of over 350 damage line items in the seven months following Hurricane Harvey. Duties required coordinating the activities of seven team leaders and five engineering sub consultants. Developed and enforced multiple Standard Operating Procedures for the services provided. Assisted with the development of preliminary Hazard Mitigation Proposals for damaged facilities, including public buildings and wastewater lift stations.

Canal Street Ferry Terminal CMAR – New Orleans, LA

Operations and Quality Control Manager for the development of the design most cost-effective design to build a new pedestrian ferry terminal. Ensured designs satisfy project and grant requirements. The project included designs for a new steel pile supported wharf, steel framed terminal building, and two steel framed towers connected by a prefabricated two steel truss bridges spanning over railroad tracks.

Broadmoor Drainage Upgrades and Green Infrastructure Project - New Orleans, LA

Senior project manager and lead engineer to guide a multi-disciplined team through the development of a schematic design report and schematic design documents for a project aimed at improving stormwater management within multiple New Orleans Neighborhoods on a very aggressive schedule. Responsibilities included managing landscape architects and civil engineers through the development of a systematic approach to improving the stormwater management aspects of the existing system, effectively increasing the capacity of the system at a lower cost than traditional methods.

Ridgelake Drive Drainage Improvements – Metairie, LA

Operations and Quality Control Manager for the engineering and design services for drainage improvements on Ridgelake Drive, including subsurface drainage, new 54-inch outfall, and lateral drainage connections. Provided design oversight as well as acted as liaison between Infinity and Jefferson Parish to ensure designs effectively met the goals of the scope of design.

Magnolia Street Bridge – Slidell, LA

Operations and Quality Control Manager for the replacement of Magnolia Street Bridge. Provided technical support and project coordination for the replacement of the existing bridge with a 2-4-ft x 6-ft reinforced aluminum box culvert and approximately 60-LF of existing roadway with guardrails on each side of the roadway. Acted as liaison between Infinity and City of Slidell to ensure deliverables were received in a timely manner and were effective in their design.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Ricardo Contreras, P.E.
Civil Engineering Manager

Project Assignment:

Project Manager
Civil Engineering Manager

Name of Firm with which Associated:



Infinity Engineering Consultants, LLC.

Years' experience with this Firm:

7

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1994 / Civil Engineering

Active registration: Year first registered/discipline:

Professional Engineer – Civil Engineering
LA / 1999 / Civil FL / 2006 / Civil

Other experience and qualifications relevant to the proposed Project:

Mr. Contreras holds over 27 years of Civil Engineering experience that encompasses program management, design, and construction administration. Throughout his career, Mr. Contreras has worked on various projects, including roadways, bridges, drainage improvements, water and wastewater improvements, site development, and flood control structures. As the Civil Engineering Manager, Mr. Contreras partners with Infinity's Project Engineers to make certain every design and deliverable is executed effectively and on time.

West Metairie Avenue & Embankment Rehabilitation – Metairie, LA

Project manager responsible for the overall design, preparation of plans and specifications, cost estimates, and coordination of all aspects of the design of roadway, crosswalk, bike lane, and drainage improvements for West Metairie Avenue. The designs included the **removal and replacement of concrete paving panels** and repair and adjustment of select drainage outfalls that cross beneath the avenue and enter the canal within the median, and implementation of stabilization measures to the embankments of the canal.

Brookter Street Floodgate Design and Construction – Slidell, LA

Provided technical assistance for the design of a flood gate that is a **self-deploying buoyant gate** activated by rising water. A foundation to contain the retracted gate along with wing walls to integrate into the existing levee system and new roadway approaches were constructed.

Conway Bayou Drainage Pump Station Expansion – Sorrento, LA

Technical lead responsible for providing engineering services associated with the expansion of the Conway Bayou Drainage Pump Station in Sorrento, LA. Project components included preparation of detailed construction drawings for two new diesel driven pumps housed in a new steel/concrete structure adjacent to the existing building. The civil design included existing reservoir design modifications and a new pump intake area. **Project was funded through the FEMA Hazard Mitigation Grant Program.**

Belle Point Drainage Pump Replacement – Reserve, LA

Project manager for the design of two new pump stations to improve the existing drainage of the Belle Point neighborhood. The pumping stations include submersible pumps and power systems located below grade in a wet well within the right-of-way of the street and are capable of handling 70,000 GMP of storm water.

Pritchard Ditch Drainage Improvements – Marrero, LA

TEC Professional Services Questionnaire

Technical lead responsible for the design and development of the Pritchard Ditch Drainage Improvements. The improvements included **replacing a reach of drainage canal with box culverts and headwalls**. Responsibilities included analysis of drainage conveyance capacity, box culvert and headwall design and placement including the development of construction documents (Specifications and Plans and cost estimate).

Trapp Canal – Jefferson Parish, LA

Responsible for the design of approximately **14,500 linear feet of concrete slope paving**, various drain line extensions, and sediment removal within Trapp Canal. Repairs included 54,800 cubic yards of excavation, 46,300 cubic yards of lightweight aggregate (expanded clay) for backfill, 216,000 square feet of vinyl sheet pile, placement of 43,800 tons of rip rap, and the construction of **34,000 square yards of concrete slope paving**. Responsibilities also included performing drainage analysis/calculations.

Temporary Levee Repairs for the Citrus Lands Back Levee – Plaquemines Parish, LA

Responsible for the design and construction administration for coordination with the National Guard to airlift 3,000 pound sand bags via Chinook Helicopters to temporarily close a 200 linear foot breached section of levee, **reconstruction of approximately 200 linear feet of levee** by utilizing 10,861 tons of various classes of rip rap to close the breach and armoring of the flood side of the existing levee, 6,958 tons of limestone, and 58,196 cubic yards of clay embankment; scour repairs to approximately 15,800 linear feet of levee, construction of two access roads totaling approximately 15,840 linear feet to access the breached section, minimized impacts to adjacent wetlands by coordinating with the Office of Coastal Management and the Corps of Engineers.

Breach and Scour Repairs to Citrus Lands Levees from Laressite to Myrtle Grove – Plaquemines Parish, LA

Responsible for the design and construction administration for breach repairs and levee reconstruction of approximately 300 linear feet and scour repairs for approximately 69,966 linear feet along the existing levee. Repairs included 43,350 cubic yards of clay embankment, 270 tons of rip rap for armoring, removal of 3,000 cubic yards of storm generated debris, and **hydro-mulching 25 acres of the existing levee**.

Emergency Repairs to Braithwaite / Scarsdale Levee - Plaquemines Parish, LA

Responsible for the design and construction administration of repairing scour holes and restoring approximately 89,700 linear feet of the existing levee to pre-Hurricane Gustav and Ike conditions, repairs to a failed section of the levee approximately 290 linear feet, and realignment of an existing drainage canal and backfilling of the old canal. Repairs included removal of 3,901 cubic yards of storm generated debris, **placement of 7,745 tons of 610 limestone, and 142,445 cubic yards of clay embankment**.

Channel Excavation and Sediment Removal of Bayou Terre Aux Boeufs - St. Bernard Parish, LA

responsible for the contract administration for sediment and debris removal for 40,214 linear feet of drainage canals, which included the **excavation of 119,580 cubic yards of sediment**, spoil disposal, and debris removal along the length of the canal, coordination with NRCS, LaDNR, and Parish officials.

Remediation, Removal, And Disposal of Grounded Vessels - Plaquemines Parish, LA

Responsible for the design and construction administration for the removal of twelve grounded vessels due to Hurricane Katrina throughout Venice. Work included **coordination with Wildlife and Fisheries, FEMA, Coast Guard, LaDNR, and Parish Officials**.

Channel Excavation and Sediment Removal of Riverbend Canal, South Lake Canal, Little Riverbend Canal, Willie Smith Ditch, and Reunion Canal – St. Bernard Parish

Responsible for the contract administration for sediment and debris removal for 21,905 linear feet of drainage canals, which included the **excavation of 7,163 cubic yards of sediment**, the disposal of 6,805 cubic yards of spoils, and debris removal along 9,337 linear feet of canal, coordination with NRCS, LaDNR, and Parish officials.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Robert Haydel Civil Project Designer
Project Assignment:
Civil Project Designer & Hydrologic and Hydraulic (H&H) Study
Name of Firm with which Associated:
 Infinity Engineering Consultants, LLC.
Years' experience with this Firm:
4
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2005 / Physics Master of Science / 2007 / Civil & Environmental Engineering
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>With over 17 years of experience, Robert Haydel is proficient in construction and project management as well as managing grant proposals. Mr. Haydel expertise lies in urban hydraulics and hydrology modeling, sediment transportation, and river morphodynamics. Mr. Haydel specialties include channel design, storm water system design, infrastructure assessment, sedimentation investigation, and disaster damage assessment.</p> <p><u>Pritchard Ditch Drainage Improvements – Jefferson Parish, LA</u> Participated as a project manager responsible for leading a team in the design and development of the Pritchard Ditch Drainage Improvements. The improvements included replacing a reach of drainage canal with box culverts and headwalls. Responsibilities included analysis of drainage conveyance capacity, box culvert and headwall design and placement..</p> <p><u>Bainbridge Canal Closure & Roadway Improvement – Kenner, LA</u> Participated as a project manager responsible for leading a team in the development of the Bainbridge Canal realignment. The improvements included relocating a 1000 ft reach of drainage canal. Responsibilities included analysis of drainage canal cross sectional layout, drainage outfall connections, adjacent infrastructure utilities, and alignment with downstream headwall. Additionally, developed construction documents and cost estimate.</p> <p><u>MSY Airport Stormwater Management Master Plan – Kenner, LA</u> Under the direction of Infinity's engineer of record, led Infinity's team in conducting field investigations of major drainage facilities at Louis Armstrong International airport, as part of a stormwater management master plan. Responsibilities included applying the US EPA Storm Water Management Model to the development of a baseline condition hydrologic and hydraulic model for the stormwater system. The master plan culminated in a report consolidating the team's analysis to inform future decisions on stormwater systems at MSY airport.</p> <p><u>City of New Orleans Stormwater Drainage Master Plan – New Orleans, LA</u> As part of CDM Smith's City of New Orleans Stormwater Drainage Master Plan, analyzed New Orleans stormwater conveyance capabilities, and modeled the performance of the drainage system utilizing Storm Water Management Model (SWMM). Identified potential flood hazard areas throughout the city and provided recommendations for city drainage improvements utilizing green infrastructure techniques.</p> <p><u>Estelle Drainage Pump Station Addition Study – New Orleans, LA</u> Under the direction of Infinity's engineer of record, led a team in evaluating the drainage capacity expansion for Estelle drainage pumping station No.2. The project team has evaluated the existing intake and discharge basins, existing electrical services, existing pumping capacity, and existing site to develop a decision matrix with various expansion alternatives. Ultimately, the team will draft a project report detailing the study and providing Jefferson Parish a recommendation to achieve an additional 2,000 cfs pumping capacity at Estelle DPS No.2.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Michael Riviere, E.I.
Civil Project Engineer

Project Assignment:

Civil Project Engineer
Construction Engineer

Name of Firm with which Associated:



Infinity Engineering Consultants, LLC.

Years' experience with this Firm:

11

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1988 / Civil Engineering

Active registration: Year first registered/discipline:

Engineering Intern: LA / 1985 / 13329
Civil Engineering

Other experience and qualifications relevant to the proposed Project:

Myrtle Grove Water & Sewer Line Replacement – Myrtle Grove, LA

Provided on-site resident inspection observation, prepared daily reports documenting contractor activities during the HDPE pipe water and forced sewerage main installation, testing, and tie-in. The two 8" water and the two 4", 6" and 8" sewer lines were being temporarily relocated during construction of the Army Corps of Engineers flood protection levees. Pipes will be rerouted through the top of the levee per USACOE requirements when completed.

Brookter Street Floodgate – Slidell, LA

As project manager performed construction administration services for the installation of the Brookter St. Floodgate. The flood gate is a **self-deploying buoyant gate activated by rising water**. A foundation to contain the retracted gate along with wing walls to integrate into the existing levee system and new roadway approaches were constructed. Signage and warning lights were also installed to warn motorists of gate's activation.


Sewerage & Water Board East Bank Wastewater Treatment Plant Flood Protection Modifications – New Orleans, LA

Project Engineer for the design of roadway and railway flood gates, flood walls, utility relocation and penetration of **new flood wall**, construction phasing, temporary relocation of access roadway and removal and reconstruction of the railway for the East Bank Wastewater Treatment Plant flood protection. The rail gate and replacement railway were designed to meet the requirements of Norfolk Southern standards for spur track. Checked and coordinated all details of the steel swing gates and reviewed shop drawings for the project.

Cenex Harvest States (CHS) Levee Ramp – Myrtle Grove, LA

As Project Manager designed a new diagonal levee ramp to replace an existing non-compliant perpendicular ramp for CHS using the USACE standard design details and integrating the ramp into the site with existing site constraints between the levee and the New Orleans & Gulf Coast Railway (NOGC). Provided surface runoff collection and drainage with use of French drain between the levee and the tracks and a trench drain across the concrete ramp without penetrating the levee structural fill. **Applied for a Section 408 permit with the USACE; obtained letters of no objection from the Coastal Protection and Restoration Authority (CPRA)** and a written endorsement for the real estate, operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) statement and statement of in-kind credit from Plaquemine Parish. Prepared plans with specification notes for the ramp construction with concrete pavement, surface water runoff collection and cross track drainage system and precast concrete track crossing details.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
	Cindy Gallo, P.E. Project Delivery Manager
Project Assignment:	
	Project Delivery Manager
Name of Firm with which Associated:	
	 Infinity Engineering Consultants, LLC.
Years' experience with this Firm:	
	9
Education: Degree(s)/Year/Specialization:	
	Bachelor of Science / 2014 / Civil Engineering
Active registration: Year first registered/discipline:	
	Engineering Intern: LA / 2019 / 43357 Civil Engineering
Other experience and qualifications relevant to the proposed Project:	
<p><u>Conway Bayou Drainage Pump Station Expansion – Sorrento, LA</u> Project manager responsible for leading a team of civil, structural, mechanical, and electrical engineers to provide engineering services for a drainage pump station expansion. Project components included a feasibility study to determine potential solutions to increase pumping capacity, followed by detailed construction drawings. Final designs included the specification of two new diesel driven pumps housed in a new steel/concrete structure. Civil designs included existing reservoir design modifications and a new pump intake area.</p> <p><u>Belle Point Drainage Pump – Reserve, LA</u> Assisted with the initial drainage calculations using the Louisiana DOTD Hydraulics Program, HYDR2009. This project consisted of a hydrology and hydraulic study for the watershed area in a Belle Point subdivision to identify flood susceptibility and the design of submersible storm water pump stations.</p> <p><u>Port of New Orleans Patterson Pump Station – Belle Chasse, LA</u> Part of the structural team that was responsible for the design and model of a new steel platform in RAM Elements. This project consisted of performing engineering services associated with maintenance and improvements for the Patterson Drainage Pump Station.</p> <p><u>Shintech Water Intake Platform – Plaquemine, LA</u> Project manager of the engineering team responsible for the civil, structural, mechanical, electrical and instrumentation designs of a new EPA 316B compliant river water intake platform to provide raw/untreated water via a 30-inch pipeline to clarification units within Shintech's SPP3 Plant. Project components included performing topographic and hydrographic surveys, as well as the design of the concrete intake platform and vehicular access bridge supported by steel pilings/substructures, levee crossing and modifications, piping layouts, pipe support design, hydraulic analyses, and power and instrumentation as required for the platform.</p> <p><u>St. Charles Parish Water Intake Platform Repair – Norco, LA</u> Project manager of the engineering team responsible for the structural and electrical designs of the repairs to St. Charles Parish's east bank river water intake platform. Project components included performing hydrographic surveys and specification of removal of the damaged structures, as well as the design of the pump skid stabilization, concrete deck/pile cap repairs, and new steel support piles. Designs also included the implementation of multiple monopiles to serve as protection piles for the structure as well as a new prefabricated building to house all required electrical equipment necessary for pump and crane operations.</p>	

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Raoul V. Chauvin, III, P.E.
Principal

Project Assignment:

Mechanical Engineering Advisor

Name of Firm with which Associated:



Infinity Engineering Consultants, LLC.

Years' experience with this Firm:

20

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1990 / Mechanical Engineering

Active registration: Year first registered/discipline:

IA/2018/Mechanical

IL/2018/Mechanical

IN/2018/Mechanical

KY/2018/Mechanical

LA/1999/Mechanical

MI/2018/Mechanical

MN/2018/Mechanical

MS/2007/Mechanical

OH/2018/Mechanical

TN/2018/Mechanical TX/2007/Mechanical

Other experience and qualifications relevant to the proposed Project:

As Principal Partner of Infinity Engineering Consultants, Mr. Chauvin is responsible for all mechanical system designs. Included in those responsibilities are client interface, site inspection and evaluation, contract negotiation, project management, design, and drafting supervision. Mr. Chauvin's professional 30-year career has revolved around providing cost effective, efficient design solutions for municipalities, offshore oil, and inland marine terminals.

Ollie Basin Drainage Study and Pump Station Expansion – Jesuit Bend, LA

Lead mechanical engineer for a new \$16.5MM 600 CFS drainage pump station addition. Evaluated existing pumps to determine suitability of present and future demands. Additional fuel, air, and water supply systems were designed to support the new pumps. Additionally, **specified new pumps**, diesel engines, and gears based on the hydraulic requirements, including future Corps of Engineers levee modifications.

Patterson Pump Station Port of New Orleans – New Orleans, LA

Principal engineer and mechanical engineering supervisor for the design of **removal and refurbishment of two vertical pumps**; condition evaluation of two electric motors; replacement of the electrical system from the existing main breaker/disconnect; establishment of a back-up generator; and checking the elevation of the discharge piping against the flood protection requirement.

St. John the Baptist Parish Belle Point Drainage Pumping Station – Laplace, LA

Principal engineer and mechanical engineering supervisor for the design of **two new pump stations** to improve the existing drainage. The pump stations include submersible pumps and power systems located below grade in a wet well within the right-of-way of the street and will be capable of handling 70,000 GMP of storm water.

Davant Oxidation Pond Repair Design – Davant, LA

Project manager and lead mechanical engineer for the design repair of this sewage processing facility in Plaquemines Parish. Plans and specifications for new pumps, piping, valves instruments, electrical panels and feeders were designed as a result of flooding and wind damage. To mitigate future damage, **the berms of all three ponds were repaired, raised, and re-constructed** to the 10 States Standards.

Amoretti & Fort Jackson Sluice Gates – Buras, LA

Lead Engineer responsible for damage assessment and repair design for mechanical components of these flood control drainage structures. Coordinated with Plaquemines Parish operations and FEMA personnel for strategic planning of repairs operations, including hazard mitigation techniques. Both drainage control stations required the **replacement of mechanical gates and gear mechanism**.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Laura Kelly, P.E.
Mechanical Engineering Manager

Project Assignment:

Mechanical Engineering Manager

Name of Firm with which Associated:



Infinity Engineering Consultants, LLC.

Years' experience with this Firm:

7

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 2008 / Mechanical Engineering

Active registration: Year first registered/discipline:

Professional Engineer – Mechanical Engineering
LA / 2015 / 39645

Other experience and qualifications relevant to the proposed Project:

Ms. Kelly holds fifteen years of mechanical engineering experience, including more than five years in major capital oil and gas consulting. Ms. Kelly has served as a mechanical technical lead in phases ranging from design conception to field installation and startup. As Mechanical Engineering Manager, Ms. Kelly oversees all mechanical designs and deliverables.

Conway Bayou Drainage Pump Station Expansion – Sorrento, LA

Project engineer responsible for leading mechanical design team in engineering services associated with a proposed expansion of the Conway Bayou Drainage Pump Station. The final design included **two diesel-driven pumps** with right angle gear drives and formed suction intakes, as well as modifications to the diesel fuel storage and piping systems. Project responsibilities included **equipment sizing and selection**, design of engine fueling system, and development of drawings, specifications, and project documents.

Planters Pump Station Replacement Design – Jefferson Parish, LA

Project engineer responsible for project management and mechanical engineering design for the **replacement of engines and refurbishment of gears** at Jefferson Parish's Planters Pump Station. Project responsibilities included project coordination, site visits, specification of equipment, design of engine cooling system, and development of drawings, specifications, and project documents.

16th Ave. Pump Building Rehabilitation – Covington, LA

Project manager responsible for the **replacement of controls and electrical systems** at a municipal water pumping building. Project responsibilities included meeting with client's representatives to define scope objectives, coordinating project schedule and deliverables, and participating in project status meetings.


Sewerage and Water Board New Orleans West Power Complex Non-C7 Tie-Ins – New Orleans, LA

Project manager responsible for leading a team in providing civil, mechanical, structural, and electrical designs for utility connections to the new West Power Complex (WPC) at SWBNO's Carrollton Water Plant. Utility connections include **electrical duct bank, water, sewer, and fuel oil**. Project components included performing laser scanning to develop 3D point cloud, and developing civil, electrical, piping, and structural designs in a 3D model for design coordination.

LSU Science Zone Utility Infrastructure Improvements – Baton Rouge, LA

Project manager responsible for leading a team to provide civil and electrical designs for the replacement and upgrades of existing utility infrastructure in the "Science Zone" on LSU's Baton Rouge campus. Project designs included replacement and/or repairs to the **chilled water, drainage, steam & condensate, domestic water**, telecommunications, and electrical systems. Project responsibilities included coordinating and participating in site visits, coordinating with subconsultants for topographic and SUE surveys, and leading the project team in the development of detailed construction drawings and opinions of probable cost.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
John Lawrence, P.E. Electrical Engineering Manager
Project Assignment:
Electrical Engineering Manager
Name of Firm with which Associated:
 Infinity Engineering Consultants, LLC.
Years' experience with this Firm:
2
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2008 / Electrical Engineering
Active registration: Year first registered/discipline:
Professional Engineer – Electrical Engineering LA / 27941 / 1998
Other experience and qualifications relevant to the proposed Project:
<p><u>Avondale Lift Station Backup Generator Addition – Avondale, LA</u> Project manager for the design and installation to add a new backup power generator for the Avondale lift station within Jefferson Parish, LA. The new 1MW 480/277VAC, 3ph, 4W, backup generator has been designed with an associated 3-day belly diesel tank that will be skid mounted with the generator. The new generator will be installed on a new platform which will adjoin the existing electrical building. The new 1MW generator feeder will tie into a new automatic transfer switch via new underground conduits.</p> <p><u>St. John the Baptist Water Treatment Plant Improvements – Reserve, LA</u> Project manager for the of electrical, instrumentation, controls, and SCADA designs for improvements to the St. John the Baptist Water Treatment Plant. These improvements include a new water intake structure, transmission line, clarifiers, and clear well. The SCADA designs involve integrating multiple systems, including raw water intake and pre-treatment transfer pumps, into the existing SCADA system. Designs for the control room equipment included PLC control panels and identification of all major instruments.</p> <p><u>Sewerage & Water Board West Power Complex – New Orleans, LA</u> Principal electrical engineer for the design of routing high voltage electrical distribution to the Sewerage & Water Board's proposed new West Power Complex. The electrical designs include the addition of underground electrical duct banks to run cables from the C7 interface to the substations. The electrical duct banks also required routing of the cables, location of manholes, and performance of pull calculations. Additionally, provided designs for the above ground high voltage cable routing between the utility rack and the Sycamore substation.</p> <p><u>Helios Ave. Sewer Lift Station New Generator – Metairie, LA</u> Project manager for the design and installation of a new backup generator to the Helios Sewer Lift Station in Metairie, LA. The new natural gas 480/277VAC, 3ph, 4 wire, backup generator is specified to power two of the four VFD drives simultaneously. Once constructed, the new generator feeder will tie into a new automatic transfer switch (ATS) via new underground conduits, with the ATS installed in the existing electrical room. As part of the design package a short circuit and arc flash study accompanied the power distribution design.</p> <p><u>Kawaneer Sewer Lift Station Generator – Metairie, LA</u> Project manager for the addition of a backup generator to the Kawaneer Street sewer lift station in Metairie, LA. The designs call for a new 480/277VAC, 3ph, 4 wire, backup generator which will utilize natural gas for fuel. Infinity will provide mechanical and electrical engineering designs for the generator, as well as civil engineering for a new concrete slab with pilings as well as a new natural gas line.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Matthew Torres, P.E. Electrical Project Engineer
Project Assignment:
Electrical Project Engineer
Name of Firm with which Associated:
 Infinity Engineering Consultants, LLC.
Years' experience with this Firm:
2
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2017 / Civil Engineering
Active registration: Year first registered/discipline:
Professional Engineer – Civil Engineering LA/2022/Electrical TX/2022/Electrical
Other experience and qualifications relevant to the proposed Project:
<p><u>Upper Barataria Risk Reduction Barge Gate Electrical Design</u> Lead electrical engineer responsible for the electrical design and construction documents for a new 270 foot barge gate structure as part of the US Army Corps of Engineers 30 mile levee/floodwall improvements. The electrical design elements for the gate include electric utility service, stand-by-generator, navigational aids, power distribution, and controls. These designs included all electrical systems including conductors, transformers, electrical distribution equipment, and transfer switches.</p> <p><u>Jefferson Parish Water Department New Electrical Generators – Marrero, LA</u> Project engineer for the design to upsize new backup generators from 750kW to 1MW to provide for the full redundant power of the system at the Jefferson Parish water plant in Marrero, LA. The additional capacity required the modification of the existing switchgear to accommodate the new size of the backup generators to allow them to provide their maximum power. The new generators were designed to be diesel powered with a new day tank connected in parallel to the existing day tank with a new transfer valve between both tanks.</p> <p><u>Avondale North Sewer Lift Station Generator – Avondale, LA</u> Lead electrical engineer responsible for the generator and power system replacement design for the lift station. Project tasks included generator and electrical equipment sizing calculation, development of engineering design package including one line and equipment drawing, equipment specifications, and coordination with other disciplines.</p> <p><u>Hahnville High School MEP Additions – Bouttee, LA</u> Project manager for the facility renovations and addition of a Career & Technical Education learning space to Hahnville High School. In conjunction with the lead architect, designs included plumbing and HVAC systems for the new space, as well as electrical power service and distribution. Additionally electrical designs included communication systems and interior lighting plans. Throughout the construction phase, provided construction administration services with periodic site visits and review of contractor submittals.</p> <p><u>St. Charles Parish Public Schools Satellite Center MEP – Luling, LA</u> Project manager for the facility renovations and addition of a Career & Technical Education learning space to the St. Charles Parish Public Schools Satellite Center in Luling, LA. In conjunction with the lead architect, designs included plumbing and HVAC systems for the new space, as well as electrical power service and distribution. Additionally electrical designs included communication systems and interior lighting plans. Throughout the construction phase, provided construction administration services with periodic site visits and review of contractor submittals.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Bart Lacombe
Electrical Project Designer

Project Assignment:

Electrical Project Designer – SCADA & Instrumentation

Name of Firm with which Associated:



Infinity Engineering Consultants, LLC.

Years' experience with this Firm:

6

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 2007 / Civil Engineering

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Camp Plauche Lift Station Rehabilitation – Harahan, LA

Under the direction of the engineer of record, coordinated with Entergy and the Jefferson Parish Sewage Department for the electrical design for the lift station rehabilitation project to **replace the existing 2400-volt pumps with new 480-volt pumps**. Infinity's electrical designs included the new electrical service which required new transformers and a new motor control center for the lower voltage motors for the pumps. The designs also included a new PLC pump control system which will be integrated into most station operations.

Ochsner H3-3 Lift Station Pump Replacement – Jefferson, LA

Under the direction of the engineer of record, assisted with **electrical design and development of drawings for pump replacement** for the existing lift station and evaluation and design of new electrical distribution system. Infinity's designs included the electrical service and new pump controls.

Laurel & Mistletoe Street Lift Station Rehabilitation – Metairie, LA

Under the direction of the engineer of record, assisted with the development of electrical and control system designs for the rehabilitation of the sewage lift station. Infinity's electrical designs included **replacement of the electrical service equipment** with provisions for a temporary generator connection, the electrical distribution for the pumps, lighting, and receptacles in the dry well. The control system designs included replacement of the SCADA and telemetry equipment.

Planters Pump Station Refurbishment – Jefferson Parish, LA

Under the direction of the engineer of record, assisted with electrical design and development of drawings for **replacement of pump engines, interface with existing control systems**, and refurbishment of pump gears.

Shintech Water Intake Platform – Plaquemine, LA

Under the direction of the engineer of record, assisted with electrical and instrumentation design and development of drawings for construction of a **new river water pumping platform**. The electrical design included the main electrical service connection to plant electrical, cable tray design, platform distribution involving a 480V panelboard, stepdown transformer and panel for servicing lighting and receptacles and lighting design. Infinity's instrumentation design included connection to plant instrumentation, platform distribution involving instrument junction boxes and instrument cable tray required for integration for platform instruments.

St. Charles Parish Water Intake Platform Repairs – St. Charles Parish, LA

Under the direction of the engineer of record, assisted with electrical design and development of drawings for **replacement of electrical equipment and special systems** on the collapsed section of the water intake platform. The project scope was to re-establish platform electrical service including main electrical service connection to plant electrical, platform distribution involving a 480V MCC, pump VFDs and control wiring, stepdown transformer and panel for servicing lighting and receptacles and lighting design. The special systems included CCTV cameras and gate access.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Ehab Amin Meselhe, Ph.D., P.E.
Professor, River-Coastal Science and Engineering Department,
Tulane University

Project Assignment:

Environmental Educational Support

Name of Firm with which Associated:



Infinity Engineering Consultants, LLC.

Years' experience with this Firm:

Contract Employee

Education: Degree(s)/Year/Specialization:

Doctor of Philosophy / 1994 / Civil & Environmental Engineering
Master of Science / 1991 / Civil & Environmental Engineering
Bachelor of Science / 1987 / Civil Engineer

Active registration: Year first registered/discipline:

Professional Engineer – Civil Engineering
LA / 2000 / Civil ; IA / 1997 / Civil

Other experience and qualifications relevant to the proposed Project:

PROFESSIONAL EXPERIENCE

2017 - Present: Tulane University

Professor, River-Coastal Science and Engineering Department, Tulane University

2012 - 2018: The Water Institute of the Gulf

Vice President for Engineering

Director for the Louisiana RESTORE Center of Excellence

Director of Natural Systems – Modeling and Monitoring

1997 - 2012: The University of Louisiana

Director of the Institute of Coastal Ecology and Engineering

Professor with dual endowed professorships. Department of Civil Engineering

1994 - 1997: The University of Iowa: Post-doctor at the Iowa Institute of Hydraulic Research

CURRENT RESEARCH ACTIVITIES

Federal:

(Co-PI) "NGOMEX 2016: Using Linked Models to Predict the Impacts of Hypoxia on Gulf Coast Fisheries Under Scenarios of Watershed and River Management". Sponsored by NOAA Center for Sponsored Coastal Ocean Research (NOAA) (\$80,000) (2019-2020) (Grant)

(PI) NOAA-Office of Water Prediction: "Implementation of an Accurate, Robust and Computationally Efficient Channel Routing Technique for the National Water Model (NWM)" – (\$403,044) (2018 – 2020) (Grant)

(PI) "Louisiana Watershed Initiative." Sponsored by U.S. Department of Housing and Urban Development (HUD) through Office of Community Development (OCD) – (\$450,000) (2018-2020) (Grant)

State/Foundations/Other:

(PI) "Adding Innovation to the Coastal Master Plan: Planning for the Future Rather than Planning from the Past". Sponsored by Environmental Defense Fund - \$363,800 (2018-2021) (Contract)

(PI) "Barataria Landscape Modeling". Sponsored National Wildlife Federation (NWF): (\$46,700) (2020-2021) (Contract)

(PI) "2023 Coastal Master Plan: Model updates and improvements (CPRA): (\$45,544) (2020-2021) (Contract)

TEC Professional Services Questionnaire

(PI) "Optimization of the Bonnet Carre Operation Plans" (EDF) (\$150,000) (2019-2021)

(PI) "Development of a Decision Support Tool and Data Management System to Identify Relevant Monitoring Metrics for Evaluation and Comparison of Effective Coastal Restoration Activities" (Sea Grant) (\$50,000) (2020 – 2022)

(Co-PI) "Storm Surge and Sea Level Rising Model Enhancement in support of the FPLOS - Case study of the Biscayne Bay Coastal Areas" (South Florida Water Management District) (\$100,000) (2020-2021)

PROFESSIONAL SERVICES AND ACTIVITIES

Member: Community Advisory Committee for Water Prediction (CAC-WP) 2018-2022; National Weather Service Office of Water Prediction (OWP) – NOAA

Member: Committee on Independent Scientific Review of Everglades Restoration Progress (2019-2020); National Academy of Science (NAS)

American Society of Civil Engineers, 2017 Louisiana Infrastructure Report Cards: Chair for the Coastal Restoration and Protection Report Card

Associate Editor: 2008 – 2016

Journal of Hydrology, Elsevier Science, Earth Sciences Department

Associate Editor: 2003 – 2008

Journal of Hydraulic Research, International Association of Hydraulic Research (IAHR)

Numerous technical committee chairmanship and memberships

CONFERENCE PROCEEDINGS AND PRESENTATIONS: 148 papers/posters

AWARDS, HONORS:

1. The 2020 Journal of Geographical Systems (JGS) Best Paper Award: *Scott A. Hemmerling, Monica Barra, Harris C. Bienn, Melissa M. Baustian, Hoonshin Jung, Ehab Meselhe, Yushi Wang & Eric White, published in JGS 22:2 (2020), pages 241–266.*
2. The 2019 Louisiana Engineering Foundation (LEF) **Engineering Faculty Professionalism Award**
3. The 2018 Engineering News Report's Top 25 Newsmakers of 2018: Advanced the Industry
4. The 2011 **Best Paper of the year.** Journal of Hydrologic Engineering, ASCE, EWRI.
5. The 2010 **LITE-Fellow** for the Computation and Visualization Enterprise Consortium (CAVE).
6. The 2008 University of Louisiana, College of Engineering **Researcher of the Year Award.**
7. The 2007 University of Louisiana/ASCE Civil Engineering **Favorite Teacher Award.**
8. The 2006 UL **"Distinguished Professor"** Award.
9. The 2006 Louisiana Engineering Foundation (LEF) **Engineering Faculty Professionalism Award.**
10. The Stuller Family/BORSF **endowed professorship** in engineering effective Fall 2006 - 2012.
11. The Contractors Educational Trust Fund/BORSF **endowed professorship** in civil engineering effective Fall 2000 – 2012.
12. The 2005 **Coastal Stewardship Award,** Coalition to Restore Coastal Louisiana.
13. The 2005 **Certificate of Appreciation from the Gulf Guardian Awards Program** administered by the Environmental Protection Agency (EPA).
14. The 2005 **Team Achievement Award,** Louisiana Coastal Area, US Army Corps of Engineers and the State of Louisiana.
15. The 2002 **Outstanding Government Engineer,** American Society of Civil Engineers, Louisiana Section.
16. The 2001 **James M. Todd Technological Accomplishment Medal,** Louisiana Engineering Society.
17. The 2001 **ASCE Faculty Advisor Reward Program,** the Committee on Student Activities (CSA).
18. The 1999-2000 Chi Epsilon **Excellence in Teaching Award** for the Southern District.
19. The American Society of Civil Engineers (ASCE) 1999 **Best Technical Note Award** for the Journal of Hydraulic Engineering.
20. Member of **Chi Epsilon,** the National Civil Engineering Honor Society.
21. Research and teaching assistantships, Iowa Institute of Hydraulic Research, the University of Iowa.
22. Full scholarship to attend the **NPACI** (National Partnership for Advanced Computational Infrastructure) Parallel Computing Institute, August 1997.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

G. Paul Kemp
Geologist and Oceanographer

Project Assignment:

Environmental Support and Public Outreach

Name of Firm with which Associated:



Infinity Engineering Consultants, LLC.

Years' experience with this Firm:

Contract Employee

Education: Degree(s)/Year/Specialization:

Doctor of Philosophy / 1986 / Coastal Studies/Marine Sciences
Master of Science / 1978 / Marine Sciences
Bachelor of Science / 1975 / Natural Resources

Active registration: Year first registered/discipline:

Other experience and qualifications relevant to the proposed Project:

EMPLOYMENT

- 2013-Present, Principal, G. Paul Kemp & Assoc., LLC, Baton Rouge, LA

Dr. Kemp has worked for public clients ranging from the Association of Bay Area Governments (Sacramento River restoration and flood protection) to the South-Central Planning & Development District (Parish Coastal Zone Management Plans), and for private firms, including maritime shipping firms, engineering consultants, timber companies and environmental non-profits on a wide variety of issues involving river and coastal issues.

- 2011-2018, Commissioner, Southeast Louisiana Flood Protection Authority – East

Governor Jindal appointed Dr. Kemp to serve as one of 9 Commissioners of the New Orleans Flood Authority (east bank), which was established after the City was flooded during Hurricane Katrina. He was appointed to a slot reserved for professional scientist or engineer because of his expertise with hurricane surge and waves. Governor Edwards re-appointed Kemp to a second term in 2014, which concluded in 2018. The Authority served as a Board of Directors for 3 pre-Katrina levee districts and oversaw their consolidation.

- 2010-Present, Adjunct Professor, Department of Oceanography and Coastal Sciences, LSU

- 2007-2013, Vice-President, Gulf Coast Initiative, National Audubon Society, Founding Director, Baton Rouge Office

Dr. Kemp was recruited to lead National Audubon's Louisiana Coast Initiative in early 2007. He set up an office in Baton Rouge that grew from 1 to 8 people during his tenure. His initial work for the nation's oldest environmental NGO was to support integration of coastal restoration measures in Louisiana with the post-Katrina push for new levees.

- 1998-2006, Director, Natural Systems Modeling Laboratory & Hurricane Center, LSU

- 1994-1998, Associate Professor, Research, School of the Coast and Environment, LSU

- 1992-1994, Assistant Professor, Research, School of the Coast and Environment, LSU

- 1989-1994, Founding Executive Director, then Science and Technology Director, Coalition to Restore Coastal Louisiana, Baton Rouge

- 1987-1991, Project Scientist, Coastal Sciences Unit - Woodward-Clyde Consultants, Baton Rouge

TEC Professional Services Questionnaire

- 1987, Post-Doctoral Research Associate-Coastal Ecology Institute, LSU
- 1985-1987, Hydrogeologist, Groundwater Technology, Inc., Mandeville, LA
- 1984, NOAA/Knauss Congressional Fellow, Office of Senator Edward M. Kennedy, Washington D.C.
- 1983, Geologist, Navarin Basin Project- Woodward-Clyde Oceanengineering Inc., Dutch Harbor, AK and Houston, TX
- 1980-1983, Consulting geologist/Graduate Research Assistant- Department of Marine Sciences, LSU

CASES IN WHICH DR. KEMP WAS RETAINED AS, AND LATER QUALIFIED AS AN EXPERT IN SEDIMENTOLOGY AND HYDROLOGY AND PROVIDED -- OR WILL PROVIDE -- TESTIMONY AT TRIAL (IF CASE TRIED)

SUMMARY 1999-2021

Qualified as Expert and Testified at Trial: 8 (4 fed, 5 state)

Depositions: 18 (9 fed, 9 state)

Expert Reports/Investigations: 24 (13 fed, 11 state)

2021

(1) 3rd Judicial District court for Union Parish, State of Louisiana

John Andrew Newbold, et al., vs Kinder Morgan SNG Operator LLD, et al., Civil Docket No. 49, 745

Conducted field investigation and will write expert report.

(2) State of Louisiana, Third Circuit Court of Appeal 17-750

Steve Crooks and Era Lea Crooks vs State of Louisiana, Department of Natural Resources

Obtained and analyzed hydrologic records for Catahoula Lake in Rapides Parish, La., Ongoing

(3) United States District Court for the Middle District of Louisiana

Spoon, et al. vs. Bayou Bridge Pipeline LLC, et al. No. 3:19-cv-516-SDD-SAJ.

Recently contracted to conduct field inspection, determine navigability and write expert report.

2019-20

(1) 25th Judicial District court for the Parish of Plaquemines, State of Louisiana

Morgan City Land and Fur Company, LLC v. Tennessee Gas Pipeline Company, LLC, et al.

No. 64-754, Division "B"

Conducted Field Investigation and wrote expert report, now scheduled for deposition

(2) 34th Judicial District Court for St. Bernard Parish, State of Louisiana

Biloxi Marsh Lands Corporation v. Alta Mesa Holdings, LP, et al.

No. 17-1104

Conducted Field Investigation and wrote expert report and rebuttal report, and was deposed before defendant declared bankruptcy.

2018

(1) 39th Judicial District Court, Parish of Red River, State of Louisiana

Hall-Ponderosa LLC v. State of Louisiana through Louisiana State Land Office, et al.

Docket No. 35585

Conducted Field Investigation and wrote expert report, was qualified as expert in fields of geomorphology and hydrology, testified at trial in 2018.

(2) United States Court of Federal Claims

Biloxi Marsh Lands Corporation et al. consolidated with The Borgnemouth Realty Co., Limited et al. v. United States of America


Case Nos. 12-382 and 14-0003 (Docket No. 1:14-cv-00003-LB)

Wrote supplemental expert and rebuttal reports that covered three new properties affected by the Mississippi River Gulf Outlet as coastal hydrologist and sedimentologist, and was deposed, expect to testify at trial.


TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 1


Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Harbor of Refuge Design and Construction Empire, LA</p> <p style="text-align: center;">Plaquemines Parish Government John Helmers 504-934-6297</p>	<p>Infinity provided engineering, design services, and construction administration for the development of a harbor of refuge to house 30 to 50 commercial fishing vessels during harsh weather conditions. The scale of the project consisted of approximately 16 acres of land and surface water located off Hwy 23 south of the Empire Mississippi River Locks. Additionally, the project consisted of other amenities to support the growth of the local fishing economy and facilities for the public to learn about the importance of coastal protection and restoration for South Louisiana.</p> <p>The project includes the following civil, structural, mechanical, and electrical design elements: new harbor master building; 20,000 SF open air pavilion; RV parking; storage for 50+ fishing vessels; new parking area with green infrastructure elements; on-site wastewater treatment.</p> 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Completed: 2/2024	\$4,100,000	\$4,100,000

PROJECT NO. 2


Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">West Metairie Avenue Canal Stabilization & Street Rehabilitation Kenner, LA</p> <p style="text-align: center;">Jefferson Parish Government Gene Gillen, P.E. 504-832-4878</p>	<p>Infinity is the prime consultant for the restoration designs of (2) miles of West Metairie Avenue between Roosevelt Boulevard and David Drive. The project designs included the replacement of West Metairie Avenue pavement as well as adjacent canal bank stabilization efforts. The stabilization of the banks utilized new vinyl sheet pile wall and supplemented with rip-rap at the cap.</p> <p>Infinity was responsible for geometry and layout of the sheet pile, including the treatment of culvert outfalls. Adjacent sidewalks were also designed with side street turnout to meet ADA criteria. Additionally, Infinity is providing construction administration services.</p> 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Under Construction: 3/2025 (E)	\$7,050,406	\$7,050,406

TEC Professional Services Questionnaire


PROJECT NO. 3


Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>East Bank Wastewater Treatment Plant Flood Wall New Orleans, LA</p> <p>Sewerage & Water Board of New Orleans Reid Dennis 504-865-0657</p>	<p>Infinity provided the civil and structural designs for a new flood protection berm at the Sewerage & Water Board's East Bank Wastewater Treatment Plant. For the \$24 Million Construction project, plans and specifications were provided for the design of secure flood gates, flood walls, electrical transmission, and road and piping crossings for plant flood protection.</p> <p>The project included design of a 18'-0" high X 3'-0" thick X nearly one (1) mile long reinforced concrete floodwall, with continuous pilecap/footing and steel H-piles. Infinity designed the entrance wall, as well as the steel vehicular and railroad floodgates with associated drainage and paving. Civil design included modifications to the entrance roadway, paving, sluice gate, and utility penetrations at the sheet pile wall below the floodwall.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2015	\$24,000,000	\$4,800,000

PROJECT NO. 4

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Brookter Street Floodgate and Bank Stabilization Slidell, LA</p> <p>St. Tammany Parish Government Ken Dugas, P.E. 504-297-5343</p>	<p>Infinity provided designs for a self-actuating flood gate across Brookter Street at the intersection of Voters Road. St. Tammany Parish was in the process of establishing flood protection measures around the Fox Hollow and Springhill subdivisions, which included a berm approximately 6 feet high along the southern side of Voters Road. Infinity provided a feasibility study to determine which type of flood gate would best meet the needs of the Parish, settling on a passively actuated flood gate that tilts up from the roadbed on its own in the presence of water.</p> <p>Infinity's designs included a new concrete foundation with vertical walls at each side and shaped to receive the premanufactured gate. The foundation incorporated sheet pile both along its base and its sides to seal beneath and into the berm. The vertical geometry of Brookter street was adjusted to meet typical DOT roadway standards for design.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
9/2020	\$500,000	\$500,000


TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Ollie Pump Station Expansion & Retaining Walls Jesuit Bend, LA Plaquemines Parish Government Ken Dugas, P.E. 504-297-5343	<p>Infinity served as the prime consultant for the design of the pump station addition, which included civil, structural, mechanical, electrical engineering design, and construction administration. Infinity performed a drainage study of the basin and the subsequent addition of two (2) new 300 CFS drainage pumps to an existing 60-year-old facility. Infinity provided designs for new pile supported pump building foundation, enlargement of the suction/discharge basins, and new pumps based on hydraulic requirements.</p> <p>Additionally, the project included permit drawings as required to apply for a U.S. Army Corps of Engineers Section 10/404 permit; topographic and hydrographic surveys of the suction and discharge basins. Infinity also designed replacement of the retaining walls to connect to the existing levee.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
July 2011	\$16,500,000	\$16,500,000


PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Fort Jackson Sluice Gate Plaquemines Parish, LA Plaquemines Parish Government Bill Serpas 504-274-2471	<p>This FEMA-funded project involved damage assessment and repair design for a drainage control station damaged by flooding. Infinity coordinated with Plaquemines Parish operations and FEMA personnel for strategic planning of repairs operations, including hazard mitigation techniques.</p> <p>Infinity prepared plans and specifications for detailed design of:</p> <ul style="list-style-type: none"> • Canal sloping and installation of slope stabilization pavers on all canal banks • Replacement of mechanical gates and gear mechanisms • Hydraulic analysis of drainage basin for gate selection • Replacement of two (2) 150 feet, 72" steel corrugated culverts and repair/replacement of levee drainage district separation and water seal 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2009	\$1,400,000	\$1,400,000

TEC Professional Services Questionnaire

PROJECT NO. 7


Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Myrtle Grove Water/Sewer Lines & Lift Stations Replacement Port Sulphur, LA Plaquemines Parish Government Blair Rittiner 504-297-5577	<p>Infinity provided the designs for the relocation of (2) 8" water lines and (1) 2" water line on Marina Road that included both temporary and permanent installation designs. In addition to water line relocation Infinity designed the relocation and installation of approximately 3,800 linear feet of (2) 8" DHPE Sewer Force Mains (SFM) on Myrtle Grove and Audubon roads, including temporary and permanent installation. Jack and bore method was used for approximately 150 linear feet. The relocation of the water and sewer lines were necessitated by the addition of a new protection levee along the perimeter of the Myrtle Grove Marina designed by the US Army Corps of Engineers.</p>  <p>The removal and replacement of (2) existing pumps at each sewer lift station (No. 283 and No. 289) to clear the new levee modifications. The designs included replacement of the sewer lift station wet well, dry pit, duplex pumps, as well as electrical power and controls. Infinity was required to prepare an application for Coastal Use Permit with the Louisiana Department of Natural Resource (DNR).</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Under Construction: 5/25 (E)	\$1,600,000	\$1,600,000

PROJECT NO. 8


Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Davant Oxidation Pond Davant, LA Plaquemines Parish Government Bill Serpas 504-294-5343	<p>Complete repair of (3) large detention ponds, containment berms, pumps, electrical switchgear, and site beautification due to wind and flooding damage caused by Hurricanes Katrina and Rita. The Davant 4 Oxidation Pond consists of three settlement ponds connected by cross-over piping. As part of the damage repair and hazard mitigation designs, Infinity conducted a topographic and hydrographic survey of each pond and associated berms, influent and cross-over piping. To mitigate future damage, the berms of all three ponds were repaired, raised, and re-constructed to the 10 States Standards.</p>  <p>The new berm construction required additional fill to raise the overall height, and was achieved with compacted select material, and encapsulated with a geo-textile fabric underneath and an erosion control blanket on top. The berm was fortified with an 8' wide by 6" thick aggregate maintenance cap.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2010	\$800,000	\$800,000

TEC Professional Services Questionnaire

PROJECT NO. 9

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:			
<p>Bayou Segnette Drainage Pump Replacement Westwego, LA</p> <p>Louisiana Facilities Planning & Control Roger Husser 225-773-3192</p>	<p>Infinity has served as the prime consultant for the repairs and replacement of existing storm water management system components servicing the Bayou Segnette campground. The previous pump system has been inoperable since 2005 and was primarily comprised of two 50 HP electric motors and two 16" pumps, with electric power control and backup systems housed in weatherproof boxes. With the pumps inoperable, the Bayou Segnette campgrounds become flooded during excessive rainfall; necessitating the closure of the camping sites.</p> <p>When creating the pump replacement designs, Infinity set out to mitigate the effects of a 100-year, 24-hour storm with total rainfall of 14-inches. This resulted in Infinity creating designs for two 10-inch diameter electric motor pumps with a capacity of 3,000 to 3,400 GPM. The two pumps were fitted with new suction lines that tie into the existing discharge piping. Additionally, a new concrete suction basin was designed to mitigate the instances of vegetation clogging the pumps. Bayou Segnette State Park has remained open to the public and operational during construction. All new replacement equipment is code compliant and energy efficient.</p> 			
Completion Date (Actual or estimated):	Estimated Cost:			
	<table> <tr> <th style="text-align: center;">Entire Project:</th><th style="text-align: center;">Work for which Firm was Responsible:</th></tr> <tr> <td style="text-align: center;">\$500,000</td><td style="text-align: center;">\$500,000</td></tr> </table>	Entire Project:	Work for which Firm was Responsible:	\$500,000
Entire Project:	Work for which Firm was Responsible:			
\$500,000	\$500,000			

PROJECT NO. 10

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:			
<p>Clipper Estates Bulkhead Repair Slidell, LA</p> <p>Clipper Estates Homeowners Association Jim Langendonk 985-643-9868</p>	<p>Following Hurricane Katrina, a bulkhead in the Clipper Estates subdivision failed causing land erosion along the embankments of adjoining properties and a bridge. Infinity developed civil and structural designs and as well as handled permitting for the repair of the timber bulkhead and the remediation of all lost lands.</p> <p>Infinity employed and coordinated with a geotechnical consultant in identifying resultant earth pressures to use for the design of bulkhead sections and to identify acceptable slope requirements at the canal. The designs incorporated special corrosion protective measures to guard against salt/brackish water that is present at the site. Special remediation measures were employed to restore where the bridge was undermined below water.</p> 			
Completion Date (Actual or estimated):	Estimated Cost:			
	<table> <tr> <th style="text-align: center;">Entire Project:</th><th style="text-align: center;">Work for which Firm was Responsible:</th></tr> <tr> <td style="text-align: center;">\$500,000</td><td style="text-align: center;">\$500,000</td></tr> </table>	Entire Project:	Work for which Firm was Responsible:	\$500,000
Entire Project:	Work for which Firm was Responsible:			
\$500,000	\$500,000			
10/2014				

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. Not Applicable	Not Applicable	Not Applicable
2.		
3.		
4.		

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

Project Understanding

It is our understanding that the Department of Ecosystem and Coastal Management in Jefferson Parish seeks to create a list of qualified engineering firms to perform coastal engineering work on an as-needed basis across the Parish. With over 50% of Jefferson Parish being water, thus involving many coastlines, the projects stemming from this RFQ are vital to the safety and livelihoods of our communities. These coastlines provide a crucial barrier between Jefferson Parish communities and weather events that threaten the Gulf Coast.

To provide the necessary coastal engineering skills, Infinity has built a team that has the knowledge and experience in working along major water systems. This team knowledge includes local soil conditions, embankment stabilization, and morphodynamics – the interaction between sedimentation, water flow, and erosion. With current NOAA and NASA estimates predicting the Louisiana coast could lose 800 square miles to erosion by 2050, designing preventative and protective measures is a crucial undertaking. Infinity's team holds the knowledge and experience to execute any design challenge arising from this as-needed coastal engineering contract.

Team Overview & Qualifications

To accomplish the requirements of the project, Infinity has assembled a qualified team of professionals to perform all tasks that could be assigned by the Department of Ecosystem and Coastal Management. As a firm, Infinity Engineering holds a vast amount of experience in performing design, assessment, and advanced measurement work on projects involving large water systems. Infinity's in-house capabilities blend together the disciplines of **civil, structural, mechanical, and electrical engineering** to create a world-class organization capable of ushering a project from the earliest conceptual stages all the way to commissioning.

Additionally, Infinity has teamed with several consulting entities to ensure all environmental regulations are accurately followed and proper care is taken to preserve our Louisiana coastal ecosystems. Our engineering team consists of:

- **Infinity Engineering Consultants, LLC**
 - Engineering Design – Civil, Structural, Mechanical, & Electrical
 - Hydrologic & Hydraulic Modeling
 - Shoreline Stabilization and Protection
 - Project Management
 - Cost Estimation
 - Resident Inspection
- **La Terre Engineering, LLC**
 - Marsh/Ridge Restoration Civil Design
 - Shoreline Protection Civil Design
- **Neel-Schaffer**
 - Coastal Grant Writing & Administration
- **ELOS Environmental, LLC**

TEC Professional Services Questionnaire

- Environmental Permitting
- Wetlands Biological Assessments
- **Gulf South Engineering & Testing**
 - Onshore & Nearshore Geotechnical Services
- **BFM Corporation, LLC**
 - Hydrographic Surveying

Additionally, Infinity has partnered with two local leading experts in Gulf Coast coastal environmental challenges. These contract employees will help Infinity craft public outreach and provide environmental educational support based upon dependent on the project awarded.

- **Ehab Amin Meselhe, Ph.D., PE – Professor River-Coastal Science**
 - Environmental Educational Support
- **G. Paul Kemp, Ph.D., – Geologist & Oceanographer**
 - Environmental Support and Public Outreach

We take pride in our work and set forth to create designs that improve the livelihood of our communities. In response to the Request for Qualifications, we offer the following qualifiers for the evaluation criteria:

Professional Training and Experience in Relation to the Type of Work Required for the Engineering Services

Infinity's staff along with our teaming partners have the experience to provide Jefferson Parish with the expertise to prepare an appropriate assessment of the current coastal systems. We employ **(11), full-time, licensed professional engineers, many with over twenty (20) years of experience**. For coastal engineering projects, Infinity will assign Ricardo Contreras, P.E. as the Project Manager. Mr. Contreras holds more than 27 years of experience in the field of civil engineering, including 20 years of responsible charge of water system related projects; including **levee design, channel excavation, sediment removal, and embankment stabilization**. Mr. Contreras's responsibilities will include project management, engineering design, preparation of plans/specifications, preparation of cost estimates, construction administration, and collaboration with owners for various construction projects. Previously, for Jefferson Parish, Mr. Contreras provided designs for channel excavation and sediment removal for the Trapp Canal project.

Additionally, Infinity project civil designer, Robert Haydel holds extensive experience and knowledge in the field of water resource engineering. Throughout his 17-year career, Mr. Haydel has provided analysis of water systems including hydraulic/hydrology modeling, sediment transportation, and river morphodynamics. This knowledge has been instrumental in Mr. Haydel's project experience in creating designs for storm water management, disaster recovery, channel excavation, and embankment stabilization. Mr. Haydel has provided insight and designs for numerous storm water management master plans, including for Jefferson Parish.

Our teaming partner La Terra Engineering's principal, Seneca Troussant, PE, holds 20 years' experience and specific expertise in coastal protection/restoration engineering design. Mr. Troussant's coastal engineering project experience includes marsh fill placement, earthen containment dikes, and shoreline protection. Currently, La Terre Engineering is working with the Coastal Protection and Restoration Authority on providing feasibility studies, value engineering, preparation of conceptual drawings, and computer modeling as part of an IDIQ contract.

As illustrated in the resume sections of the TEC forms, Infinity's professional engineering staff and partners are well-suited to address all needs of this project. As an engineering firm located within Jefferson Parish Infinity is familiar in all facets of design anticipated. When forming the Infinity team, special consideration was given to making sure all team members work within the Greater New Orleans to Baton Rouge area. This localized team ensures all personnel working on a project hold familiarity with the Jefferson Parish coastal soil conditions. The skill sets for Infinity's engineers are as follows:

Infinity Engineering's Key Personnel & Experience:

William Thomassie, P.E.	Principal	Civil/Structural – Marine Engineering	Experience: 31 years
Raoul Chauvin, P.E.	Principal	Mechanical – Drainage Pumps	Experience: 32 years

TEC Professional Services Questionnaire

Rachel Kenney, P.E.	Chief Engineer	Civil/Structural – Marine Docks	Experience: 21 years
Louis Jackson, P.E.	Ops & QA/QC	Civil – Stormwater Management	Experience: 27 years
Ricardo Contreras, P.E.	Civil Engr Mgr.	Civil – Embankments & Sedimentation	Experience: 27 years
Robert Haydel	Proj. Designer	Civil – Hydrology & Sedimentation	Experience: 17 years
Cindy Gallo, P.E.	Proj. Engineer	Structural – Marine Structures	Experience: 9 years
Laura Kelly, P.E.	Proj. Engineer	Mechanical – Pumping and Piping	Experience: 15 years
John Lawrence, P.E.	Proj. Engineer	Electrical – Instrumentation & SCADA	Experience: 24 years
Matthew Torres P.E.	Proj. Engineer	Electrical – Power & Lighting	Experience: 6 years

Infinity Engineering Consultants, LLC is a registered Louisiana engineering firm (License No. 3109) and is in full compliance of Louisiana state law. *Infinity Engineering did not participate in any manner with the development of coastal engineering master plans in this RFQ and is therefore not conflicted in submitting qualifications for this project.*

Infinity points to past successes as a token of our reputation as a responsible and capable technical resource for Jefferson Parish on this project. To quote Ken Dugas, P.E., Plaquemines Parish Public Works Director regarding Infinity's design of the \$16.5MM Ollie Drainage Pump Station Expansion "...Infinity worked on a variety of packages for PPG, but none more so than the Ollie Pump Station Expansion. They completed a **very thorough drainage study** to justify expanding the station....The addition was constructed with less than 2% overruns for change orders....the station has performed, as designed, through several rain events and hurricanes...I would highly recommend Infinity for these types of projects....They've proven to be good stewards of public funds."



Ollie Drainage Pump Station Expansion

Please refer to Section K of this form and subconsultants for specific project experience of all personnel included in this qualification package.

Capacity for timely completion of newly assigned work, considering the factors of type engineering task, current unfinished workload, and person or firm's available professional and support personnel.

Infinity's current workload is well-suited to provide engineering support services to Jefferson Parish. At the time of submittal, Infinity has seventeen projects within the 75-100% construction completion, including Group B of street repairs to the Mid-City neighborhood, the Sewerage & Water Board Static Frequency Changer Utility Rack, and Laurel St and Mistletoe Lift Station Rehabilitation. The completion of these projects will allow for Infinity's engineers to shift their focus towards any assigned coastal engineering project, as the firm currently does not have a backlog of project work.

Concerning Infinity's diligence to deliver on assigned tasks for major infrastructure projects, AECOM's Project Manager for the design of the Regional Transit Authority's Loyola and St. Claude streetcar projects, Bill Norquist, P.E. commented, *"The design of the new streetcar lines were high-profile projects for the New Orleans Regional Transit Authority (RTA) and for the City of New Orleans, and Infinity Engineering provided design and construction-phase design support for the preservation and/or relocation of the existing utilities within the new rail corridor. They worked efficiently and effectively to coordinate their design with local utility companies so that their utility engineering design could be implemented within the very tight schedule constraints of the project while minimizing the effects of the required changes on the public...The success of the Loyola Streetcar project was due, in part, to the exceptional design work by Infinity Engineering."*

Location of Principal Office

Infinity's office is located in the Fat City (District 5) neighborhood of Metairie, within a 2-hour drive from the furthest possible project site in Grand Isle, LA. All but one of our staff work out of this office and many live in Jefferson Parish. We as a firm and our employees hold a vested interest in the success of our communities across Jefferson Parish.

Additionally, it is important to note that Infinity is not involved in any adversarial legal proceedings with Jefferson Parish of any kind and in particularly stemming from performing professional services.

TEC Professional Services Questionnaire

Prior successful completion of projects of the type and nature of the engineering services, as defined, for which firm has provided verifiable references.

As illustrated in Section L of Infinity's TEC Questionnaire, we have completed various projects along large water systems involving embankment design and stabilization for Jefferson Parish and other local municipalities. Included in these projects have been special designs for scheduling and/or phasing of construction to accommodate conditions.

Infinity's team holds considerable experience in all forms of marine engineering and construction. With this marine experience, Infinity has the unique ability to integrate each of our engineering disciplines when working on projects above and under water. Much of Infinity's marine work has come working along the Mississippi River; including providing remote hydro survey services.

With a portfolio ranging from bulkhead repair to building new industrial docks, Infinity has the experience and vision to manage any design challenge involving large water systems. Infinity's marine engineering services include:

- Bulkheads and Retaining Walls
- Barge Dock Design
- Breasting Dolphin Design
- Mooring Analysis and Design
- Condition and Auditing Inspections
- Dredging Packages
- Caissons and Cofferdams
- Cellular Structures
- Hydro Surveys (bathymetry)
- Ship Dock Design

An example of Infinity providing embankment designs for Jefferson Parish is evident in the West Metairie Avenue Rehabilitation project. Infinity is the prime consultant for the restoration of (2) miles of West Metairie Avenue between Roosevelt Boulevard and David Drive. This \$7 million project required the complete street replacement of West Metairie Avenue pavement as well as adjacent canal bank stabilization. The embankment repair designs include **new vinyl sheet pile wall and supplemented with rip-rap at the cap**. Adjacent sidewalks were also reconstructed with side street turnout to meet ADA criteria.



Infinity's designs included improvement to the drainage system along the streets that was based off hydraulic studies. The drainage improvements included the following:

- Street outfall pipe replacement
- Adjustments of longitudinal and transverse slopes
- Adjustment of existing and addition of new drain inlets

An example of a similar past success, Tim Mathison, former City of Slidell Chief Administrative Officer states his experience working with Infinity for the City's Kostmayer Avenue (1.1 mile) and Sgt. Alfred Drive (1.1 mile) projects, "...Infinity was tasked with the improvements to the roadway and drainage and sidewalks. Infinity's designs and schedule took into consideration a school located nearby, and all construction was done to minimally interfere with the school schedule and traffic...I would recommend Infinity for their design capabilities, as well as their professional approach to project management."

As illustrated in the resume section, Infinity's professional engineering staff and partners are well-suited to address all of the needs of this project.

Size of firm considering the number of professional and support personnel required to perform the type engineering tasks.

Infinity's firm size is well-suited for an array of project sizes. Infinity's full-time staff currently includes eleven (11) professional engineers, three (3) engineering interns, four (4) engineering graduates, nine (9) AutoCAD designers, four (4) resident inspectors, and administrative support personnel. available who may be required for these projects. **Total firm size is 38.** The total Infinity team has the capacity to leverage the knowledge of close to 100 professionals

TEC Professional Services Questionnaire

Infinity's professionals are skilled in project assessment/evaluation, producing comprehensive engineering designs, construction plans and specifications, and providing construction administration. Infinity staff members are dedicated to monitoring the progress of construction, while remaining conscious of the monetary budget and meeting deadlines. We have sufficient staff with the appropriate technical knowledge and experience to complete any coastal engineering project.

Past Performance by person or firm on Parish projects.

Infinity Engineering Consultants is a full-service, multi-disciplinary firm with turn-key capabilities. To date, Infinity has provided civil, structural, mechanical, and electrical designs for a variety of projects for Jefferson Parish as well as several local municipalities. We are familiar with projects that have involved weekly and daily coordination meetings with public and private clients, engineers, managers, and operations personnel. Infinity maintains positive working relationships with these entities throughout the design and construction process.

Some of Infinity's notable Jefferson Parish projects include:

- Westbank Emergency Operation Center Tower Installation
- Traffic Operations Center Standby Generator
- Landfill Leachate Collection System Rehabilitation
- West Metairie Avenue Rehabilitation and Bank Stabilization
- Glenwood Street Lighting Improvement
- Pritchard Ditch Drainage Improvements


Sections L of the TEC Questionnaire lists Infinity clients and contact information. Infinity has a history of providing excellent engineering services and the references provided will emphasize this commitment. The fact that our client references recommend us and return to us is the greatest affirmation of our quality of work.

Infinity completed an EOC communications tower and two major drainage projects for Jefferson Parish on the Westbank, one in District 1 and the other in District 3. Former Capitol Projects Director **Reda Youssef, P.E.** offered these affirming words of Infinity's performance, "Infinity Engineering Consultants has successfully completed the designs for the Wedmore and Bannerwood Drainage projects, as well as the design for the parish's new EOC tower. Their team is competent, easy to work with, and communicate well. **I would highly recommend Infinity for these types of projects.**"

Infinity is proud to provide engineering services to Jefferson Parish and believe that our team has the ability to continue this relationship by providing timely and effective designs for this important coastal engineering contract.

Thank you for taking the time to learn more about Infinity Engineering Consultants, LLC. We look forward to working alongside Jefferson Parish continue to grow and enhance our communities together.

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature:  Print Name: Raoul V. Chauvin, III, P.E.
Title: Principal Date: 7/16/2024



Coastal Engineering Consulting Services As-Needed Parish Wide



Section II **La Terre Engineering, LLC.**

**Marsh/Ridge Restoration
Shoreline Protection**

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 24-040 Coastal Engineering Consulting as Needed Parish Wide- Resolution No. 144205

B. Firm Name & Address where Project work will be performed:

**La Terre Engineering, LLC
343 Third Street, Suite 511B
Baton Rouge, LA 70801**



C. Name, title and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

**Seneca Toussant, PE, Principal
343 Third Street, Suite 511B
Baton Rouge, LA 70801
(225) 960-1160
stoussant@laterre-eng.com**

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline.

**Seneca Toussant, PE, Principal
343 Third Street, Suite 511B
Baton Rouge, LA 70801
(225) 960-1160
stoussant@laterre-eng.com**

E. Please provide the number of employees whose primary function corresponds with each category:

<u>1</u>	Administrative	_____	Estimators	_____	Specification Writers
_____	Architects (Licensed)	_____	Geologists	_____	Structural Engineers
_____	Chemical Engineers	_____	Geotechnical Engineers	<u>1</u>	Graduate Engineers
<u>1</u>	Civil Engineers	_____	Interior Designers	_____	Project Managers
_____	Construction Inspectors	_____	Landscape Architects	<u>1</u>	Clerical
_____	Ecologists	_____	Land Surveyor	_____	Grant/Funding Specialist
_____	Electrical Engineers	_____	Mechanical Engineers	_____	Sanitary Engineers
<u>1</u>	Engineer Intern	_____	Environmental Engineers	_____	
_____	Professional Land Surveyors	_____		<u>5</u>	TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES _____ NO ✓

If marked “No” skip to Section I. If marked “yes” complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.

1.
N/A

2.

H. Has this JOINT-VENTURE previously worked together? Please check: N/A
YES ___ NO ___

I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. N/A		
2.		
3.		

J. Please specify the total number of support personnel that may assist in the completion of this Project:

5

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title: Seneca Toussant, PE - Principal

Project Assignment: Project Manager/Project Engineer

Name of Firm with which associated: La Terre Engineering, LLC

Years' experience with this Firm: 4

Education: Degree(s)/Year/Specialization: BS, Biological Engineering Louisiana State University - 1999

Active registration: Year first registered/discipline: 2011 - Professional Engineer, LA, Civil Engineering, No. 36080

Other experience and qualifications relevant to the proposed Project:

Mr. Toussant is an accomplished Civil Engineer with over 20 years of consulting experience for an extensive and varied range of projects. His experience ranges from coastal engineering and design, roadway and drainage design, water and wastewater systems design and preparation of planning documents, commercial and residential development and hydrologic and hydraulic studies. Mr. Toussant has been involved in projects from the initial planning stages, through design, to project coordination and construction inspection through final acceptance. His experience includes pipeline conveyance, marsh fill placement, earthen containment dikes, and shoreline protection. He is registered as a professional civil engineer in four states and his relevant project experience includes:

Coastal Protection and Restoration Authority: Bayou Pigeon Boat Launch Improvements | Plaquemine, LA

Mr. Toussant is providing civil engineering design for the Bayou Pigeon Boat Launch Improvements project for CPRA. The project includes expansion of an existing single boat launch and the design and construction of a floating dock, additional parking, ADA accessible parking and access, and a kayak launch.

Slidell Breakwater Restoration Feasibility Study | Slidell, LA

Mr. Toussant is responsible for processing topographic survey data using Autocad Civil 3D to create mapping and surface files as part of the feasibility study for the restoration of existing breakwaters near the City of Slidell.

Coastal Protection and Restoration Authority: Grand Isle State Park Improvement Phase I | Grand Isle, LA

Mr. Toussant was responsible for the preparation of preliminary and final plans, including demolition, geometric drawings, signing plans, and associated drainage improvements for 3 miles of roadway repairs for the project in accordance with LADOTD specifications, standards, and guidelines, including ADA accessible parking and access to address subsidence and sea level rise at the Park facility.

Greater Lafourche Port Commission, 2035 Master Plan | Port Fourchon, LA

Mr. Toussant was responsible for the preparation of the Greater Lafourche Port Commission 2035 Master Plan. He defined the scope of the document and researched, collected and compiled existing data and information to develop and prepare the master plan. He prepared conceptual layouts and cost estimates for infrastructure improvements including dredging and fill placement estimates and the beneficial use of dredge material at the Port facility.

East West Channel Study | Port Fourchon, LA

Mr. Toussant was responsible for the preparation of a study to determine the feasibility of dredging and maintaining access between Port Fourchon and the Port of Terrebonne. The study included determining the costs and benefits of dredging the East-West Channel across Terrebonne Bay to connect Bayou Lafourche to the Houma Navigation Channel to

TEC Professional Services Questionnaire

provide better access between the Port Fourchon and the Port of Terrebonne. His tasks involved research, preparing figures and alignments in AutoCAD, developing conceptual cost estimates and beneficial use of dredge material.

Point Chevreuil Shoreline Protection Project | St Mary Parish, LA

Mr. Toussant prepared construction documents for a shoreline protection project at Point Chevreuil along the southeastern shoreline of East Cote Blanche Bay in St Mary Parish. The project consisted of the design and placement of artificial oyster rings for the protection of eroding shoreline caused by open water fetch and resulting wave energy from East Cote Blanche and Atchafalaya Bays. He prepared plans and specifications to allow for construction of the project.

Deer Island Pass Realignment | St Mary Parish, LA

Mr. Toussant prepared preliminary plans for the Deer Island Restoration project in St Mary Parish. This project consists of dredging the channel across the shallow flat at the mouth of Deer Island Bayou to improve water and sediment flow through Deer Island Pass and provided the creation of 30 acres of marsh through the beneficial use of the dredge material. He was responsible for the sizing and design of the marsh creation cells and preparation of construction documents for the project.

Long Distance Sediment Pipeline Phase I Feasibility Study | Terrebonne Parish, LA

Mr. Toussant assisted in the preparation of a feasibility study for a 40-mile pipeline from the Atchafalaya to deliver sediment to three proposed disposal areas in Terrebonne Parish. His tasks involved pipeline and pipe design, booster station sizing and locations, preparing figures and alignments in AutoCAD, developing conceptual cost estimates for the sediment conveyance portion of the study.

Lafourche Basin Levee District, Hurricane Protection Study Ridge Levee Protection System | Vacherie, LA

Mr. Toussant prepared conceptual alignments for the study and evaluation of an approximately two-hundred-mile ring levee system to provide flood protection to local communities in Lafourche and St Charles Parishes. The conceptual design consisted of ring levee alignments, the hydraulic design and preparation of cost estimates for proposed pump stations and levees.

Chacahoula-Gibson Drainage Resiliency Project | Terrebonne Parish, LA

Mr. Toussant was the project manager and lead design engineer for the preparation of the Chacahoula Pump Station in Terrebonne Parish. He was responsible for all civil and site design for the 1000 CFS pump station including the conveyance channel and all civil site related improvements.

Elliot Jones Canal Drainage Conveyance & Pump Station | Terrebonne Parish, LA

Mr. Toussant was the lead design engineer for the Eliot Jones Pump Station project which consisted of the design of a 1,000 cfs drainage pump station to reduce flooding due to excessive rainfall. Mr. Toussant was responsible for all H&H, pump station design and civil design, including site design of the pump station and the hydraulic calculations of the conveyance channel.

Bayou Plaquemine Boat Launch Improvements | Plaquemine, LA

Mr. Toussant was lead design engineer for the reconstruction of the Bayou Plaquemine Boat Launch that was funded by the Atchafalaya Basin Program and managed by CPRA. The project included demolition of an existing single boat ramp and the design and construction of a double boat ramp, floating dock and shade structure. He coordinated design with CPRA and provided construction administration services and coordinated payment applications and project closeout with CPRA.

Naval Air Station (NAS), Joint Reserve Base (JRB), Basin 1 Drainage Improvements | Belle Chasse, LA

Mr. Toussant was responsible for the preparation of construction documents for required drainage improvements to Basin 1 at the Naval Air Station, Joint Reserve Base in Belle Chasse Louisiana.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title: Lyle Tynes, EI
Project Assignment: Civil Engineer
Name of Firm with which associated: La Terre Engineering, LLC
Years' experience with this Firm: 3
Education: Degree(s)/Year/Specialization: BS, Civil Engineering Louisiana State University - 2020
Active registration: Year first registered/discipline: EI 35128 (Louisiana, Civil)
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Tynes is a graduate of Louisiana State University in Civil Engineering. Mr. Tynes is proficient in using AutoCAD Civil 3D program. He has assisted the Professional Engineering Staff in all aspects of the design process including compiling specification packages for a wide range of projects, preparing site plans, grading plans, utility plans and other construction documents, and coordinating with clients among other activities. At LTE, Mr. Tynes routinely performs hydrology calculations, creates stormwater-related reports like H&H studies and Stormwater Pollution Prevention Plans (SWPPP), as well as coordinating with local and state governing bodies to receive required permits.</p> <p>Coastal Protection and Restoration Authority: Bayou Pigeon Boat Launch Improvements Bayou Pigeon, LA Mr. Tynes is providing civil engineering design for the Bayou Pigeon Boat Launch Improvements project for CPRA. The project includes expansion of an existing single boat launch and the design and construction of a floating dock, additional parking, ADA accessible parking and access and a kayak launch. He is responsible for site construction documents and cost estimates.</p> <p>Steep Bayou Watershed Flood Prevention Plan Rayville, LA Mr. Tynes is responsible for the hydrologic and hydraulic modeling of Steep Bayou using HEC-RAS for the NRCS Watershed flood prevention plan. He is leading alternative analysis efforts and responsible for preparing probable opinions of construction cost and benefit cost analysis for each alternative.</p> <p>Louisiana Watershed Initiative White Castle Canal Drainage Improvements White Castle, LA Mr. Tynes is responsible for the preparation of preliminary and final construction documents for channel improvements for the White Castle Canal.</p> <p>Louisiana Watershed Initiative Town of Maringouin Improvements Maringouin, LA Mr. Tynes is responsible for the preparation of preliminary and final construction documents for drainage improvements for the Town of Maringouin Drainage Improvements project. His responsibilities include preparation of cost estimates and bidding and construction documents.</p> <p>Slidell Breakwater Restoration Feasibility Study Slidell, LA Mr. Tynes is responsible for processing topographic survey data using Autocad Civil 3D to create mapping and surface files as part of the feasibility study for the restoration of existing breakwaters near the City of Slidell.</p> <p>Ward Creek at Siegen Lane Channel Improvements Baton Rouge, LA Mr. Tynes is assisting in the preparation of construction documents for channel improvements for Ward Creek in Baton Rouge Louisiana. His responsibilities also include preparation of permits and permit figures.</p> <p>Louisiana Watershed Initiative LA 22 Gapping Project Ascension, LA Mr. Tynes is part of the grant administration team for the project and his responsibilities include construction administration assistance, site inspections, review of contractor invoices and construction monitoring for the LA 22 gapping project.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title: Roman Hundley
Project Assignment: Civil Engineer Technician
Name of Firm with which associated: La Terre Engineering, LLC
Years' experience with this Firm: 3
Education: Degree(s)/Year/Specialization: BS, Biological Engineering Louisiana State University - 2020
Active registration: Year first registered/discipline: N/A
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Hundley is a graduate of Louisiana State University in Biological Engineering. Mr. Hundley experience includes drainage design, utility coordination, compiling construction packages, including preparing drawings, specifications and other construction documents. Mr. Hundley's responsibilities also include construction administration for various projects for our clients.</p> <p>Coastal Protection and Restoration Authority: Bayou Pigeon Boat Launch Improvements Bayou Pigeon, LA Mr. Hundley assisting in the civil engineering design for the Bayou Pigeon Boat Launch Improvements project for CPRA. The project includes expansion of an existing single boat launch and the design and construction of a floating dock, additional parking, ADA accessible parking and access and a kayak launch. He is responsible for site construction documents and cost estimates.</p> <p>Jeff Davis Electric CO-OP, Inc. Transmission Line Project - Diamond D Industries Cameron Calcasieu Parish, LA Mr. Hundley providing dewatering calculations and dewatering plans for three required river crossing for proposed utility lines and also prepared a traffic access plan for permitting and approval by LADOTD required as part of the JDEC Transmission Line Project.</p> <p>Bayou Stumpy Drainage Improvements Erwinville, LA Mr. Hundley is construction administration support for the Bayou Stump Drainage Improvements projects for West Baton Rouge Parish. His responsibilities include permitting coordination with LADOTD for right-of-way access and construction administration as needed.</p> <p>Louisiana Watershed Initiative White Castle Canal Drainage Improvements White Castle, LA Mr. Hundley is responsible for the construction administration phase of the project. His responsibilities include biweekly site visits, review and approval of pay applications, engineering during construction and project closeout for the for channel improvements for the White Castle Canal.</p> <p>Louisiana Watershed Initiative Town of Maringouin Improvements Maringouin, LA Mr. Hundley assisted in the preparation of preliminary and final construction documents for drainage improvements for the Town of Maringouin Drainage Improvements project. His responsibilities include preparation of cost estimates, bidding and construction documents.</p>

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Bayou Pigeon Boat Launch Improvements Owner: Coastal Protection and Restoration Authority Contact: Leah Selcer, PE 225-614-2828 leah.selcer@neel-schaffer.com	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2025 E	\$2.5 Mil	80K

Project description:

La Terre Engineering, LLC (LTE) is sub-consultant to Neel-Schaffer Inc. for the Coastal Protection and Restoration Bayou Pigeon Boat Launch Improvements project located in Bayou Pigeon Louisiana. Public and commercial demand for access to Atchafalaya Basin has increased as the existing ramp serves as one of the main access points to the Atchafalaya Basin. Improvements include the expansion of the existing boat launch with the construction of floating piers to accommodate commercial and recreational boaters, ADA parking and access, additional vehicle and boat parking, kayak launches and security lighting.



LTE staff are providing general and civil engineering support including site and geometric layout design to assure accessibility, grading and drainage plans technical specifications and cost estimates as part of the construction document development phase of the project.

RELEVANCE TO PROJECT SCOPE

- General Engineering
- Construction Document Preparation
- Cost Estimating

TEC Professional Services Questionnaire

PROJECT NO. 2

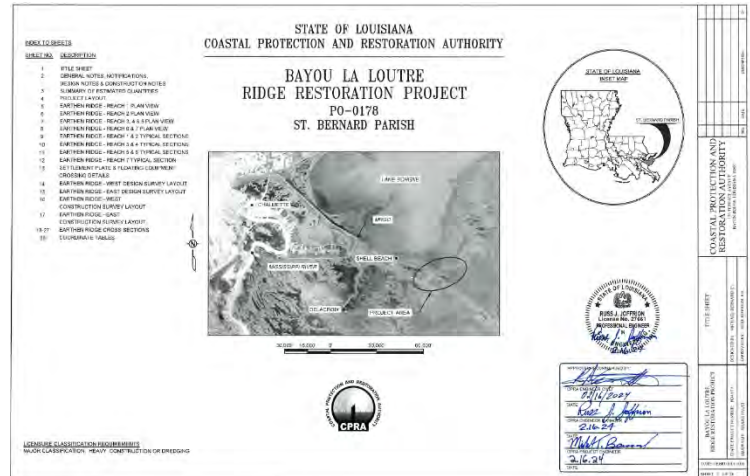
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Bayou La Loutre Ridge Restoration (PO-0178) Owner: Coastal Protection and Restoration Authority Contact: Vida Carver, PE 225-342-2799 Vida.Carver@LA.GOV	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2025 E	\$2.7 Mil	277K

Project description:

Project description:

La Terre Engineering, LLC (LTE) is providing construction administration and inspection services to CPRA for the Bayou La Loutre Ridge Restoration project located in St. Bernard Parish, Louisiana.


The Bayou la Loutre Ridge Restoration (PO-0180) project is part of a larger project to restore marsh and ridge habitat in the Biloxi Marsh area and along Bayou la Loutre. The project consists of two distinct components. The marsh creation portion is located southeast of Lena Lagoon and north of Bayou La Loutre, north of the confluence of Bayou La Loutre and the Mississippi River Gulf Outlet (MRGO). The ridge restoration component extends along Bayou La Loutre southwest of MRGO and again to the northeast of MRGO.



RELEVANCE TO PROJECT SCOPE


- Construction Administration
- Construction Inspection
- Davis Bacon Administration
- Project Closeout

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Slidell Breakwater Restoration Feasibility Study Owner: St. Tammany Parish Contact: Leah Selcer, PE 225-614-2828 leah.selcer@neel-schaffer.com	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
2022 E	Entire Project: \$6.5 Mil	Work for which Firm was Responsible: 3.5K
<p>Project description:</p> <p>La Terre Engineering, LLC (LTE) is part of the team selected by St Tammany Parish for the Ward Creek at Siegen Lane Channel Improvements Project. The project consists of the widening of Ward Creek to a bottom width of 100' and will include channel stabilization, outfall protection and utility modifications and coordination.</p> <p>The proposed project is an offshore segmented rock breakwater structures along the Lake Pontchartrain shoreline in St. Tammany Parish to the south of the City of Slidell. The goal of the project is to provide coastal resilience to the greater Slidell community by addressing wave energy and wave-induced erosion along the shoreline while also providing additional fisheries habitat, where possible. The total breakwater project would be a maximum of 6-miles long with the first phase of the project to be located near the Eden Isles community between the 1-10 Twin Span Bridge on the east and US Hwy 11 on the west side of the community.</p> <p>The Feasibility Study will provide an analysis of the existing conditions and coastal processes to determine the real and ongoing negative consequences to the immediate shoreline and littoral habitat found within the study area. The Scope of Services for the project includes topographic survey, ROW mapping, Subsurface Utility Engineering, Hydraulic and Hydrologic (H&H) Study and Analysis, Benefit Cost Analysis, permitting and preparation of construction documents.</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;">  </div> <div style="width: 35%; border: 1px solid black; padding: 10px;"> <p>RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> Civil Engineering Mapping & Cadd Support Preliminary Plans </div> </div>		

TEC Professional Services Questionnaire

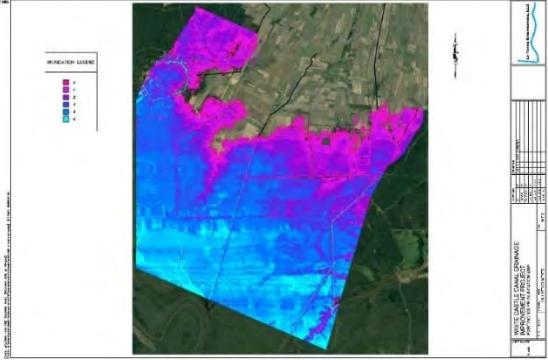

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Grand Bayou Freshwater Reintroduction Phase II and III- Engineering, Design, and Permitting (Lafourche Parish, LA) Owner: Lafourche Parish Government Point of Contact: Laura Barnes P.E. labarnes@gisy.com 985-219-1048	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2024 E	\$700K	40K
Project description: <p>The Grand Bayou Freshwater Introduction Phase II and III aims to increase the flow of fresh water from the Atchafalaya River down to the Grand Bayou Canal via the Gulf Intracoastal Waterway. The project will increase the flow of freshwater, redirect freshwater from Grand Bayou Canal into the marshes east and west of Grand Bayou Canal; create 112 acres of fresh marsh; and nourish an additional 14 acres of intermediate marsh west of Grand Bayou Canal near Highway 24.</p> <p>La Terre Engineering (LTE) is part of the design team responsible for Phase II and Phase III of the project.</p> <p>Phase II and III includes the following:</p> <ul style="list-style-type: none"> Conduct hydrologic modeling: This will include development of model scenarios needed for delineation of marsh areas of interest, hydraulic boundaries, and proposed dredging and spoil placement and to identify water control structures. Data collection and analysis. Perform bridge scour analysis Prepare 30% design package: This will include estimated construction cost and duration, permit drawings and application submittal, and ongoing agency coordination. Complete 100% engineering and design package: 		





RELEVANCE TO PROJECT SCOPE

- Civil Engineering
- Mapping & Cadd Support
- Hydrology and Hydraulics
- Permitting and Design
- Preliminary and Final Design

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Louisiana Watershed Initiative White Castle Drainage Improvements (White Castle, LA) Owner: Iberville Parish Government Contact: Parish President Chris Daigle 225.687.5190	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
2024 (A)	Entire Project:	Work for which Firm was Responsible:
2024 (A)	\$2.1 Mil	200K
<div style="display: flex;"> <div style="flex: 1;"> <p>Project description:</p> <p>La Terre Engineering LLC (LTE), provided engineering and grant preparation services to Iberville Parish for the White Castle Drainage Improvements project. The White Castle Canal serves as major drainage lateral for the rural portion of Iberville Parish and the Town of White Castle. The 4.5 mile canal conveys storm runoff from local residences, farms and businesses to Lake Natchez.</p> <p>This project consists of the removal of accumulated sediment for approximately 4.5 miles of the channel bottom and immediate adjoining side slope to match historical grade lines. The project includes the removal of siltation above historical channel bottom grade lines and settled eroded materials on the bottom of the channel and the disposal of all excavated soils. LTE's services included the following:</p> <ul style="list-style-type: none"> • LWI Round 1 Application Preparation • Project Location Details <ul style="list-style-type: none"> ○ Project Location Map, Aerial Photo, Map showing Area of Disturbance, Parcel Map, Topo Maps, USGS Ecological Maps, Photographs of the Project Site • Description of Mitigation Need <ul style="list-style-type: none"> ○ Summary of Project Benefits, Map of Benefitting Area, Benefit Cost Analysis, Level of Risk Reduction Narrative, HUD LMI Summary Data • Project Scope of Work <ul style="list-style-type: none"> ○ Project Scope of Work Narratives • Environmental Review & Permitting • Project Schedule & Budget <ul style="list-style-type: none"> ○ Project Milestone Schedule, Project Delivery & Construction Cost Estimate/Budget, O&M Cost Estimate • Preliminary and Final Design • Construction Administration </div> <div style="flex: 1; padding-left: 20px;">   <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p style="text-align: center; margin: 0;">RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> • Civil Engineering • Dredging Design • Mapping & Cadd Support • Hydrology and Hydraulics • Benefit Cost Analysis • Permitting and Design • Preliminary and Final Design </div> </div> </div>		

TEC Professional Services Questionnaire





PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Steep Bayou Watershed Flood Prevention Plan (Rayville, LA) Contact: Jens A. Rummler Owner: Boeuf River Soil and Water Conservation District rummler@coxmclain.com Office: 225.354.6275	Subcontractor- See Below	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021 (A)	\$3.5 Mil.	45K
Project description La Terre Engineering is providing engineering and planning services as part of the Environmental Assessment and Watershed Plan development for the Boeuf River Soil and Water Conservation District for the Steep Bayou Watershed Project as part of the NRCS Small Watershed Program. The project consists of evaluating alternatives to increase drainage capacity to Steep Bayou and will include dredging, snagging and streambed rehabilitation to improve drainage into Boeuf River for the watershed containing 36,400 acres. LTE task include developing hydrologic and hydraulic modeling, development of alternatives, alternative cost estimates and preparation of benefit cost analysis.		
		 <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> Civil Engineering Dredging Design Mapping & Cadd Support Hydrology and Hydraulics Benefit Cost Analysis Permitting and Design Preliminary and Final Design </div>

TEC Professional Services Questionnaire

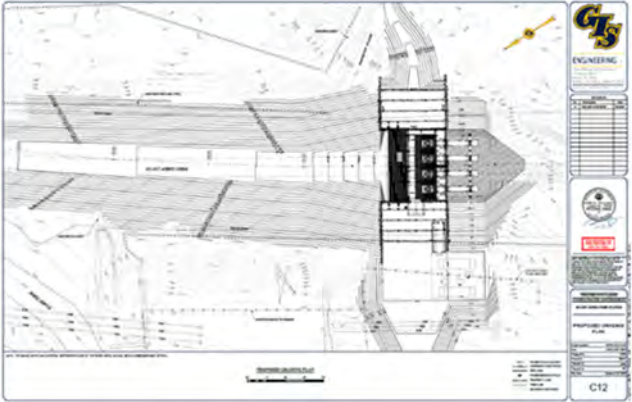

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Ward Creek at Siegen Lane Channel Improvements (Baton Rouge LA) Owner: East Baton Rouge City Parish Contact: Kimberly Koehl, PE 225-644-55232, kimberly.koehl@gsaengineers.com	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2025 E	\$1.1 Mil	30K
<p>Project description:</p> <p>La Terre Engineering, LLC (LTE) is part of the team selected by East Baton Rouge Parish for the Ward Creek at Siegen Lane Channel Improvements Project. The project consists of the widening of Ward Creek to a bottom width of 100' and will include channel stabilization, outfall protection and utility modifications and coordination.</p> <p>The Scope of Services for the project includes topographic survey, ROW mapping, Subsurface Utility Engineering, Hydraulic and Hydrologic (H&H) Study and Analysis, Benefit Cost Analysis, permitting and preparation of construction documents.</p> <p>LTE responsibilities include permitting with LADOTD and preparation of the required Environmental Assessment and submittal to FEMA</p> <div style="border: 1px solid black; padding: 10px; margin-top: 20px;"> <p>RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> Civil Engineering Dredging Design Hydrology and Hydraulics Permitting and Design Cost Estimating Preliminary and Final Design </div>		





TEC Professional Services Questionnaire

PROJECT NO. 8						
Project Name, Location and Owner's contact information: Boudreaux to Gilmore Drainage Improvements Project - Pump Station Commissioning (Berwick, LA) Owner: St Mary Parish Government Contact: Henry 'Bo' LaGrange Office: 337-828-4100 Ext. 500	Nature of Firm's Responsibility: Subcontractor- See Below					
Completion Date (Actual or estimated): 5/2021 (A)	Estimated Cost: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 5px; text-align: center;">Entire Project:</td> <td style="width: 40%; padding: 5px; text-align: center;">Work for which Firm was Responsible:</td> </tr> <tr> <td style="padding: 5px; text-align: center;">\$1.4 Mil.</td> <td style="padding: 5px; text-align: center;">15.6K</td> </tr> </table>		Entire Project:	Work for which Firm was Responsible:	\$1.4 Mil.	15.6K
Entire Project:	Work for which Firm was Responsible:					
\$1.4 Mil.	15.6K					
<p>Project description: La Terre Engineering provided commissioning services for the HMGP-CDBG Boudreaux to Gilmore Drainage Improvements' Pump Station project to Saint Mary Parish Government. La Terre's scope of services included project start up and administration, review of contractor submittals, testing of controls, and preparation of a report of findings which included a punch list and required actions for the acceptance and project closeout by the Parish. The pump station features three 36" axial impeller pumps powered by natural gas engines.</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"> <p style="font-size: small;">Boudreaux to Gilmore Drainage Improvements Pump Station Commissioning HMGP #1786-101-003, FEMA Project 0080 Berwick, Louisiana April 5, 2021</p> </div> <div style="width: 30%; text-align: center;">  </div> <div style="width: 35%;">  </div> </div> <div style="margin-top: 20px;"> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p style="font-size: x-small;">Prepared By: La Terre Engineering, LLC</p>  <p style="font-size: x-small;">Burk-Kleinpeter, Inc.</p>  </div> <div style="width: 65%; border: 1px solid black; padding: 10px; margin-left: auto;"> <p style="margin: 0;">RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> Civil Engineering Design Analysis and Reports Construction Administration </div> </div> </div>						

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Elliot Jones Canal Drainage Conveyance & Pump Station (Terrebonne Parish, LA) Owner: Terrebonne Parish Consolidated Government Point of Contact: Jacob M. Loeske, P.E., L.S.I. jloeske@gisy.com 225-408-0700	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021 (A)	\$14 Mil	20K
Project description: La Terre Engineering is providing design support to GIS Engineering, LLC for the Elliot Jones Canal Drainage Conveyance & Pump Station. The Elliot Jones Canal currently flows directly out of Bayou Black, with a bridge crossing over the entrance to the canal, on Highway 182. The project included a study to evaluate alternatives for providing flood risk reductions in the basin, a hydrologic and hydraulic study of the evaluated alternatives that resulted in the required pump station at the Elliot Jones Canal. The project included improvements to the existing conveyance channel, a pump station consisting of four (4) 60" pumps, discharge piping and a protective trash screen for a design capacity of 1,000cfs. Mr. Toussant was responsible for the preliminary and final design of the pump station and conveyance channel and access roads.		
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> RELEVANCE TO PROJECT SCOPE <ul style="list-style-type: none"> Civil Engineering Dredging Design Mapping & Cadd Support Hydrology and Hydraulics Benefit Cost Analysis Permitting and Design Preliminary and Final Design </div> </div> <div style="width: 50%;">   </div> </div>		

TEC Professional Services Questionnaire

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Louisiana Watershed Initiative LA 22 Gapping Project (Ascension Parish, LA) Owner: Pontchartrain Levee District Contact: Monica Salins Gorman, Executive Director 225.869.9721	Prime- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
2026 (E)	Entire Project: \$42 Mil	Work for which Firm was Responsible: 300K
Project description: La Terre Engineering LLC (LTE) is providing grant management services to the Pontchartrain Levee District (PLD) for the Louisiana Watershed Initiative LA 22 Gapping project in Ascension Parish. LA Hwy 22 functions as a barrier impeding natural hydrology in the Amite River floodplain. The highway prevents the natural flow of water into the adjacent McElroy Swamp, increases surface elevation in the river and exacerbates area flood risk. The LA Hwy 22 Bridge Construction and Drainage Improvements project includes the construction of two bridge structures and the excavation of two drainage basins for the purpose of improving local hydrology, reducing area flood risk and restoring the McElroy Swamp. LTE's scope of work includes the following: <ul style="list-style-type: none"> Establishing project files at PLD's office to demonstrate compliance with all applicable state, local, and federal regulations. The project files will be monitored throughout the program to ensure that they are complete and that all necessary documentation is being retained in PLD's files. Ensuring that the PLD has an acceptable financial management system as it pertains to finances of the CDBG-MIT funds program. Financial management system includes, but is not limited to, cash receipts and disbursements journal and accompanying ledgers that conform to generally accepted principles of municipal accounting. Prepare the Requests for Payment to ensure consistency with the procedures established for the CDBG-MIT funds Program. Assist PLD in meeting the Office of Community Development's financial reporting requirements. Attend and assist PLD during the Office of Community Development's monitoring visit(s). Prepare PLD's response to all monitoring findings. Prepare close-out documents. 		
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> RELEVANCE TO PROJECT SCOPE <ul style="list-style-type: none"> Project Initiation and Planning Grant Management </div> </div> <div style="width: 35%;">   </div> </div>		

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. NONE		
2.		
3.		
4.		

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

THE LA TERRE DIFFERENCE

La Terre Engineering LLC. (LTE) is a full service, minority-owned civil engineering firm founded by Seneca Toussant, PE. Mr. Toussant is a Professional Civil Engineer with over twenty years of experience in a broad range of projects including coastal engineering, marsh creation, shoreline protection, levee, port infrastructure design, and stormwater and drainage design.



LTE's professional services deliver excellent solutions to clients in the following markets: Environmental/Water, Transportation, Development Services and Facilities. These services are designed to provide opportunities for growth and success. Although LTE is a relatively new firm, LTE's founder and principal engineer has an extensive history on a wide range of projects throughout the state for various state agencies, municipalities and parish governments.

LTE is certified as a **Louisiana Unified Certification Program Disadvantaged Business Enterprise (DBE), State & Local Disadvantaged Business Enterprise (SLDBE), 8(a) Certified, HUBZone** and a **Louisiana Hudson Initiative (Small Entrepreneurship) Firm**. LTE can provide experienced professionals and additional staff as LTE grows with the aim to provide timely and well-coordinated work in a professional manner. LTE will provide innovative solutions to the challenges of this project utilizing knowledge of the most current design techniques.

OUR CAPABILITIES

La Terre offers technical expertise in project management, construction management, roadway design, drainage design, water and wastewater design, and land development. La Terre's founder and principal engineer has an extensive history on a wide range of projects throughout the state of Louisiana for various state agencies, municipalities and parish governments. La Terre has the experience and relationships to dedicate the necessary personnel to staff projects immediately, which will ultimately lead to completion within the proposed project schedules.

LTE has the capability to bring in additional qualified and committed professionals to provide the necessary support to ensure timely and successful completion of all tasks and projects we may receive.

TEC Professional Services Questionnaire

- General Civil Engineering
- Dredging - Material Transport, Processing, and Placement
- Construction Inspection
- Construction Management
- Hydraulics and Hydrology
- Technical Document & Report Development
- Construction Cost Estimating
- Preparation of Construction Plans & Specifications
- Project Management
- Pump Station Design
- Roadway/Highway Design
- Stormwater and Flood Control
- Surface Water Management
- Sustainable Design
- Environmental Permitting

QUALIFICATIONS OF KEY PERSONNEL

Mr. Seneca Toussant, PE, is highly regarded professional civil engineer with over twenty years of professional experience and a reputation for assisting his clients achieve success with even their most challenging projects. Mr. Toussant has a multitude of loyal and repeat clients that have been cultivated through his dedication to creative and exceptional service to his clients.

Mr. Toussant has experience on a variety of projects including design and project management experience on coastal projects in south Louisiana. Mr. Toussant has been involved in projects from the initial planning stages, through design, to project coordination and construction inspection through final acceptance. He is currently registered as a professional civil engineer in four states.

Mr. Toussant has performed multiple drainage studies, flood inundation studies and benefit cost analyses that included hydrologic and hydraulic modeling, detention systems, open channel analysis and design, subsurface drainage system and stormwater pump stations for an assortment of public and private projects and grant programs.

EXISTING CUSTOMER SATISFACTION

Below is a short list of references that will attest to customer satisfaction from working LTE.

Louisiana Coastal Protection and Restoration Authority

Glenn Ledet PE, Executive Director
225.400.4012
glenn.ledet@la.gov

Lafourche Parish Government

Archie Chaisson, Parish President
985.446.8427
chaissonap@lafourchegov.org

Pontchartrain Levee District

Monica Gorman, Executive Director
225.869.9721
mgorman@leveedistrict.org

Bayou Lafourche Freshwater District

Dustin Rabalais, Executive Director
985.447.7155
Dustin.Rabalais@blfwd.org

Greater Lafourche Port Commission

Chett Chiasson, Executive Director
985.632.6701
chettc@portfourchon.com

Louisiana Coastal Protection and Restoration Authority

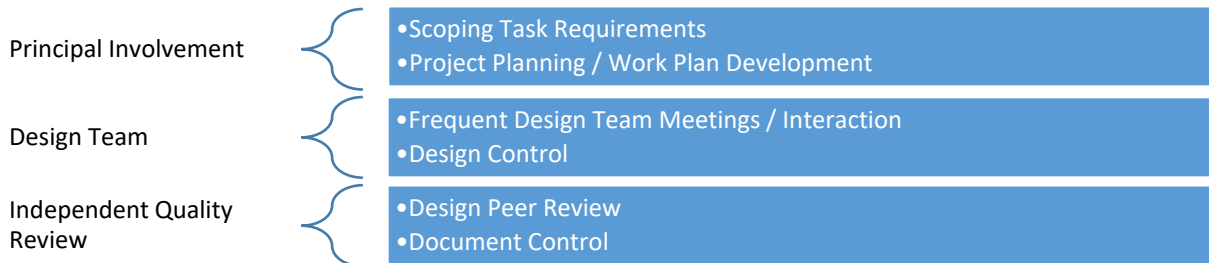
Ignacio Harrouch PE, Former CPRA Operation Chief
225.532.3479
ignacio.harrouch@stantec.com

LTE APPROACH AND METHODOLOGY

LTE's approach to managing design projects is comprehensive and focused on creating the best workflow to accomplish the work. Our goal is reliable delivery of the scope within the agreed budget and within the specified schedule. We anchor our management plan on active, engaging, and productive communication between LTE, the Parish, project staff, and all project stakeholders.

TEC Professional Services Questionnaire

LTE relies upon a proven methodology for managing task order driven and specific projects. The methodology is part of our policy and procedures. To ensure proper implementation and customer satisfaction, the involvement of our firm's principals is a key element. The following bullets highlight our proposed standard process for performing the required services.



QUALITY CONTROL

QC processes work best when they are simple to apply and designed to meet the end goal: an accurate deliverable that fully meets the project objectives. LTE has a quality program that is scalable to meet the needs of a project based on its size, complexity, and the disciplines involved. The process involves development of a Project Execution Plan (PEP), routine peer reviews, and formal quality reviews. The PEP communicates the scope of work (SOW), budget, schedule, applicable standards, and the quality control methods to be rigorously applied throughout the project duration.



At LTE, quality control is built into the schedule, not as an item to occur at the end of the project if there is budget remaining. It follows right behind each work task to catch minor problems before they magnify. Good quality control reduces rework and simplifies budget and schedule control. A quality control check sheet follows every set of plans, calculations, report, or relevant deliverable document to ensure that the required reviews have been successfully performed.

ABILITY AND CAPACITY TO PERFORM SERVICES

LTE has exceeded client expectations on current and previous projects as demonstrated in the examples provided. LTE's founder and principal engineer has a 20-year history of performance with repeat clients which is the foundation upon which LTE was started.

LOCATION OF FIRM

LTE's office is located downtown Baton Rouge and is less than an hour from Jefferson Parish offices and facilities.

CONCLUSION

LTE is pleased to present our qualifications and is prepared to provide the services required under this contract. Our proven experience will provide Jefferson Parish with confidence in the delivery of a high-quality, cost-effective, and timely management and design service to meet your project needs. LTE looks forward to growing and establishing a record of performance to become an integral team member of the Jefferson Parish engineering community.

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature:  Print Name: Seneca Toussant, PE

Title: Principal Date: 7/16/24



Coastal Engineering Consulting Services As-Needed Parish Wide



Section III **Neel-Schaffer**

**Coastal Grant Writing
& Administration**

TEC Professional Services Questionnaire

Project Name and Advertisement Resolution Number:

SOQ 24-020 Coastal Engineering Consulting Services Resolution No. 144205

A. Firm Name & Address where Project work will be performed:



1340 Poydras Street, Suite 1950
New Orleans, LA 70112

B. Name, title, and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

Nick Ferlito, Jr., PE, PTOE Senior Vice President / Louisiana Area Manager
225.924.0235

C. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline.

Dain Gillen, PE
601.684.4564
dain.gillen@neel-schaffer.com

D. Please provide the number of employees whose primary function corresponds with each category:

<u>6</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u>1</u> Geologists	<u>1</u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u> </u> Graduate Engineers
<u>24</u> Civil Engineers	<u> </u> Interior Designers	<u>1</u> Project Managers
<u>2</u> Construction Inspectors	<u> </u> Landscape Architects	<u> </u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u> </u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u>4</u> Engineer Intern	<u> </u> Environmental Engineers	
<u> </u> Professional Land Surveyors	<u>8</u> Other (Planners, Tech Support)	<u>47</u> TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES ☐ NO ☒

If marked "No" skip to Section I. If marked "yes" complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.

1.

2.

H. Has this JOINT-VENTURE previously worked together? Please check: YES ☐ NO ☐

I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):

J. Please specify the total number of support personnel that may assist in the completion of this Project:

47

TEC Professional Services Questionnaire

- K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Dain Gillen, PE Coastal Discipline Lead

Project Assignment:

Project Manager

Name of Firm with which associated:



Years' experience with this Firm:

1 (21 total)

Education: Degree(s)/Year/Specialization:

BS / 2000 / Biological Engineering
MS / 2002 / Biological and Agricultural Engineering

Active registration: Year first registered/discipline:

X2007/ Professional Engineer - Civil, LA 33282

Other experience and qualifications relevant to the proposed Project:

Mr. Gillen joined Neel-Schaffer in 2023 as a Senior Project Manager with 20 years of experience in the field of Water Resources and Coastal Engineering.

Prior to joining Neel-Schaffer, Mr. Gillen served as Engineer Manager for a staff of 10 engineers and technicians for the Louisiana Coastal Protection and Restoration Authority (CPRA). In this role, he was responsible for oversight of project planning, development, design, and construction of large-scale ecosystem restoration and flood risk reduction projects. He also has previous experience with many civil works and flood control projects during design and construction.

Mr. Gillen has worked for state and Federal agencies and private engineering firms, giving him a diverse background and ability to communicate effectively with multiple stakeholders.

RELATED EXPERIENCE

Lillian Park Beach Habitat and Shoreline Protection, Baldwin County, AL: Design Engineer on a project to mitigate excess sand deposition on a County boat ramp. This project consists of the design of riprap groins on Perdido Bay to mitigate excess sand deposition on a County boat ramp. The design of the groins will stabilize the beach shoreline, minimize erosion and habitat loss, and provide a usable public beach. Mr. Gillen is serving as project engineer for the project.

West Hancock County Nearshore Habitat Restoration Project: Project Manager and Design Engineer on a coastal habitat restoration project in Waveland, MS. The project will enhance sub-tidal habitat by placing extensive reef substrate for

TEC Professional Services Questionnaire

shellfish and artificial reefs for productivity of red and black drum, spotted seatrout, crabs, and oysters.

University Lakes Flood Risk Reduction, Baton Rouge, LA: The goal of this project is to increase the sustainability and recreational attributes of the University Lakes on and near the LSU campus. Five of the six lakes will be dredged to increase water quality, and a bird sanctuary and several islands will be constructed to enhance ecological habitat. The project will include drainage improvements at the drainage culvert outfalls. Mr. Gillen is assisting with review of design, quantities, layout, and construction administration for the project.

Slidell Breakwaters Coastal Resilience Project, Slidell, LA: Design engineer of large segmented breakwaters near Slidell, LA. The project consists of the design approximately 8,000 linear feet of foreshore rock dike structures intended to provide coastal resiliency to the Eden Isle community in Slidell, LA. The breakwaters are being designed in phases, as construction funding allows, to provide increasing levels of protection from wave impacts during storm events.

St. Tammany Parish Coastal Master Plan, St. Tammany Parish, LA: Developed a Coastal Master Plan for St. Tammany Parish to reduce flooding risk for residents and protect, restore, and enhance coastal wetlands. Mr. Gillen assisted in development and analysis of conceptual projects to help meet these objectives.

Mandeville Lakefront Wetlands Restoration Project, Mandeville, LA: Situated between two “hard” shorelines, a mature cypress forest is rapidly eroding. The Mandeville Lakefront Wetlands Restoration Project will prevent further degradation of the existing wetlands and restore a functioning wetlands ecosystem within the area. Storm water from the Galvez and Massena outfalls will be directed through created wetlands, improving water quality within Lake Pontchartrain. Mr. Gillen completed project review and QA/QC on the project.

Kingwood Regional Drainage/Detention Study & Improvement, Harris County, TX: The project consists of a conceptual Watershed Plan to identify strategies for mitigation of existing flooding problems and to address improved drainage infrastructure required to achieve 100-year channel level-of-service within the Kingwood Area study limits. The limits of study encompass 32.3 miles of stream. Mr. Gillen completed project review and QA/QC on the project.


CS-87: Calcasieu-Sabine Large-Scale Marsh & Hydrologic Restoration, Cameron Parish, LA: Design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning, including project E&D work breakdown structure and cost estimates, optimization planning and initial optimization tasks, and other project planning. Mr. Gillen assisted with program and project management, project alternative evaluations, conceptual designs, and environmental compliance.

Mid-Basin Sediment Diversion Program, Plaquemines Parish, LA: Multi-billion dollar program consisting of the Mid-Barataria (BA-153) and Mid-Breton (BS-030) Sediment Diversion projects. These are large scale civil works projects proposed to divert 75,000 and 50,000 cfs, respectively, from the Mississippi River to deliver sediment to degrading marshes south of New Orleans. Mr. Gillen served as the State’s project engineer, working with design contractors and the Construction Manager at Risk (CMAR) contractors on both projects to optimize project designs for constructability and performance.

Barataria Basin Ridge and Marsh Creation Project - Spanish Pass Increment (BA-203), Venice, LA: Large-scale (1,600 acre) marsh and ridge restoration project in Plaquemines Parish, LA. Mr. Gillen served as the CPRA Engineer for this project, providing extensive input on project design that helped shape the project bid package. Participated in bidding and construction activities. Responded to Contractor RFI’s, attended bi-weekly construction meetings, and approved field orders and change orders.

Cameron-Creole Freshwater Introduction Project (CS-49), Cameron Parish, LA: Project engineer for a freshwater introduction project intended to reduce salinities in an impounded marsh in Cameron Parish, LA. Design of flapgated sheetpile weir structure, rip rap channel protection, and conveyance channel improvements. Input during construction to ensure that project features were being built as shown in the project documents.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Don Lancaster, PE <i>Engineering Manager</i>
Project Assignment:
Senior Project Engineer
Name of Firm with which associated:

Years' experience with this Firm:
24 years (41 total)
Education: Degree(s)/Year/Specialization:
BS / 1982 / Civil Engineering
Active registration: Year first registered/discipline:
1987 / Professional Engineer - Civil, LA 22821
Other experience and qualifications relevant to the proposed Project:
<p>Don has over 40 years of experience in civil engineering and project management. He manages Neel-Schaffer's offices in Mandeville and New Orleans, LA, as well as overseeing some of the company's largest design, bid and construction administration projects.</p> <p>He has extensive experience in program and project management for large and small municipal and port related projects that include programming, design, bidding and construction administration. His civil background includes ports; roads and bridges; streetscapes; structural; and water and wastewater.</p> <p>Don has extensive experience in preparing contract documents for construction projects. He has coordinated and worked with many local, state and federal agencies, including the Sewerage and Water Board of New Orleans, United States Corps of Engineers, Louisiana Department of Transportation and Development, the New Orleans Levee District, the Port of Gulfport, the Coastal Protection and Restoration Authority and numerous cities, parishes and counties.</p> <p>RELEVANT EXPERIENCE</p> <p>CS-87 Calcasieu-Sabine Large-Scale Marsh and Hydrologic Restoration Project: Engineer for Design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning, including project E&D work breakdown structure and cost estimates, optimization planning and initial optimization tasks, and other project planning.</p> <p>PO-184: St. Tammany Storm Surge Risk Reduction Project: Engineer for a CPRA project providing conceptual engineering for a Slidell Ring Levee including levee segments in east Slidell from Lakeshore Estates to Kingspoint and from Kingspoint to US Hwy 190. The project considered the feasibility of alternative alignments and provided conceptual planning and engineering for the required alignment features. It included a data collection report with project feature locations, layouts, environmental considerations, hydrologic and hydraulic considerations, and construction method considerations.</p>

TEC Professional Services Questionnaire

It also provided a design documentation report with a basis of design, details of the conceptual design stages, example calculations for all relevant disciplines, conceptual level engineer's estimate of probable construction cost, site layouts, conceptual O&M plans, construction considerations, a summary of benefits and impacts and cost comparison for the recommended alternatives.

St. Tammany Parish Coastal Protection Master Plan: Project lead for collaborative effort between St. Tammany Parish Government (STPG) and the St. Tammany Levee, Drainage and Conservation District (STLDCD), with funding from CPRA through an Intergovernmental Agreement. Neel-Schaffer's Team is assisting in this effort. The scope of services is divided into three tasks. Task I consist of collecting and organizing existing flood control assets and associated project data into a GIS data base. Task II is a gap analysis and Task III is a project feasibility analyses and engineering design.

Port of Gulfport Restoration, Gulfport MS: Project Manager for the planning, design, bidding, and construction management of the general engineering for this \$570 million restoration program. Supervise and oversee the engineering and support staff responsible for design of this program to elevate the Port of Gulfport site from its existing elevation of 10 feet above mean sea level (MSL) to 25 feet MSL, which will protect the Port from future storm surges. Work includes an 84-acre expansion of the West Pier by filling the water bottom; relocating tenant facilities; new construction and renovation to create an expandable, modern container terminal; and road and rail upgrades required to support the expanded modernized facility.

Calcasieu Salinity Control - Joe's Cut & West Pass, CPRA, Calcasieu Parish, LA (RSIQ 2016-2019): Mr. Lancaster is NSI's Project manager overseeing and coordinating all aspects of the engineering project. As NSI team leader, develops and coordinates the work plan, civil design, project team meetings, and coordinates with sub-consultants.

Tag Along Creek Drainage Analysis, St. Tammany Parish, LA: Project Manager, Responsible for engineering deliverables for a drainage analysis of Tag Along Creek, a tributary to Bayou Lacombe, for the purpose of determining causes of flooding and developing a solution to afford flood relief for residents of Cloverland Acres Subdivision.

Bayou Mandeville Maintenance Dredging, 3-Year Task Order Contract: Engineering. Officer-in-Charge for this task order contract which has included two task orders to date. One task order provides debris screen improvements at the Teche Vermilion Pump Station. The Bayou Mandeville Maintenance Dredging task includes dredging of a 1-mile-long preexisting access channel from Lake Lery into Bayou Mandeville with the disposal to supplement the Western Bank of Lake Lery.


Mandeville Lakefront Wetlands Restoration, Mandeville, LA: Project Manager for Lakefront Wetlands Restoration Project will prevent further degradation of the existing wetlands and restore a functioning wetlands ecosystem within the area. Storm water from the Galvez and Massena outfalls will be directed through created wetlands, improving water quality within Lake Pontchartrain. The project established a best practice for creation of new wetlands, provided engineering concepts in support of multiple storm water routing alternatives and coastal engineering concepts for the design of a storm-resistant shoreline closure with an integral bike path and pedestrian link between Old Mandeville and Sunset Point Park.

Salt Aire Shoreline Restoration, Mobile County, AL: Mr. Lancaster provided Quality Assurance and Quality Control for the preparation of Construction Documents (Plans, Specifications, and Engineer's Opinion of Probable Cost) for the Coastal Engineering Design of the Shoreline Protection and Restoration Project.

High Water Level Flood Protection Bridges, USACE New Orleans, LA: Project Manager, designed flood protection bridges for the Orleans Avenue Canal, which is part of the City of New Orleans Hurricane Flood Protection System. Work included new bridges, floodwalls (I-walls and T-Walls), levees, and roadway approaches. These new bridges tie into the Hurricane Levee Protection System and allow the roads to remain open during flood conditions.

The Groves, Pelican Park, Mandeville, LA: Project Manager for programming, schematic design, final design, bidding and construction phase services for this \$1.8 million green space and multi-generational park project for Pelican Park in Mandeville, Louisiana. The project was funded by St. Tammany Parish, Recreation District. No. 1

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Nick Ferlito, Jr., PE, PTOE <i>Louisiana Area Manager</i>
Project Assignment:
Project Principal
Name of Firm with which associated:

Years' experience with this Firm:
28 years (29 total)
Education: Degree(s)/Year/Specialization:
BS / 1993 / Civil Engineering MS / 1996 / Civil Engineering
Active registration: Year first registered/discipline:
1998 / Professional Engineer – Civil, LA #28001
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Ferlito joined Neel-Schaffer in 1996. He is a Senior Vice President and serves as Louisiana Area Manager, overseeing all responsibilities for the state.</p> <p>An ITE-certified Professional Traffic Operations Engineer, he has more than 30 years of experience and manages a wide range of traffic and transportation projects. He has served as a project manager for many intersection/corridor signal timing studies, signal design projects, safety studies and other traffic engineering related projects for public and private projects.</p> <p>Mr. Ferlito is experienced with numerous traffic engineering software packages, including HCS, CORSIM, SYNCHRO, Tru-Traffic (TSPPDraft), and SIDRA. He also completed the Naztec TS1/TS2 Controller 2-Day training course. He has also completed the NEPA and Transportation Decision Making course (2004), the Highway Safety Manual Workshop (2011) as well as LADOTD's Traffic Engineering Process and Report (TEPR) training.</p> <p>RELEVANT EXPERIENCE</p> <p>I-10 & I-12 College Drive Flyover Ramp Design-Build, Baton Rouge, LA: Project Manager for Interchange Modification Report, Transportation Management Plan (TMP) and ITR of MOT Plans for the proposed College Drive Ramp improvements. The IMR was prepared in accordance with DOTD's TEPR and FHWA Policy Points. The IMR analysis was performed using Vissim software. In addition, the TMP was prepared for the various maintenance of traffic phases. Analysis used in the TMP included HCS analysis for detour evaluations and Dynameq (Mesoscopic Modeling) for evaluating various MOT strategies. The project also includes signal modification plans at College Drive and the I-10 WB off ramp. (July 2020 – Present)</p> <p>US 80 Feasibility Study, Haughton, LA: Stage 0/Traffic & Safety Study (S.P. No. 44-10504, T.O. No. H.014044.1) Project</p>

TEC Professional Services Questionnaire

Manager for the preparation of a Stage 0 Report in support of safety improvements along US 80 corridor, specifically in the vicinity of Bellevue Road and Mid South Loop Road. All analysis performed in HCS for this study. The traffic study was performed in accordance with DOTD's TEPR.

Kansas Lane-Garrett Road Connector and I-20 Improvements, Monroe, LA: (S.P. No. H.004774.5 & H.007300.6) Project Manager/Traffic Lead for the preparation of a Level 4 Transportation Management Plan, review of MOT plans, design of temporary and permanent traffic signals and design of the relocation of DOTD ITS fiber optic trunk line.

I-49 South at Verot School Road, Lafayette, LA: (S.P. No. H.011235.5) Traffic Lead that performed Traffic QA/QC on the preparation of a Transportation Management Plan and design of temporary and permanent traffic signals.

MOVEBR Harding Boulevard at Interstate I-110: Project Manager for traffic engineering for intersection improvements for Harding Boulevard at I-110 to analyze the existing and projected future No Build conditions for operational and safety issues, and developed Tier 1 design solutions that mitigate those issues.

MOVEBR College Drive Enhancements: Project Manager for a traffic study that addressed pedestrian mobility and transit accommodations. The overall project plan incorporated planned LADOTD improvement projects at Interstate 10 which include a Design-Build project to modify the westbound offramp and other ramp terminal improvements implemented by the I-10 widening CMAR project.

MOVEBR N. Sherwood Forest Extension: Project Manager for design report for the extension of the existing North Sherwood Forest Drive from its current northern terminus at Greenwell Springs Road to the intersection of Joor Road at Mickens Road.

College Drive Enhancement Project (Perkins Road to I-10), Baton Rouge, LA (MOVEBR Project 19-EN-HC-0033): Project Manager for the Traffic Study component for the study of the College Drive corridor. The Traffic Study is being prepared in accordance with DOTD' TEPR and includes performing all analysis in Vissim to evaluate various alternatives. In addition to corridor improvements, a tiered analysis will be performed to evaluate various interchange alternatives for I-10 at College Drive. Dynameq will also be used to evaluate off system and connectivity alternatives within the study area.


LA 385 Feasibility Study, Lake Charles, LA: Stage 0/Traffic & Safety Study (S.P. No. 44-4402, T.O. No. H.012685.1) Developed a Stage 0 Report in support of safety improvements along with the LA 385 (Ryan Street) corridor between LA 3186 south of I-10 to Eddy Street north of I-10, including the LA 385 interchange with I-10. Traffic Engineering Manager

LA 6 Feasibility Study, Natchitoches, LA: Stage 0 / Traffic & Safety Study (S.P. 44-4402, T.O. No. H.012307.1) Prepared and coordinated a formal Stage 0, including a comprehensive safety analysis and traffic study for the purpose of analyzing existing and future conditions along the LA 6 corridor between Parish Road 542 west of I-49 to LA 3278 east of I-49, including the LA 6 interchange with I-49 to determine feasible alternatives that will preserve and enhance mobility and safety. Traffic Engineering Manager

District 05 Safety Investment Plan, DOTD District 05 (SPN 4400010504, Task No, H.014295.1). Project Manager for this study. Coordinated the evaluation of crashes on the state and local highway networks using variations in crash statistics to identify possible roadway issues and potential low-cost safety improvements.

IDIQ Contract for Safety Studies (44-10504) District 08 Safety Investment Plan: Developed a District-wide Safety Investment Plan for low cost improvements for HPSI locations, abnormal intersections, roadway departure locations and local roads. Crash history was evaluated at over 70 locations, countermeasures were identified and B/C analysis was performed using CMFs and estimated construction cost for potential low cost improvements at each location.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Steve Hazen, PE <i>Senior Project Manager</i>
Project Assignment:
Structural Engineer
Name of Firm with which associated:

Years' experience with this Firm:
16 years (49 total)
Education: Degree(s)/Year/Specialization:
BS / 1974 / Civil Engineering
Active registration: Year first registered/discipline:
1979 / Professional Engineer - Civil, LA 18087
Other experience and qualifications relevant to the proposed Project:
<p>Steve joined Neel-Schaffer in 2008 and has nearly 50 years of experience. He has worked as a Structural, Hydraulics and Soils Engineer with a primary focus on highway and railway bridges, structural design for buildings, facilities, hydrological analysis, and drainage design for projects. He recently served as the structural designer for several facilities at the Port of Gulfport as well as many bridge and roadway projects in Harris County, TX.</p> <p>RELATED EXPERIENCE</p> <p>Mandeville Lakefront Wetlands Restoration: Senior Structural Engineer. Situated between two “hard” shorelines, a mature cypress forest is rapidly eroding. The project will prevent further degradation of the existing wetlands and restore a functioning wetlands ecosystem within the area. Storm water from the Galvez and Massena outfalls will be directed through created wetlands, improving water quality within Lake Pontchartrain.</p> <p>Calcasieu-Sabine Large-Scale Marsh and Hydrologic Restoration Project: Senior Structural Engineer. Design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning, including project E&D work breakdown structure and cost estimates, optimization planning and initial optimization tasks, and other project planning.</p> <p>Slidell Ring Levee: Slidell East Segments (PO-184): Senior Structural Engineer. Feasibility evaluation of alternative alignments for flood protection and resiliency for the eastern side of Slidell and conceptual planning and engineering for the required alignment features. Provide Independent Technical Review of conceptual design alternatives and development of capital and construction costs for project features. Review of structural conflicts and land right issues associated with conceptual alignments.</p> <p>Port of Gulfport Restoration: Senior Project Engineer responsible for the structural design of three vehicle maintenance and repair buildings, three gate interchange structures, Customs and Border Patrol building and cross dock inspection facility for the Mississippi State Port Authority.</p>

TEC Professional Services Questionnaire

Calcasieu Salinity Control - Joe's Cut & West Pass, CPRA, Calcasieu Parish, LA (RSIQ 2016-2019): Steve is NSI's primary manager overseeing and coordinating all aspects of the structural engineering components of the project for Joe's Cut. Assists, develops and coordinates the civil design, and coordinates with sub-consultants for the design of West Pass.

Design of hurricane protection levees in Rockefeller Wildlife Refuge in Cameron Parish: Mr. Hazen provided engineering design services for the elevation of hurricane protection levees at the Rockefeller refuge in Southwestern Louisiana. Marsh settlement led to existing levee grades being lower than the required elevation for the desired level of protection.

Inspection of Mississippi river levees during flooding, Belle Chase to Venice, LA: Mr. Hazen performed structural/geotechnical field inspection and evaluation services of various flood risk reduction system components downriver of New Orleans, LA. Specifically he performed an armoring and erosion control study that included erosion monitoring, armoring analysis, and design recommendations that included the use of concrete slope paving and baffle boards.

Design of channel improvement to Bayou Pierre in Shreveport from 70th street to Industrial loop: Mr. Hazen performed hydraulic design of the channel and improvements utilizing the U.S. Army Corps of Engineers, Hydraulic Engineering Center's (HEC) suite of models.

Analysis of Gilbert Bayou channel improvements in Caddo Parish for FEMA LOMR application: Mr. Hazen performed analysis using USACE HEC software for the Caddo Parish Commission to design improvements to the channel of Gilbert Bayou.

Analysis of Bayou Pierre and floodway at Robson for Caddo/Bossier Port for submittal to FEMA: Mr. Hazen performed hydraulic design using USACE HEC software to evaluate hydraulic impacts on the floodway of improvements at the Caddo/Bossier Port.

Hydraulic design of slab span bridges and culverts for timed project Hwy 167. Quitman to Lincoln Parish Line: Mr. Hazen utilized USACE HEC-RAS and LADOTD Hydraulics software for the analysis and design process of bridges and culverts associated with the roadway design.

LA 371 Bridge over Red River at Coushatta, LA: Project Engineer responsible for design of steel cross frames and lateral bracing for non-redundant steel plate girders, concrete approach piers designed to withstand barge impacts, and voided concrete slab approach span design. Pier design included steel H-pile design for barge impact and design of concrete tremie seals. Other work included detailing of miscellaneous steel items, quality control of drawings and review of shop drawings. Two designs were provided for the bridge, one being a concrete segmental bridge and the other a steel plate girder bridge. The steel plate girder bridge was constructed. At the bridge location the Red River is navigable so all main piers and approach column bents in the river were designed to resist the extreme loading from barge impact. The two column approach bents were connected with concrete walls designed in accordance with barge impact criteria provided by LaDOTD.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Amanda Phillips, PE <i>Senior Project Engineer</i>
Project Assignment:
Senior Project Engineer
Name of Firm with which associated:

Years' experience with this Firm:
4 years (22 total)
Education: Degree(s)/Year/Specialization:
BS / 2000 / Biological Engineering
Active registration: Year first registered/discipline:
2005 / Professional Engineer - Civil, LA 31764
Other experience and qualifications relevant to the proposed Project:
<p>Amanda joined Neel-Schaffer in 2020 and serves as a Senior Project Manager in the Coastal Science and Engineering department. Amanda has 20 years of design and construction experience on a wide variety of coastal restoration projects.</p> <p>In addition to design work, she has spent more than 10 years working and learning the world of marine construction. This fast paced, real-world experience has provided her with successes and failures of inland waterway and heavy civil construction critical to furthering her understanding coastal engineering and construction challenges.</p> <p>Her background in biological engineering coupled with her years of construction experience, has provided a unique lens with which to view coastal projects. She is currently pursuing a Master's in Coastal Engineering and Sciences at the University of New Orleans.</p>
<p>RELEVANT EXPERIENCE</p> <p>Mandeville Lakefront Wetlands Restoration: Engineer of Record. Update of project design to include changes to existing conditions since original design. Design provides a reduction of water surface elevations for the 50, 100-, and 500-yr storm events through reduction in wave heights and addresses future erosion by significantly reducing the open water fetch from Lake Pontchartrain at the project site. Design reroutes urban stormwaters through the wetlands allowing suspended sediment to settle within the lagoon and marsh areas and will mitigate the effects of saltwater intrusion on the existing wetlands. The newly created wetlands will increase faunal habitats, support fisheries, support bird usage, improve primary productivity at the base of the food chain and improve carbon sequestration and watershed storage.</p> <p>St. Tammany Parish Sustainable Growth Pilot Study: Technical Advisor. Study to detail the hydrology and hydraulics of three drainage basins within the study area to consider future development as related to types, conditions, densities, and regulatory structure associated with the developments. Additionally, the goal is to review regulation of stormwater</p>

TEC Professional Services Questionnaire

management within the study area to avoid additional flood risk and or mitigate flooding within the existing drainage basins associated with the study area as related to existing and future developments.

Slidell Ring Levee: Slidell East Segments (PO-184): Senior Project Engineer. Feasibility evaluation of alternative alignments for flood protection and resiliency for the eastern side of Slidell and conceptual planning and engineering for the required alignment features. Provide Independent Technical Review of conceptual design alternatives and development of capital and construction costs for project features. Review of structural conflicts and land right issues associated with conceptual alignments.

St. Tammany Parish Coastal Master Plan (PO-167), St. Tammany Parish, LA: Senior Project Engineer. Updates to the 2012 Northshore Hurricane and Flood Protection Study with newly completed and current proposed projects as well as coordination with state and federal agencies for the development of independent project feasibility evaluations for the development of a Master Plan within the Coastal Zone of St. Tammany Parish. Development and evaluation of conceptual alignments and estimated capital and construction costs of proposed alignments to determine project priority and viability. Development of conceptual design analysis summary report.


University Lakes Flood Risk Reduction Design: Senior Project Engineer – Dredging and Constructability Coordination with Construction Manager at Risk (CMAR). Improvements to water quality and flood risk reduction potential for the Louisiana State University (LSU) Lakes System. Development and constructability review for dredging of the 6 Lakes. Provide Independent Technical Review of conceptual design alternatives and development of construction costs for project features. Coordination with CMAR Contractor for Constructability concerns and issues during the development of Dredging Plans and Specifications.

Calcasieu-Sabine Large-Scale Marsh and Hydrologic Restoration Project: Senior Project Engineer. Design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning, including project E&D work breakdown structure and cost estimates, optimization planning and initial optimization tasks, and other project planning.

Bayou Mandeville Dredging: Project Engineer. Coordinated work of subconsultants for hydrographic surveying of existing channel for this Louisiana Coastal Restoration & Protection Authority (CPRA) project. Provided recommendations to client for project path forward based on survey data and client needs.

Teche-Vermillion Debris Screen: Project Engineer. Coordinated with client to determine project issues and researched options utilizing client input for this CPRA project. Developed scopes of work for geotechnical subcontractor and provided design and oversight of debris screen of a temporary nature as chosen by client.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Warren Huggins, PE <i>Civil Engineer</i>
Project Assignment:
Civil Engineer
Name of Firm with which associated:

Years' experience with this Firm:
11 years (12 total)
Education: Degree(s)/Year/Specialization:
BS / 2012 / Civil Engineering
Active registration: Year first registered/discipline:
2018 / Professional Engineer - Civil, LA 42443
Other experience and qualifications relevant to the proposed Project:
<p>Warren joined Neel-Schaffer in 2013 and works out of the firm's New Orleans and Mandeville, LA, offices. He has assisted in the design of several FEMA-funded Recovery Roads Program projects in New Orleans that include roadway and sidewalk rehabilitation, ADA ramp improvements, water line replacement, and drainage improvements. Warren also has assisted in airport design and planning, developed FAA bid documents, and developed engineer's estimates.</p> <p>RELATED EXPERIENCE</p> <p>Port of Gulfport Restoration Program – West Pier Construction Phases 1, 2, and 3, West Pier Facilities, Gulfport, MS: Construction of over \$160 million in port improvements including demolition, grading, storm drainage and site utilities, paving and roadway construction, electrical and site lighting, striping, railroad construction, transit shed, administration, and maintenance and repair buildings. Responsibilities include developing construction constraints and sequencing plans for all projects, design of some site utilities, and cost estimation duties.</p> <p>Calcasieu Salinity Control - Joe's Cut & West Pass, CPRA, Calcasieu Parish, LA (RSIQ 2016-2019): Designing control structures to limit salinities being introduced through the Calcasieu Ship Channel (CSC) into Calcasieu Lake and surrounding wetlands to reduce the rate of wetland loss within the project area. Duties include cost and quantity estimating, creating drawings such as plan/profiles, cross sections, and details, and coordinating with sub consultants on project features.</p> <p>Salt Aire Shoreline Restoration – Mobile County, AL: Design of a living breakwater and shoreline restoration, using dredged fill and concrete-unit-based wave attenuation structures, to prevent shoreline retreat of the Salt Aire Property and Goat Island in Mobile Bay. Duties included assisting the coastal engineer in the design and preparation of plans, such as existing conditions, proposed layouts, cross sections, typical sections, signage and details.</p>

TEC Professional Services Questionnaire

Concordia Parish Drainage, Concordia Parish, LA: Created hydraulic models of the system of Bayous and canals (approx. 60 mi) that provide for the stormwater drainage of Concordia Parish. Assisted in developing maps that illustrate the parish-wide inundation changes that result from several proposed drainage improvements.

Repurpose Green Field Five, Pelican Park, Mandeville, LA: For Recreation District No. 1, planning and design for repurposing the Green Field Five to an adult focused recreation area with a walking trail adjacent to a created pond, Bocce Ball and Pickleball courts, designed drainage improvements and other amenities. Construction engineering services included response to requests for information, submittal review and biweekly progress meetings. Construction cost is approximately \$1,600,000.

FEMA-funded Recovery Roads Program, Lower Ninth Ward Quad 2, New Orleans: Engineer Intern. Comprehensive recovery strategy to repair Hurricane Katrina related damages on and beneath city managed streets throughout New Orleans. Responsibilities include determination of storm related repairs to streets, sidewalks and ADA ramps through FEMA scoping. Coordination with the Sewerage and Water Board of New Orleans Water Line Replacement Program to incorporate water line and drainage improvements into the project.

Waterline Replacement Program, Mid-City and City Park Neighborhoods, New Orleans, LA: Engineer Intern. Part of a larger Citywide, multi-year infrastructure repair/recovery effort funded by FEMA to restore the city's distribution system. Responsibilities include plan/profile design of new waterlines and drainage improvements on over 60 city blocks.

Lower Ninth Ward Streetscape Phase II, New Orleans, LA: Engineer Intern. The second and final phase of "streetscape" beautification on North Claiborne Avenue. Responsibilities included design of ADA ramps, landscaping, art plazas and previous concrete for pedestrian walkways throughout the neutral ground.

South Jahncke Avenue Water Line Improvements, Covington, LA: Engineer Intern. Water distribution improvements that include replacing 1,600 feet of 4-inch water main with a 10-inch water main. Responsibilities include plan/profile design of new water main and pavement replacement.

Port of Gulfport (MS) Restoration Program, West Pier Construction Phase I and West Pier Facilities: Engineer Intern. Construction of \$110 million in port improvements, including demolition, grading, storm drainage and site utilities, paving and roadway construction, electrical and site lighting, striping, railroad construction, transit shed, administration buildings, and maintenance and repair buildings. Responsibilities included developing construction constraints and sequencing plans for both projects.

Water Line Replacement Program – Mid-City, City Park, and Dixon Neighborhoods, New Orleans, LA: Part of a larger City-wide, multi-year infrastructure repair/recovery effort funded by FEMA to restore the city's water distribution system. Responsibilities include plan/profile design of new waterlines and drainage repairs on over 65 city blocks.

Lower Ninth Ward Streetscape Phase II, New Orleans, LA: The second and final phase of "streetscape" beautification on North Claiborne Ave. in the Lower Ninth Ward neighborhood. Responsibilities included design of ADA ramps, landscaping, art plazas and previous concrete pedestrian walkways throughout the neutral ground and assistance with construction services. Construction cost is approximately \$535,000.

Broad and Lafitte St. Streetscape, New Orleans, LA: "Streetscape" beautification project that ties in with the Lafitte Greenway Bicycle and Pedestrian Path project making the Mid-City neighborhood more accessible for pedestrians. Responsibilities included design of ADA ramps, striping with the addition of bike lines, street lighting additions and improvements, and landscaping and assisting with construction services. Construction cost is approximately \$540,000.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Christopher M. Trebisky, PE, PLS, PP <i>Senior Project Manager</i>
Project Assignment:
Civil Engineer
Name of Firm with which associated:

Years' experience with this Firm:
12 years (25 total)
Education: Degree(s)/Year/Specialization:
BS / 2003 / Environmental Engineering BS / 2010 / Engineering Technology-Surveying
Active registration: Year first registered/discipline:
2013 / Professional Engineer – MS 21207 2014 / Professional Surveyor – MS 25446
Other experience and qualifications relevant to the proposed Project:
<p>Christopher joined Neel-Schaffer in 2012 and serves as a Senior Project Manager on a variety of site/civil and engineering projects. His areas of expertise include site planning, design, transportation design, topographic and title surveying, sanitary and storm drainage systems, and recreation design. Before joining Neel-Schaffer, he worked for 13 years as a project manager for a New Jersey-based consulting firm.</p> <p>In addition, he has experience in writing specifications, bidding and contracting construction work, meeting construction schedules and construction inspection. Christopher is skilled in project budgeting and cost analysis with an excellent background in estimating. Besides engineering and surveying practices, he holds expertise in the field of green construction as a LEED Accredited Professional.</p> <p>RELATED EXPERIENCE</p> <p>Port of Gulfport Restoration, West Pier Site Improvements, Phase I, Gulfport, MS: Project Engineer. Engineering design and construction services for Phase I of a 95-acre Port expansion. Responsible for overall site design, stormwater management and pavement design, with construction costs exceeding \$60 million.</p> <p>Port of Gulfport Restoration, West Pier Site Improvements, Phase 2, Gulfport, MS: Project Engineer. Engineering design and construction services for Phase 2 of a 50-acre Port expansion. Responsible for overall site design, stormwater management and pavement design, with construction costs exceeding \$30 million.</p> <p>City of Vicksburg Port Expansion, Vicksburg, MS: Preliminary Engineering Design and Environmental Permitting for the protection of approximately 1,800 Acres for the development of a multi-modal port in the City of Vicksburg. The project includes the construction approximately 5 miles of levee protection adjacent to the Mississippi River, the development of a slackwater port, and infrastructure to support industrial development vital to the City.</p>

TEC Professional Services Questionnaire

Amazon Warehouse Civil Site Design, Madison County, MS: Project Manager. Neel-Schaffer was contracted by the Trammell Crow Company to provide complete engineering design and construction management services for a 2.7 million-square foot warehouse near Canton (MS) for Amazon, a one of the top four e-commerce and information technology companies in the United States. The 70-acre site will be the first anchor building for an 850-acre megasite industrial park near Interstate 55 being developed by the Madison County Economic Development Authority. Construction began on the massive ARS Sort Facility on August 1, 2020 and is expected to take 13 months to complete. Neel-Schaffer provided complete civil site design and permitting services on an expedited scheduled and is now providing construction management services. Neel-Schaffer sister firms Maptech and SoilTech Consultants provided survey and geotechnical engineering services, respectively.


Vicksburg Sports Force Parks, Vicksburg, MS: Neel-Schaffer provided a wide variety of services for the construction of Sports Force Parks on the Mississippi, a new \$20 million multi-use complex that opened in February 2019 in Vicksburg near the Mississippi River. Services include civil site design for grading, drainage, and layout for the new complex. Neel-Schaffer also provided construction engineering and inspection during the construction phase, survey through sister firm Maptech, and water and wastewater design through subconsultant SOL Engineering.

Rankin Trails Amphitheater and Baseball Park Project, Brandon MS: Project Manager. Engineering design and construction services for a 75-acre recreational facility, including the provision of 10 baseball fields with state-of-the-art lighting, concession buildings, parking areas and an 8,000-seat amphitheater. Responsible for overall site design, grading and stormwater management and pavement design with construction costs exceeding \$20 million.

Continental Tire, Hinds County, MS: Project Engineer. Preliminary engineering design and planning services for the new \$2.4 billion Continental Tire facility under construction near Clinton. This project included the overall site and drainage layout required to obtain a Section 401 Water Quality permit. The scope also included the design of earthwork models to aid in the development of construction cost estimates for the plant, scheduled to open in late 2019.

Shiloh Park Improvements Project, Brandon, MS: Project Manager. Engineering design and construction services for the reconstruction of a 110-acre recreational facility, including the provision of three new soccer fields, one football field, and miscellaneous parking lots. The project also included converting eight baseball fields to softball fields, and the provision of state-of-the-art lighting systems. Responsible for overall site design, grading, stormwater management and pavement design, with construction costs exceeding \$4 million.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Leah Selcer, PE <i>Civil Engineer</i>
Project Assignment:
Civil/Coastal Engineer
Name of Firm with which associated:

Years' experience with this Firm:
4 (10 total)
Education: Degree(s)/Year/Specialization:
BS / 2014 / Civil Engineering
Active registration: Year first registered/discipline:
2019 / Professional Engineer - Civil, LA 43492
Other experience and qualifications relevant to the proposed Project:
<p>Leah joined Neel-Schaffer's Baton Rouge office in 2020. With an extensive and diverse experience working for consulting firms on a variety of Civil Engineering projects, her focus is providing Coastal Engineering services for NSI clients.</p> <p>She has a broad range of project engineering and management experience, providing design, planning, and budgeting services for multiple projects. She is also experienced in preparing permits, plans and specifications, design calculations, reports, and presentations for a variety of civil engineering projects.</p> <p>She has assisted in the engineering and design of several complex civil, coastal and water resources projects for coastal ports, parish governments, LADOTD, CPRA, as well as private developers.</p> <p>RELEVANT EXPERIENCE</p> <p>Mandeville Lakefront Wetlands Restoration: Situated between two "hard" shorelines, a mature cypress forest is rapidly eroding. The Mandeville Lakefront Wetlands Restoration Project will prevent further degradation of the existing wetlands and restore a functioning wetlands ecosystem within the area. Storm water from the Galvez and Massena outfalls will be directed through created wetlands, improving water quality within Lake Pontchartrain.</p> <p>Slidell Ring Levee: Slidell East Segments (PO-184): Project Engineer. Feasibility evaluation of alternative alignments for flood protection for the eastern side of Slidell and conceptual planning and engineering for the required alignment features. The project also included hydrologic and hydraulic considerations and conceptual modeling for two drainage pump stations are required along proposed levee segment to manage the rainfall captured within the flood protection systems during gate closure events to address inland or upstream flooding. Conceptual level of analysis was performed for the sizing of these pump stations.</p>

TEC Professional Services Questionnaire

Coastal Processes Study for Lillian Park: The Coastal Processes Study for the Lillian Park Beach Habitat and Shoreline Protection Project evaluates the existing conditions and associated coastal processes. By establishing the existing conditions related to wave action, sediment deposition, erosion, and degradation of littoral environments, conceptual alternative solutions can be developed, evaluated, and selected to provide a sustainable shoreline and boat ramp.

St. Tammany Parish Coastal Master Plan (PO-167): Project Engineer. Neel-Schaffer tasks include updating the GEC 2012 Northshore Hurricane and Flood Protection Study with newly completed and current proposed projects, gather information on multiple projects by different agencies and jurisdictions. Perform a gap analysis to identify new projects, and a benefit/cost analysis of proposed projects will be completed to determine project priority and viability. NSI is currently performing a Conceptual project Alternatives and Feasibility Analysis as a part of Task III.

Calcasieu-Sabine Large-Scale Marsh and Hydrologic Restoration Project: Project Engineer for Design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning. Main project tasks involve evaluation of the flow capacity of the existing drainage system, provide design conditions to drive local hydraulic modeling for culverts, and hydrologic structure design optimization. Hydrologic structure design optimization includes development of hydrologic structure alternatives, analysis and determination of preferred structure type, construction logistics and constructability evaluation, conceptual level estimates of quantities, construction, and operations/maintenance costs, and conceptual pump station evaluation.

University Lakes Flood Risk Reduction Design: Dredging and Constructability Coordination with Construction Manager at Risk (CMAR). Improvements to water quality and flood risk reduction potential for the Louisiana State University (LSU) Lakes System. Development and constructability review for dredging of the 6 Lakes. Provide internal Independent Technical Review of conceptual design alternatives and development of construction costs for project features. Coordination with CMAR Contractor for Constructability concerns and issues during the development of Dredging Plans and Specifications.

Calcasieu Salinity Control - Joe's Cut & West Pass: Project Engineer. Designing control structures to limit salinities being introduced through the Calcasieu Ship Channel (CSC) into Calcasieu Lake and surrounding wetlands to reduce the rate of wetland loss within the project area. Duties include calculations for estimated scour and rip-rap sizing.

Jackson County Board of Supervisors Dredging Program, Group 4: In response to the disaster damages as a result of Hurricane Nate (FEMA EM-3393), Neel-Schaffer was selected by the Jackson County Board of Supervisors to provide professional civil engineering and monitoring services for the dredging, debris and sediment removal of approximately 12,000 linear feet of navigable channels. The project also includes design services necessary to restore navigation aids to acceptable operations.

Upper Terrebonne Basin Watershed Plan/EA, Upper Delta Soil & Water Conservation District: Ms. Selcer was the project engineer responsible for preparing a hydrologic and hydraulic analysis as part of the Watershed Plan and EA for the Upper Terrebonne Basin Watershed using HEC HMS for storm water runoff calculations and HEC RAS for required channel improvements. The total flood protection project area encompasses seven HUC 12 watersheds totaling approximately 225,072 acres.

Petite Caillou Drainage Project, Terrebonne Parish, LA: Project Engineer. This project consisted of the design 450 cfs drainage pump station to reduce flooding due to excessive rainfall. Ms. Selcer performed site design of the pump station and the hydraulic calculations of the conveyance channel. Ms. Selcer prepared preliminary construction plans and estimate of probable cost.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Shane Seeger, EI <i>Civil/Coastal Engineer</i>
Project Assignment:
Civil/Coastal Engineering
Name of Firm with which associated:
 NEEL-SCHAFER <i>Solutions you can build upon</i>
Years' experience with this Firm:
4 (4 total)
Education: Degree(s)/Year/Specialization:
BS / 2022 / Environmental Engineering
Active registration: Year first registered/discipline:
2022 / Engineering Intern - LA 35169
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Shane Seeger has four years of engineering experience as a student intern at Neel-Schaffer's Baton Rouge office. He has experience assisting and with design and document preparation in the Coastal and Water Resources field. Projects he works on include drainage, the design and implementation of habitat restoration, marsh creation, shoreline protection, hydrologic restoration, and flood protection in Coastal Louisiana.</p> <p>RELATED EXPERIENCE</p> <p>Mandeville Lakefront Wetlands Restoration Project, Mandeville, LA: Situated between two "hard" shorelines, a mature cypress forest is rapidly eroding. The Mandeville Lakefront Wetlands Restoration Project will prevent further degradation of the existing wetlands and restore a functioning wetlands ecosystem within the area. Storm water from the Galvez and Massena outfalls will be directed through created wetlands, improving water quality within Lake Pontchartrain.</p> <p>PO-184: St. Tammany Storm Surge Risk Reduction Project: Feasibility evaluation of alternative alignments for flood protection for the eastern side of Slidell and conceptual planning and engineering for the required alignment features.</p> <p>PO-167: St. Tammany Parish Coastal Protection Master Plan, St. Tammany Parish, LA: Neel-Schaffer tasks include updating the GEC 2012 Northshore Hurricane and Flood Protection Study with newly completed and current proposed projects, gather information on multiple projects by different agencies and jurisdictions. Perform a gap analysis to identify new projects, and a benefit/cost analysis of proposed projects will be completed to determine project priority and viability. NSI is currently performing a Conceptual project Alternatives and Feasibility Analysis as a part of Task III.</p> <p>CS-87 Calcasieu-Sabine Large-Scale Marsh and Hydrologic Restoration Project: Project Engineer for Design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning, including project E&D work breakdown structure and cost estimates, optimization</p>

TEC Professional Services Questionnaire

planning and initial optimization tasks, and other project planning tasks.

Coastal Processes Study for the Lillian Park Beach Habitat and Shoreline Protection Project: The Coastal Processes Study for the Lillian Park Beach Habitat and Shoreline Protection Project evaluates the existing conditions and associated coastal processes. By establishing the existing conditions related to wave action, sediment deposition, erosion, and degradation of littoral environments, conceptual alternative solutions can be developed, evaluated, and selected to provide a sustainable shoreline and boat ramp.



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Sahar Haddadian, PE, PhD, CFM, WEDG <i>Coastal Engineer</i>
Project Assignment:
Coastal Engineer
Name of Firm with which associated:

Years' experience with this Firm:
2 (11 total)
Education: Degree(s)/Year/Specialization:
BS / 2011 / Civil & Structural Engineering MS / 2013 / Civil & Hydraulic Engineering PhD / 2020 / Civil & Coastal Engineering
Active registration: Year first registered/discipline:
2024 / Professional Engineer - Civil, LA 48648
Other experience and qualifications relevant to the proposed Project:
<p>Ms. Haddadian joined Neel-Schaffer in 2022 and serves as a Coastal Engineer responsible for coastal engineering analyses, numerical modeling, and the design of coastal structures.</p> <p>Sahar has three years of experience, and her expertise ranges from project inception to construction, including: feasibility studies, field investigations, cost estimates, comprehensive coastal engineering analyses, numerical modeling, and structural design.</p>
RELATED EXPERIENCE
<p>MDOT SCOUR Analysis for US-84 and SR-15 Bridges Over Tallahala Creek, MS: Provided quality assessment of two-dimensional numerical modeling of river hydraulics and bridge scour analysis using SMS-SRH2D software</p> <p>SCDOT Scour Analysis for US-301 Bridge Over Savannah River, SC: Sahar was in charge of two-dimensional numerical modeling of river hydraulics and determining the bridge scour depth and extent for the proposed bridge replacement using SMS-SRH2D software.</p> <p>SCDOT Scour Analysis for US-278 EB/WB Bridge Over Okatee River, SC: Sahar was in charge of developing a two-dimensional hydraulic numerical model to estimate the 100- and 500-year river hydraulics for bridge scour calculations using SMS-SRH2D software.</p> <p>St. Tammany Parish Slidell Breakwater Restoration Feasibility Study, Slidell, LA: Sahar was in charge of evaluating the feasibility of constructing shoreline protection and habitat development through the construction of segmented breakwaters along Lake Pontchartrain's southeast shoreline. Sahar analyzed the existing conditions (water levels, subsidence, sea level rise) and coastal processes (wind and wave climate during normal and extreme conditions) on site to determine the real and ongoing negative consequences to the immediate shoreline and littoral habitat found within</p>

TEC Professional Services Questionnaire

the study area.

St. Tammany Parish Coastal Master Plan, LA: Sahar was in charge of conducting flooding analysis using a two-dimensional HEC-RAS model to evaluate the vulnerable areas during existing conditions and determine the size of proposed pump stations to reduce flooding risk within the project site.

Austal USA South Access Road, Mobile, AL: Sahar was in charge of conducting a two-dimensional HEC-RAS model to evaluate the changes in water surface elevation within the vicinity of the project site due to the widening of the connector road located on Pinto Pass that connects the South end of the Austal Complex to Dunlap Drive.

Marine Industries Association of Palm Beach County Peanut Island Flood Shoal Dredging Project, Riviera Beach, FL: Sahar was in charge of coastal analysis and dredge design for the Peanut Island dredging project. The analysis focused on the potential effects of dredging, such as sand accretion, reduction of sediment, and how long until the project needs to be dredged again.

Miami-Dade County Haulover and Crandon Park Sea Level Rise Mitigation Plan, Miami, FL: Sahar prepared flood inundation and sea level rise analysis for the Haulover Park Sea Level Rise Mitigation Plan. This plan will lead to the development of mitigation solutions and cost estimates to address the effects of sea level rise that impact the public's use of amenities.

Government of the Bahamas/Engineering & Technical Services Glass Window Bridge Coastal Engineering, Eleuthera, The Bahamas: The project included the reconstruction of existing bridge and roadway, which provides sole access between northern and southern regions of the island. Sahar was responsible for modeling of wave propagation and extreme tide events.

Clifton Point LNG Facility, New Province, The Bahamas: The project included Coastal Engineering analysis in determining the hydrodynamic conditions in the Project site. The goal was to determine the sediment transport processes during the construction of the pier and the fate of potential oil spills during the operational phase. Sahar was responsible for hydraulic analysis and the modeling of sediment transport and oil spill.

FDOT District 1 Sea Level Rise, Miami, FL: The project included the sea level rise analysis and determination of the potential future flooding. Sahar was responsible for determining the King tide in the project area and conducting sea level rise analysis to determine possible areas and roads that would experience flooding.

Sunset Harbor Yacht Club wave screen, City of Miami Beach, FL: The project included the construction of a new wave screen on the seaward side of the existing deck. Sahar was responsible for analyzing wave characteristics both within and outside the perimeter of the existing wave attenuator for the Sunset Harbor Yacht Club, and calculating the wave load and wave attenuation to properly design the wave screen.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Levi Roady, EIT Coastal Engineer
Project Assignment:
Coastal Engineer
Name of Firm with which associated:

Years' experience with this Firm:
2 (4 total)
Education: Degree(s)/Year/Specialization:
BS / 2020 / Ocean Engineering
Active registration: Year first registered/discipline:
2020 / Engineer in Training – TX 74553
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Roady joined Neel-Schaffer in 2022 and serves as an Engineer in Training with the Coastal Engineering Group.</p> <p>Levi has two years of experience with the Army Corps of Engineer Galveston District.</p> <p>Based in Texas, Levi works on drainage and coastal projects along the Gulf of Mexico.</p> <p>RELATED EXPERIENCE</p> <p>CS-87 Calcasieu-Sabine Large-Scale Marsh and Hydrologic Restoration, Cameron, LA: Graduate Coastal Engineer. Due to the effects of sea level rise, and several major hurricanes, the Calcasieu-Cameron watershed has suffered from significant land loss since the 1970s. Although several marsh restoration projects have occurred in the region in order to restore lost land, CS-87 is the largest scale marsh-restoration project that has been proposed in the region, with benefits for the entire 65,000 acre watershed. Levi has assisted the Baton Rouge office with the design of marsh creation areas for this project, including research and design of the pipeline corridors used to transport sediment, and the borrow areas where material will be drawn from. Additionally, Levi has created a report to document the corridor creation process, and all preliminary requirements of design.</p> <p>Kingwood (TX) Diversion Ditch Conveyance Improvement Study: Graduate Coastal Engineer. The Kingwood Subdivision experienced severe flooding during both Hurricane Harvey and Tropical Storm Imelda. During these events, the existing Kingwood Diversion Ditch was not able to completely divert flow from the Ben's Branch channel, which resulted in increased flooding in the subdivision. The goal of this project is to improve the capacity of the diversion ditch. Levi assisted by compiling the preliminary engineering report for the project, and coordinating other reports and appendices for delivery to the client.</p> <p>District Comparative Analysis, Galveston, TX: With the initiation of the "Ike Dike" Texas Coastal Study, and a massive</p>

TEC Professional Services Questionnaire

influx of funding to the district from BBA-18, the comparatively small district of SWG needed to hire new talent that would suit the needs of the Galveston District as they changed their focus from maintenance dredging to new construction. As a student intern with the district's Internal Review group, Levi's report, known as the District Comparative Analysis (DCA), compared the distribution of employees and hiring trends throughout the COE, placing an emphasis on districts that were well-established, specialized in civil works, or conducted operations on the coast. This resulted in a review of 12 of the 36 COE Districts in the Continental United States. Portions of the DCA were used by the SWG commander in a briefing to the Chief of Engineers. The same analysis was used in an analysis by SWD Headquarters Internal Review, where it was presented to 16 Districts from 3 Divisions and was accepted as CPE for professional credit.

Placement Area Classification, Galveston, TX: As an H&H Engineer with the Corps of Engineers, Levi worked with the Operations group, using ArcGIS and topographic imagery to outline every sediment placement area along the GIWW, and determine how much sediment volume each placement area contained. This was used to help create a unified classification system for the GIWW's many sediment placement areas, and determine the total volume for placement remaining along the GIWW. This was in turn used to inform the development of several large dredging projects along the GIWW, and how the placement areas along the GIWW would need to be developed in order to ensure channels could expand to accommodate larger cargo vessels.

PA-118A, Matagorda, TX: Junior H&H Engineer. Levi performed an initial visit to the site, along with other junior geotechnical and structural engineers, to ascertain site conditions of the existing levees and drainage structures. After review was completed, the team worked to design a new outlet structure, in order to accommodate levee raises which would allow dredging operations in the GIWW to continue for the next 10 years.

PA 11, Beaumont, TX: Junior H&H Engineer. On the other end of the GIWW, Levi and a team of other junior engineers visited the site to ascertain site conditions of the existing levees and drainage structures, on behalf of senior coastal engineers. PA 11 was a much larger area than PA-118A, and its outlet structures were in significantly worse condition, making this placement area a much more challenging project. After review was completed, the design team worked to design multiple new outlet structures, in order to accommodate levee raises which would allow dredging operations in the GIWW to continue for the next 10 years.

Texas Coastal Study, Galveston, TX: While not the primary author of the study, Levi worked alongside H&H Engineer Himangshu Das on documentation of the Texas Coastal Study, known as the "Ike Dike," to ensure grammatical accuracy and formatting consistency. Additionally, Levi ensured the accuracy of information in the body between multiple authors, and implemented accurate citations into the text in order to prepare the study for public delivery.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Christina Lenel <i>Civil Engineering Technician</i>
Project Assignment:
Civil Engineering Technician
Name of Firm with which associated:

Years' experience with this Firm:
3 (15 total)
Education: Degree(s)/Year/Specialization:
BS / 2010 / Industrial Technology
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>Christina Lenel joined Neel-Schaffer and serves as an Engineering Technician in the Mandeville (LA) office. She has more than 10 years of experience as a CAD Tech and Construction Inspector and provides both services for Neel-Schaffer. She joined the firm after working the last seven years for the Louisiana Department of Transportation and Development.</p> <p>Christina's experience includes monitoring construction progress, verifying work performed adhered to plans and specifications, producing daily work reports and estimate quantities, producing As-Built drawings and project closeout submittal packages. She has worked on a variety of projects including new roundabout construction, roadway widening and new roadway construction, installation of embankment and base course, soil cement, asphalt paving, concrete paving, subsurface drainage, and bridge construction.</p>
RELATED EXPERIENCE
<p>Mandeville Lakefront Wetlands Restoration: Civil Designer for Lakefront Wetlands Restoration Project that will prevent further degradation of the wetlands and restore a functioning wetlands ecosystem within the area. Storm water from the Galvez and Massena outfalls will be directed through created wetlands, improving water quality within Lake Pontchartrain. The project established a best practice for creation of new wetlands, provided engineering concepts in support of multiple storm water routing alternatives and coastal engineering concepts for the design of a storm-resistant shoreline closure with an integral bike path and pedestrian link between Old Mandeville and Sunset Point Park.</p> <p>PO-167: St. Tammany Parish Coastal Master Plan: Civil Designer. NSI tasks include updating the GEC 2012 Northshore Hurricane and Flood Protection Study with newly completed and current proposed projects, gather information on multiple projects by different agencies and jurisdictions. Perform a gap analysis to identify new projects, and a benefit/cost analysis of proposed projects will be completed to determine project priority and viability. NSI is currently performing a</p>

TEC Professional Services Questionnaire

Conceptual project Alternatives and Feasibility Analysis as a part of Task III.

Construction Inspection

US 190: Collins Blvd Right Turn Lane @ Lee Road, Covington, LA: Constructing new turn lane, mill and overlay, embankment and base course, asphalt paving, subsurface drainage.

LA 1085 & LA 1077 Roundabout, Covington, LA: Construct new Roundabout, embankment and base course, asphalt paving and widening, subsurface drainage, Concrete paving.

LA 3228: US 190 to N. Causeway Blvd, Mandeville, LA: Widen to three lanes, embankment and base course, asphalt paving and widening, subsurface drainage, concrete pavement.

LA 59: Roundabout @ Sharp Road, Mandeville, LA: Construct new Roundabout, embankment & base course, asphalt paving and widening, subsurface drainage, concrete paving.



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Mike Phillips, PE, CFM <i>Senior Project Manager</i>
Project Assignment:
Hydrology & Hydraulics
Name of Firm with which associated:

Years' experience with this Firm:
21 years (21 total)
Education: Degree(s)/Year/Specialization:
BS / 2000 / Civil Engineering
Active registration: Year first registered/discipline:
2009 / Professional Engineer - Civil, LA 34600
Other experience and qualifications relevant to the proposed Project:
<p>Mike joined Neel-Schaffer in 2000 and has 21 years of experience as a Project Engineer/Manager for municipal and DOT on-call contracts involving drainage and flooding problems that require responsiveness, technical expertise, and public relations capability. He manages Neel-Schaffer's hydrology & hydraulics discipline, providing services for clients throughout Neel-Schaffer's nine-state footprint.</p> <p>Mike has extensive experience performing drainage/flood damage inspections after flood events. He routinely performs complex and large-scale hydrologic & hydraulic modeling and flood control infrastructure improvement designs for municipal and private clients. He has managed and performed on-call contracts consisting of complex analyses for DOTs in Alabama, Georgia, and Tennessee, and the US Army Corps of Engineers (Memphis, Little Rock, and Vicksburg Districts).</p> <p>Mike has performed numerous high-profile FEMA Flood Insurance Study Updates and Map Revisions for municipalities and private clients. He is very familiar with FEMA National Flood Insurance Program Regulations; and he is an ASFPM Certified Floodplain Manager.</p> <p>Mike is proficient in the latest hydrologic & hydraulic computer models, including GIS-based applications for hydraulics & hydrology (steady and unsteady flow). He has extensive experience collecting drainage inventory and inspection data using hand-held GPS data collectors with mobile ArcGIS applications. He has extensive experience in plans and details preparation using Microstation and AutoCAD and is very proficient in the use of ArcGIS software.</p>
RELATED EXPERIENCE
<p>Mandeville Lakefront Wetlands Restoration: Lead Hydraulic Engineer responsible for hydrologic and hydraulic (H&H) modeling of alternatives for shoreline closure and marsh creation immediately east of Sunset Point Park. Existing canals south of Galvez Street and east of Massena Street were analyzed and alternatives were developed to route canal flows through the proposed cypress wetlands at various storm levels. Extensive coordination was required with coastal</p>

TEC Professional Services Questionnaire

engineering sub consultant in the exchange of data used for both H&H and wave height numerical modeling. Multiple options for horizontal alignment and cross-sectional geometry of proposed channels through the wetlands were analyzed, as well as options to incorporate a public walking trail through the wetland area.

Brownsitch Road Widening Project, Slidell, LA: Project Engineer responsible for development and calibration of hydrologic and hydraulic models of the upper region of the W-14 Canal watershed that drains to the channel outfall alongside Brownsitch Road. Steady flow models were developed and used to analyze multiple scenarios for design of a subsurface box culvert to capture and convey watershed runoff into the W-14 Canal. Also, localized upstream drainage improvements were analyzed in an effort to reduce the size/cost of the proposed box culvert. The proposed roadway was proposed to be widened to 3-lane capacity and its profile raised to provide access for emergency vehicles during the 100-year storm event. Downstream impacts along the W-14 Canal were analyzed to assess downstream effects and several alternatives were presented to mitigate the increases in discharge.

South Central Drainage Master Plan (LA 1088 and LA 434 Corridor Studies): Project Engineer responsible for performing detailed watershed analyses and hydrologic models for Bayou Lacombe and Bayou Castine drainage basins north of I-12 (60 sq. mi. area). Conceptual engineering design was performed for seven proposed regional detention ponds, and utilization of an existing 60-acre borrow pit lake, to provide regional detention to accommodate future short-term (5-10 year) and long-term (10-20 year) development scenarios, while meeting Parish design requirements for future buildout within areas expected to experience significant growth. Detailed reports and cost estimates were prepared and incorporated into the Plan.

Tag Along Creek Drainage Analysis: Project Engineer responsible for performing an unsteady flow (EPA-SWMM 5) model of Tag Along Creek, a tributary to Bayou Lacombe, for the purpose of determining causes of residential and street flooding along Cloverland Drive and developing multiple alternatives to mitigate the flooding. Alternatives included dredging the existing 2.6-acre Sunrise Lake upstream of the Cloverland Acres Subdivision, constructing regional detention ponds north of N. Pontchartrain Drive, and constructing a bypass canal to divert flood flows to the north of the residential area. The diversion canal was determined to be the most viable option since it was the least expensive and offered 1.5-ft of reduction in the 10-year water levels in the existing creek channel and removed eleven homes from flooding in that event. Construction plans were developed in 2015 and the final model was updated according to the plans.

Cypress Creek and Black Creek Drainage Analyses, Jackson County, Biloxi, Mississippi: Project Hydraulics Engineer responsible for performing drainage analyses of Cypress Creek and Black Creek to determine cause(s) of flooding to homes and streets and provide solutions to alleviate flooding to the maximum extent practicable using the most cost-effective approach. An unsteady flow (EPA-SWMM 5) model of the creeks were developed to analyze existing conditions and multiple flood reduction alternatives. Detailed reports and cost estimates were prepared and presented to County Commissioners.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Colby Curtis, PE <i>Hydrology & Hydraulics</i>
Project Assignment:
<i>Hydrology and Hydraulics Engineer</i>
Name of Firm with which associated:
 NEEL-SCHAFER <i>Solutions you can build upon</i>
Years' experience with this Firm:
1 year (4 total)
Education: Degree(s)/Year/Specialization:
BS / 2020 / Civil Engineering
Active registration: Year first registered/discipline:
2024 / Professional Engineer - Civil, LA 49117
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Curtis joined Neel-Schaffer's New Orleans office in July 2023 and serves as an Engineer Intern in the Water Resources Group.</p> <p>Prior to joining Neel-Schaffer, he worked for three years at the United States Army Corps of Engineers in the Hydraulics Branch for both the Vicksburg and New Orleans District offices.</p> <p>RELATED EXPERIENCE</p> <p>St. Tammany Parish Grande Maison Subdivision Drainage: Addressing subdivision flooding issue in Mandeville, LA. Contributed writing Existing Data Memo, Modeling Report, prepared client presentation, reviewed HEC-RAS and PCSWMM model, and created plan sheets for proposed alternatives.</p> <p>East Baton Rouge Parish Port Hudson-Pride Road Bank Scour: Near the crossing of the Comite River, the Port Hudson-Pride Road was experiencing erosion, weakening bank stabilization along the north side of the road. To mitigate this, developed a HEC-RAS 2D model to analyze velocities in the bend in the existing condition as well as testing multiple river training structures in the model to provide the client with the most stable and cost-effective option. Calculated rip rap Gradations and design parameters for a potential bendway weir.</p> <p>New Orleans Department of Public Works DeSaix Bridge Replacement: Design of a replacement bridge in Bayou St. John, City of New Orleans. Obtained needed permitting to begin construction phase of project. Reviewed submittals and RFIs, checked monthly quantities usage, updated meeting notes, created invoice letters for contractors and subconsultants.</p> <p>St. Tammany Parish Pelican Park Water Well and Tank: The park experienced a pump failure at an existing well during the Aug 2023 drought. Built an InfoWater Pro Water System model to evaluate their current system as well as the benefits</p>

TEC Professional Services Questionnaire

of adding another well. The model also evaluated installing fire hydrants and increasing the system's pipe size.

Bossier City, LA Jimmie Davis Bridge: Internal technical review of the Drainage Calculations for the proposed ditches, culverts, inlets, and storm drains.

Murphy, TX Maxwell Creek No Rise Study: The city is adding two pedestrian bridges on either side of East FM 44 road at the crossing of Maxwell Creek as well as low crossing a half mile downstream. A hydraulic analysis was performed to document any increase in water surface elevation and mitigate this increase in the stream due to these added obstructions to meet the FEMA required No Rise condition.

Haltom City, TX Huddleston Street No Rise Study: The city is repaving Huddleston Street as well as adding curb and gutter, inlets and storm drains, and sidewalks on either side. The street crosses Stream WB4, which flows through a culvert. A hydrologic and hydraulic analysis was performed to document the changes in runoff and mitigate any increase in water surface elevation in the stream to meet the FEMA required No Rise condition.

New Orleans Sewerage and Water Board Saltwater Intrusion: The saltwater wedge moving up the Mississippi River posed a threat to the City of New Orleans' drinking water as it receives its supply from two intakes on both banks. Helped with preliminary design plans, permitting for the Algiers Intake, and with the initial pipe layout options for the Carrollton Intake in a tight timeframe to meet the Sewerage and Water Board's urgent needs.

City of New Orleans Green Infrastructure Toolkit: Performed an audit and made revisions to the City's standard details, specifications, toolkit calculator, and general guidance document. The details and specifications of focus for NSI's effort were porous concrete pavement, edge restraints, cleanouts, and pavers for sidewalks, alley ways, and parking lanes.

McComb, MS, Donna Heights Drainage: Addressing subdivision flooding issue in McComb, MS. Calculated hydrologic runoff and hydraulic routing. Built HEC-RAS model to reflect existing conditions and to propose alternative solutions to problem.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Greg Taylor, RPG Senior Environmental Geologist
Project Assignment:
Environmental & Permitting
Name of Firm with which associated:

Years' experience with this Firm:
16 years (23 total)
Education: Degree(s)/Year/Specialization:
BS / 1986 / Geology
Active registration: Year first registered/discipline:
1998 / Professional Geologist #861
Other experience and qualifications relevant to the proposed Project:
<p>Greg joined Neel-Schaffer in 2007 after transferring from Neel-Schaffer sister firm SoilTech Consultants. He has more than 30 years of experience and has conducted environmental assessments and remediations throughout Mississippi, Louisiana, Tennessee, Alabama, Arkansas, Florida, and Iowa.</p> <p>Accomplishing these tasks required interfacing with regulatory agencies, preparing work plans/cost estimates, supervising all phases of field work, interpreting laboratory analytical data, preparing/reviewing project reports and making recommendations for future site activities, as needed.</p> <p>Greg has been a key project manager in conducting environmental assessments and remediations at MDOT right-of-way acquisition sites and MDEQ, Federal LUST and state trust funds.</p>
RELATED EXPERIENCE
<p>US 90 Pearl River Bridges Environmental Assessment (NO. H.000284 & NO. H.000286), St. Tammany Parish, LA and Hancock County, MS: Work includes the preparation of an Environmental Assessment, as well as line and grade engineering for fixed and movable span bridge alternatives for the West Pearl and East Pearl Rivers and fixed span concepts for the three middle rivers. Alternatives include placement of new bridges on the existing alignments utilizing temporary bypass structures, as well as alternatives supporting upstream and downstream bridge concepts. For the East Pearl River both concrete and steel span structures were considered. Work also includes navigation studies and supporting environmental studies.</p>
<p>Soil and Groundwater Assessment, Gas Saver, Hattiesburg, MS, MGPTF Facility ID No. 7792: The Gas Saver is an inactive facility and the USTs were removed in the 1990s. In May 2019, soil borings drilled on public right-of-way adjacent to the Gas Saver encountered gasoline odors in soil. Mr. Taylor served as the project manager on behalf of the registered tank owner to conduct a subsurface investigation under the Mississippi Groundwater Protection Trust Fund. Delineation of</p>


TEC Professional Services Questionnaire

petroleum hydrocarbons should be complete in May 2020 along with recommendations for future site activities. Mr. Taylor's duties as Project Manager included preparing work plans and cost estimates, supervising field crews (soil borings and monitor wells), preparing assessment reports, and preparing project invoices.

Soil and Groundwater Assessment and Remediation, Quick Stop, Vicksburg, MS, MGPTF Facility ID No. 10261: The Quick Stop is an active UST facility that had historical high vapor readings in tank bed leak detection wells. A subsequent Preliminary Subsurface Investigation (May 2018) and a Phase II Contamination Investigation (February 2019) delineated the extent of petroleum hydrocarbon impacts and identified three monitor wells containing free phase gasoline. Remedial measures were implemented as periodic vacuum recovery of free phase gasoline, groundwater, and vapor from the wells containing free product. As of April 2020, only one well contained free product and at a thickness of a sheen. We anticipate the remedial activities will be complete in the Fall of 2020 with confirmatory sampling events conducted the first half of 2021. Mr. Taylor's duties as Project Manager included preparing work plans and cost estimates, supervising field crews (soil borings and monitor wells), preparing assessment reports, and preparing project invoices.

Soil and Groundwater Assessments, Active and Former Service Stations, Highway 11, Picayune, MS: The Pit Stop, Rick's Swimming Pool Service, Ladner Property, US Highway 11, Picayune, MS: Mr. Taylor served as the project manager for soil and groundwater assessments at two former service stations and one active service station along US Highway 11 in Picayune. The work was performed for MDOT under a Master Contract for Environmental Services in connection with MDOT plans to acquire additional right-of-way for improvements to US Highway 11. Mr. Taylor duties as Project Manager included preparing work plans and cost estimates, establishing work schedules, supervising field crews and sampling activities, decommissioning monitor wells in accordance with regulatory requirements, conducting meetings and presentations for MDOT and regulatory personnel and preparing assessment reports and recommendations. Project outcomes included two sites with no contamination and one site having contamination with further assessment and potential remediation conducted under Mississippi's Underground Storage Tank Trust Fund.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Barry Brupbacher <i>Senior Project Manager</i>
Project Assignment:
Environmental & Permitting
Name of Firm with which associated:

Years' experience with this Firm:
17 years (50 total)
Education: Degree(s)/Year/Specialization:
BA / 1972 / Political Science MS / 1990 / Urban Studies from the College of Urban and Public Affairs
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>Barry has over 45 years of diversified planning experience performing in both public and private sector consulting. His public sector work includes servicing as Executive Director of South-Central Planning and Development Commission and as Planning Director for the City of Slidell, LA. His broad range of experience includes project development and the preparation of Stage 0 and Stage 1 Environmental Assessments (NEPA documents) for flood protection, roadway, freight rail and transit projects, as well as passenger rail planning, transportation planning, roadway alignment studies, zoning, and land use planning.</p> <p>Barry completed NHI course No. 142005, <i>NEPA and Transportation Decision Making</i> and NTI Course, <i>Managing the Environmental Process</i>. As part of his work on NEPA Environmental Assessments and Environmental Impact Statement, he is responsible for related public Involvement.</p> <p>RELATED EXPERIENCE</p> <p>Mandeville Lakefront Wetlands Restoration Project, Mandeville, LA: Planning manager through permitting. Situated between two "hard" shorelines, a mature cypress forest is rapidly eroding. The Mandeville Lakefront Wetlands Restoration Project will prevent further degradation of the existing wetlands and restore a functioning wetlands ecosystem within the area. Storm water from the Galvez and Massena outfalls will be directed through created wetlands, improving water quality within Lake Pontchartrain.</p> <p>St. Tammany Parish Sustainable Growth Pilot Study: Hydrology modeling of a 2,900-acre area bounded by I-12 on the north, LA 59 on the east, Sharp Road on the south and Causeway / US 190 on the west. The work also includes code review and the development of code revisions focused on wetlands preservation. It is anticipated that one alternative hydrology model will incorporate the wetlands preservation code revision. Project Planner.</p>

TEC Professional Services Questionnaire

US 90 Pearl River Bridges Environmental Assessment (H.000284 & NO. H.000286), St. Tammany Parish, LA and Hancock County, MS: Work includes the preparation of an Environmental Assessment, as well as line and grade engineering for fixed and movable span bridge alternatives for the West Pearl and East Pearl Rivers and fixed span concepts for the three middle rivers. Alternatives include placement of new bridges on the existing alignments utilizing temporary bypass structures, as well as alternatives supporting upstream and downstream bridge concepts. For the East Pearl River both concrete and steel span structures were considered. Work also includes public involvement, navigation studies and supporting environmental studies. Project Manager.

St. Tammany Parish Resiliency Program (Focus Area Master Plans), (Contract No. 13-03), St. Tammany Parish, LA: Deliverables include short, medium, and 20-year demographic forecast, projections of developable area within RPC traffic analysis zones considering potential wetlands, floodplains and other environmental constraints, and recommendations for transportation utility and drainage infrastructure. Project Manager

St. Tammany Parish Coastal Protection Master Plan, St. Tammany Parish, LA: Neel-Schaffer tasks include: updating the GEC 2012 Northshore Hurricane and Flood Protection Study with newly completed and current proposed projects, gather information on multiple projects by different agencies and jurisdictions. Perform a gap analysis to identify new projects, and a benefit/cost analysis of proposed projects will be completed to determine project priority and viability. NSI is currently performing a Conceptual project Alternatives and Feasibility Analysis as a part of Task III.

South Central Area Drainage Master Plan, St. Tammany Parish, Louisiana, LA: Project includes base hydrology model for Bayou Lacombe and Bayou Cain drainage basins north of I-12 (60 sq. mi. area); conceptual engineering for detention ponds to support near term (5-10 year) development scenario. Project also provides analysis of potential environment constraints using GIS based habitat models for wetlands and species of concern. Project Manager

Mandeville Bypass, St. Tammany Parish, LA: The Mandeville Bypass will provide a new 3-mile median section roadway with bike path connecting LA 1088 near its interchange with I-12 and US 190 near Fontainebleau Park. Mr. Brupbacher led the environmental planning for the project which includes analysis of potential wetlands and potential impacts to a Threatened and Endangered species, the Red Cockaded Woodpecker as well as the public involvement, developing traffic forecasts, providing traffic analysis and providing design services for concept routes.

Southcity Parkway Extension: Phase 1 - Robley Drive to Kaliste Saloom Road, Lafayette Parish, LA: Public Involvement and NEPA studies supporting Environmental Assessment developed in conformance with USCG guidance, engineering line and grade and technical environmental studies supporting the design and construction of Southcity Parkway extension from current terminus west of the Vermillion River to Kaliste Saloom Road including a crossing of the Vermillion River. Project Manager.

Route LA 182 (North University Avenue) Widening Environmental Assessment: I-10 to West Pont des Mouton Road (LCG No. 500-10-034, State Project No. H.009335), Lafayette Parish, LA: Project supports the widening of LA 182 to four lane capacity. The Study / EA included Public Involvement, traffic studies, environmental screening and alternative concepts for widening the 2-mile route. Project Manager.

South Central Area Drainage Master Plan, St. Tammany Parish, Louisiana, LA: Project includes base hydrology model for Bayou Lacombe and Bayou Cain drainage basins north of I-12 (60 sq. mi. area); conceptual engineering for detention ponds to support near term (5-10 year) development scenario. Project also provides analysis of potential environment constraints using GIS based habitat models for wetlands and species of concern. Project Manager.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Emily Hudson <i>Administrative Services Manager</i>
Project Assignment:
Deputy Grant Manager
Name of Firm with which associated:

Years' experience with this Firm:
15 years (18 total)
Education: Degree(s)/Year/Specialization:
BA / 2005 / Photography
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>Emily joined Neel-Schaffer in 2009. Her project management responsibilities include preparation of invoices and schedules, document control and other duties. Her position also includes administrative responsibilities, GIS applications, and IT technical support. While at NSI, she has been involved with the public outreach stage in developing Metropolitan Transportation Plans and has created land-use and transportation maps based on information gathered in the public meetings. Her diverse skills make her an asset to our project team.</p> <p>RELEVANT EXPERIENCE</p> <p>Port of Gulfport Expansion, Gulfport, MS: Section 3 Coordinator. Responsible for preparing and submitting Neel-Schaffer's monthly status reports, submitting subconsultants' monthly status reports, ensuring Neel-Schaffer's compliance with Section 3, ensuring subconsultant compliance with Section 3, including conducting subconsultant monitoring, securing Section 3 documentation from new subs (project plan, business certification, and project roster) and explaining Section 3 to ensure future compliance, posting Section 3 covered job openings on WINGS, and advertising as appropriate when subconsultant needs arise.</p> <p>Lower Ninth Ward Streetscape, New Orleans, LA: Responsibilities include document control, Primavera P6 scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration for streetscape design.</p> <p>The Groves at Pelican Park, St. Tammany Parish, LA: Responsibilities include document control, Primavera P6 scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration for conversion of existing ball field to a multi-use facility.</p> <p>Recovery Roads Program, Lower Ninth Ward Northeast Group A & B, New Orleans, LA: Responsibilities include document control, Primavera P6 scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration for design of streets,</p>

TEC Professional Services Questionnaire

sidewalks, ADA ramps, water / sanitary sewer / drainage systems for the Sewerage and Water Board of New Orleans.

Safe Haven Blue Green Campus Master Plan, St. Tammany Parish, LA: Responsibilities include document control, scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration for assessment of the existing site.

DeSaix Blvd Bridge Replacement, New Orleans, LA: Responsibilities include document control, Primavera P6 scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration for the bridge replacement project.

The Port of Gulfport Restoration Program, Gulfport, MS: Work is issued in task orders in support of the restoration of public infrastructure and publicly owned facilities damaged or destroyed by Hurricane Katrina. Responsibilities include document control, Primavera P6 scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration.

CPRA Calcasieu-Sabine Large-Scale Marsh & Hydrologic Restoration Project, Cameron Parish, LA: Handles billing for design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning, including project E&D work breakdown structure and cost estimates, optimization planning and initial optimization tasks, and other project planning tasks including supporting CPRA's RESTORE grant amendment requests.



TEC Professional Services Questionnaire

- L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.**

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>St. Tammany Parish Coastal Master Plan (PO-167) <i>St. Tammany Parish, LA</i></p> <p>St. Tammany Parish Laura B. Gatlin, Project Manager lcbeach@stpgov.org 985-898-2552</p>	<p>In 2018, St. Tammany Parish took an important step toward resiliency developing their first comprehensive flood protection plan. Planning was a collaborative effort between St. Tammany Parish Government and the St. Tammany Levee Board, made possible with \$2 million in funding from the Coastal Protection and Restoration Authority through an intergovernmental agreement. To assist with this effort, NSI was selected as the prime consultant to develop the master plan. Contracted Tasks include:</p> <p>Task 1 Collection and Organization of Existing Flood Control Assets and Project Data: Work includes compilation of a GIS data base documenting all major flood control assets, (completed, current, and future projects). The GIS database that was developed also provides documentation of streams, hydraulic units repetitive loss data and other features.</p> <p>Task II Flood Control Assets and Gap Analysis: Work includes performing a gap analysis to identify areas are vulnerable to tidal surge, flooding and wetland loss/reduction; review current models to determine data gaps; Documentation of historical losses from structure flooding, infrastructure damage, and wetland loss in the gap areas. Review and evaluation of current coastal storm surge and wave models (ADCIRC, and WHAFIS) to determine data gaps, including but not limited to geographical area, data, cross-sections, and model runs.</p> <p>Task III Conceptual & Preliminary Engineering on Project Alternatives (projected to be contracted for this phase): This task is part of Phase III efforts and included a desktop assessment of the proposed flood protection segments to identify feasibility level issues within the project vicinity. The Project Alternative Development considered the number of structures protected, the costs of land acquisition and construction, and negative environmental impacts. Additionally, the Project Team considered multiple levels of protection for each area reviewed. These levels include the 25-year, 50-year, and 100-year levels of protection. The levels are associated with the chance of exceedance for the 4 percent, 2 percent, and 1 percent respectively, for coastal storm surge in any given year. Projects that were engineered included levees, pump stations, floodgates, shoreline protection features, marsh and beach restoration and coastal breakwaters.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$2,000,000	\$2,000,000

TEC Professional Services Questionnaire

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Slidell Ring Levee: Slidell East Segments (PO-184) Slidell, LA</p> <p>Louisiana Coastal Protection and Restoration Authority Ignacio Harrouch, Project Manager Ignacio.harrouch@la.gov 225-342-7308</p>	<p>The Slidell Ring Levee: East Segments Project, in St. Tammany Parish, Louisiana, includes levee segments that provide flood protection and storm surge risk reduction around for the eastern side of the City of Slidell.</p> <p>The project is part of the CPRA's 2017 <i>Louisiana's Comprehensive Master Plan for a Sustainable Coast</i> and evaluates alternative levee alignments to close gaps in the existing Slidell Ring Levee System and complete this storm surge risk reduction system. The Slidell Hurricane Protection system protects thousands of houses and businesses from a 100-year storm event. Many of these structures have been previously flooded and are considered repetitive losses by FEMA.</p> <p>Conceptual alternative alignments were developed with consideration of cost-effectiveness while achieving project design criteria and goals while utilizing sound engineering principles. The analysis included analytical, empirical and/or limited modeling using the existing data and understanding of the project alternatives developed. Eight conceptual level alternatives were evaluated with respect to landownership, utility conflicts, and right of way requirements for the possible alignments to minimize potential impacts while still meeting the project goals and objectives. A Basis of Design Report was developed to establish comprehensive design criteria for the levees, gate structures, and pumping station complexes as part of this project. A review of compiled data sets and guidance documents was also prepared.</p> <p>As significant component of this study, biologists conducted literature reviews to gain insight on existing conditions and the species known to occur in the Study Area. Data was obtained from various federal and state agency websites such as the US Fish and Wildlife Services, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, US Dept. of Agriculture Natural Resources Conservation Service, LA Dept. of Wildlife and Fisheries, and the Gulf of Mexico Fisheries Management Council.</p> <p>The environmental assessment also included habitat classifications; fish and wildlife resources; threatened and endangered species; and other natural and archeological sites in the area. Wetland areas along with various waters of the US were identified for Section 404 permitting requirements along with potential mitigation requirements associated with wetland alterations. Federally protected wildlife species were identified and recommendations for avoidance or minimization of damage were developed to provide justification for alternative alignments. Multiple site visits were taken to corroborate literature review.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$287,000	\$287,000

TEC Professional Services Questionnaire

PROJECT NO. 3

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Mandeville Lakefront Wetlands Restoration Mandeville, LA</p> <p>City of Mandeville Public Works Department Keith LaGrange, Director klagrange@cityofmandeville.com 985-624-3169</p>	<p>Mandeville Lakefront Wetlands project is a whole ecosystem restoration project where multiple habitat types are protected, restored, and created. The project site is situated between two "hard" shorelines, south of a mature cypress forest that is rapidly eroding. This project prevents further degradation of the existing wetlands and restores a functioning ecosystem.</p> <p>A coastal protection berm closure mitigates erosion from wave action from Lake Pontchartrain while also providing functionality by connecting the two "hard" shorelines with a multi-use recreational path. The berm shoreline protection feature provides a reduction of water surface elevations for the 50-, 100-, and 500-yr event through reduction in wave heights and addresses future erosion by significantly reducing the open water fetch from Lake Pontchartrain at the project site.</p> <p>In addition, the project also provides flood protection through the dredging of a diversion channel which will receive the urban runoff from the Galvez and Massena Channel. This diversion channel will direct the waters through the existing intertidal marsh and newly created marsh area. This rerouting of stormwaters through the wetlands allows suspended sediment to settle within the lagoon and marsh areas and will mitigate the effects of saltwater intrusion on the existing wetlands. Mott MacDonald was a subconsultant and provided coastal modeling and support services for coastal engineering.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$4,000,000	\$350,000

PROJECT NO. 4

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Calcasieu-Sabine Large-Scale Marsh and Hydrologic Restoration Project Cameron Parish, LA</p> <p>Louisiana Coastal and Protection Restoration Authority Katie Freer, Project Manager Katie.Freer@la.gov 225-342-4635</p>	<p>The State of Louisiana's CPRA selected Neel-Schaffer to provide program management services and develop a project design and design integration services to support the Cameron-Creole Watershed (CCW). The CCW is a marsh system located in southwest Louisiana and is experiencing extensive loss of marsh habitat over the past century. Flood stress from elevated water levels over the marsh is the dominant factor in the marsh loss, although historically saltwater intrusion has played a significant role in marsh degradation.</p> <p>The purpose of the project is to develop an understanding of the hydraulics of the system; evaluate options to improve the ability to manage the water level in the CCW; and reduce marsh and land loss within the CCW. The project features proposed to reduce flood stress include a lake-rim drainage structures that enable the marshes to drain into Calcasieu Lake more frequently and a large-scale marsh creation and nourishment. These features will benefit the entire 65,000-acre Cameron Creole</p>	

TEC Professional Services Questionnaire

	Watershed, which is the subregion of the Calcasieu-Sabine Basin where the original project benefits were predicted to be most concentrated.	
Completion Date <i>(Actual or estimated):</i>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
April 2022	\$261,000,000	\$760,000

PROJECT NO. 5	
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
<p>Slidell Breakwater and Living Shoreline Project <i>Slidell, LA</i></p> <p>St. Tammany Parish Government Randy Pausina 985-898-2529 rbpausina@stpgov.org</p>	<p>The Slidell Breakwaters and Living Shorelines Feasibility Study, for St. Tammany Parish, is a study to determine the feasibility of mitigating the shoreline impacts from the wave environment found along the Lake Pontchartrain shoreline south of the city of Slidell, Louisiana. The project shoreline, spanning roughly six miles, is currently experiencing adverse impacts due to direct, unattenuated, high-energy wave actions. As a result, the shoreline is subject to open wave action, excessive shoreline erosion, roadway overtopping, and degradation of littoral and vegetative environments. Neel Schaffer, Inc. and its team was selected by St. Tammany Parish to provide the engineering services associated with the Slidell Breakwaters and Living Shorelines Feasibility Study.</p> <p>Neel-Schaffer and its team collected and evaluated existing data such as water levels, subsidence and sea level rise, and performed necessary collection of new data such as bathymetric and topographic data. Numerical modeling of coastal processes was then performed to understand the wind and wave climate during normal and extreme conditions at the project site aiding in the development of conceptual alternatives. Neel-Schaffer developed a set of potential solutions to meet the project goals, developed feasible alternatives and associated cost estimates, and provide recommendations on a preferred solution for overall sustainability of the project area.</p> <p>Through the reduction of storm-induced, high-energy waves reaching the project site, the segmented, rubble-mounded breakwaters would address the real and ongoing negative consequences to the immediate shoreline and submerged-aquatic vegetative (SAV) habitat found within the study area. Neel-Schaffer recognized, through a phased construction approach, that the shoreline protection benefits would gain with each phase; however, the environmental benefits would develop immediately following construction of the living shoreline phases. The two living shoreline phases would install stone riprap along the footprint</p>

TEC Professional Services Questionnaire

	<p>of the final structures but at a submerged elevation in Phase 1 and one foot above normal water level for Phase 2. These two construction phases provide a calmer water environment to restore the natural sediment transport through the area and enhance the conditions needed for subaquatic vegetation to thrive. These SAV benefits are critical foraging and breeding habitat for multiple endangered species found within the project area.</p> <p>Neel-Schaffer also recognized the engineering benefits of the phased construction approach. By placing the stone material within the footprint of the final structure, the structural settlement and soil strengths are improved over time allowing the successive phases to have minimal elevation changes. This process also provides the opportunity to maximize construction funding over multiple funding cycles and sources. The overall project recommendations provide coastal resilience to the greater Slidell community by addressing the ongoing erosion along the shoreline while also providing additional critically needed fisheries habitat.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2025 (Estimated)	\$9,000,000	\$350,000 (Fee)

PROJECT NO. 6

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
<p>Coastal Processes Study for Lillian Park Baldwin County, AL</p> <p>Baldwin County Highway Department Seth Peterson, Project Manager 251-970-4055 speterson@baldwincountyal.gov</p>	<p>Neel-Schaffer studied the coastal process occurring at Lillian Park along Perdido Bay in Alabama. Lillian Park Beach and boat launch were constructed to facilitate greater public access to and enjoyment of the natural resources of the Perdido River watershed and the Gulf of Mexico. Erosion of adjacent bay shoreline due to wave energy, loss and reduction of the nearshore habitat and degradation of the littoral habitat are occurring at this location. Additionally, sedimentation is occurring in the boat ramp, hindering water access.</p> <p>The Coastal Processes Study for the Lillian Park Beach Habitat and Shoreline Protection Project evaluated the existing conditions and associated coastal processes found at Lillian Park. The focus of the study and alternatives was to provide a safe and viable park facility, minimize the overall operations and maintenance of the park facility, and provide suitable public access for boats, fisherman, and enthusiasts to the natural resource. The project work tasks included the collection and evaluation of existing data, analysis of coastal processes, and development of conceptual alternatives to meet the project goals.</p> <p>The existing conditions related to wave action, sediment deposition, erosion, and degradation of littoral environments were studied, and the Neel-Schaffer Project Team developed and evaluated Conceptual alternative solutions. The study concluded with conceptual level alternative solutions as well as estimated capital costs comparisons for the various alternatives. The Coastal Process Study analysis provided a basis to develop alternatives that will provide</p>

TEC Professional Services Questionnaire

	<p>benefits to the functions and maintenance operations at the existing boat launch and improvements to the natural habitat found at Lillian Park.</p> <p>NSI was recently selected by Baldwin County to complete the detailed engineering and design phase of the recommended project alternative.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
September 2021	\$1,200,000	\$313,000

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>West Hancock County Nearshore Habitat Restoration Project Hancock County, MS</p> <p>MDEQ Tina Nations, PhD 601-961-5051 TNations@mdeq.ms.gov</p>	<p>Neel-Schaffer is currently conducting design of the West Hancock County Nearshore Habitat Restoration Project for the Mississippi Department of Environmental Quality (MDEQ). This project, located offshore of Buccaneer State Park near Waveland, MS, is funded by the National Fish and Wildlife Foundation (NFWF) Gulf Environmental Benefit Fund (GEBF) and was approved in 2013 as one of several projects intended to compensate for natural resources damages that occurred as a result of the 2010 Deepwater Horizon oil spill. The project aims to re-establish coastal habitats to increase productivity of fish and benthic organisms including red and black drum, spotted seatrout, and oysters. This is being accomplished by designing submerged artificial reefs using rock substrates and manufactured reef products to create sub-tidal habitat enhancements for benthic organisms and fish. The overall outcome of this project is to develop plans and acquire permits for the eventual implementation of artificial reefs which would re-establish these important coastal habitats. The NSI team has conducted bathymetric survey, performed a geotechnical investigation, analyzed habitat requirements, and selected cultch materials and manufactured reef products. A preliminary design has been submitted and is currently being refined. Design is scheduled for completion in Fall of 2024 with construction in early 2025.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2025 (Estimated)	\$20,000,000	\$900,000 (Fee)

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Jackson County Coastal Dredging Project</p>	<p>In 2017 Hurricane Nate deposited debris throughout Jackson County Navigable Waterways. Storm surge and runoff caused by Hurricane Nate deposited sediments in five channels including Graveline Bayou Waterway, Vaughndale</p>	

TEC Professional Services Questionnaire

<i>Jackson County, MS</i> Jackson County Board of Supervisors Matthew Hosey, Project Manager 228-769-3088 matthew_hosey@co.jackson.ms.us	Bayou Waterway, Sandalwood Bayou Waterway, Cedar Point Bayou Waterway, and Bayou Chicot Waterway. In response to the disaster damages as a result of Hurricane Nate (FEMA EM-3393), NSI was selected by the Jackson County Board of Supervisors to provide professional civil engineering and monitoring services for the dredging, debris and sediment removal of approximately 12,000 linear feet of navigable channels. The project also includes design services necessary to restore navigation aids to acceptable operations.	
Completion Date <i>(Actual or estimated):</i>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021	\$1,500,000	\$168,500

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Mid-Barataria Sediment Diversion</p> <p><i>Plaquemines Parish, LA</i></p> <p>Coastal Protection and Restoration Authority Glenn Ledet (225) 400-4012 Glenn.Ledet@la.gov</p>	<p>The Mid-Barataria Sediment Diversion is a large-scale sediment diversion project that aims to deliver up to 75,000 cfs of sediment-laden water from the Mississippi River into the Barataria Basin. The project is one of the largest civil works and environmental restoration projects ever designed and constructed in the U.S. When fully implemented, it is expected to create up to 30,000 acres of new wetlands.</p> <p>The project consists of multiple components including a headworks gate structure at the Mississippi River Levee, new highway and railroad bridges, a conveyance channel, guide levees, and inverted siphon to maintain existing drainage patterns in addition to other ancillary features.</p> <p>NSI is serving as Deputy Project Manager for construction administration (CA) and quality assurance (QA) activities. This role is a critical component to ensure the project's successful execution and adherence to the highest standards of safety and quality. A significant component of NSI's involvement is overseeing the construction of a new railroad bridge; however, we are also involved in oversight of multiple other project components. CA activities include project site safety, quality management, project controls, invoicing and payment, and administration of contract claims and change orders. QA activities include planning, inspections, and testing.</p> <p>Through meticulous construction administration and rigorous quality assurance protocols, we are committed to contributing to the success of the Mid-Barataria Sediment Diversion Project. Our efforts will help restore vital coastal ecosystems, protect local communities, and support sustainable economic growth in the region.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

TEC Professional Services Questionnaire

2029 (est.)	\$1,800,000,000	\$1,800,000,000
-------------	-----------------	-----------------

PROJECT NO. 10

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>University Lakes Flood Risk Reduction Design Services <i>Baton Rouge, LA</i></p> <p>Brian Lennie, Stantec Project Manager 262 643-9061 Brian.Lennie@stantec.com</p>	<p>The University Lakes connect Louisiana State University with the surrounding neighborhoods, act as a gateway to the State's Flagship University, and have served as an iconic feature for the community for nearly a century. They act as a symbol of the city and state for both those who are local, as well as the tens of thousands of I-10 drivers crossing the lakes each day. Located in the heart of Baton Rouge, the University Lakes are surrounded by local roads, private residences, and university facilities. This urban environment provides construction challenges such as narrow access locations, limited storage locations, and significant pedestrian and vehicle interactions with construction equipment.</p> <p>The University Lakes Restoration project goal is to provide flood risk reduction for the surrounding community and improve water quality within the University Lakes System. Neel-Schaffer is a subconsultant to Stantec with the role of providing hydrology analysis, dredging design, and the lake shoreline restoration.</p> <p>Additionally, the project will utilize an alternative delivery method, Construction Management at Risk to expedite the project's schedule. With years of experience in alternative delivery methods, Neel-Schaffer will bridge between the Owner and the contractor for the Construction Management and Implementation Phase of the project.</p> <p>NSI is also tasked with the design for reuse of the dredged material with consideration for the natural habitats for fisheries and migratory birds that are currently utilizing the University Lakes system. In addition to dredge design, the project will provide an opportunity to improve existing recreational facilities for pedestrians and cyclists around the lakes.</p> <p>With attention to both the ecosystem and human scale, the Lakes can continue to be a point of pride for the University—and when complete will provide a marked improvement to the quality of life for all of Baton Rouge.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2023	\$30,000,000	\$330,000

TEC Professional Services Questionnaire

M. List all prior and / or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

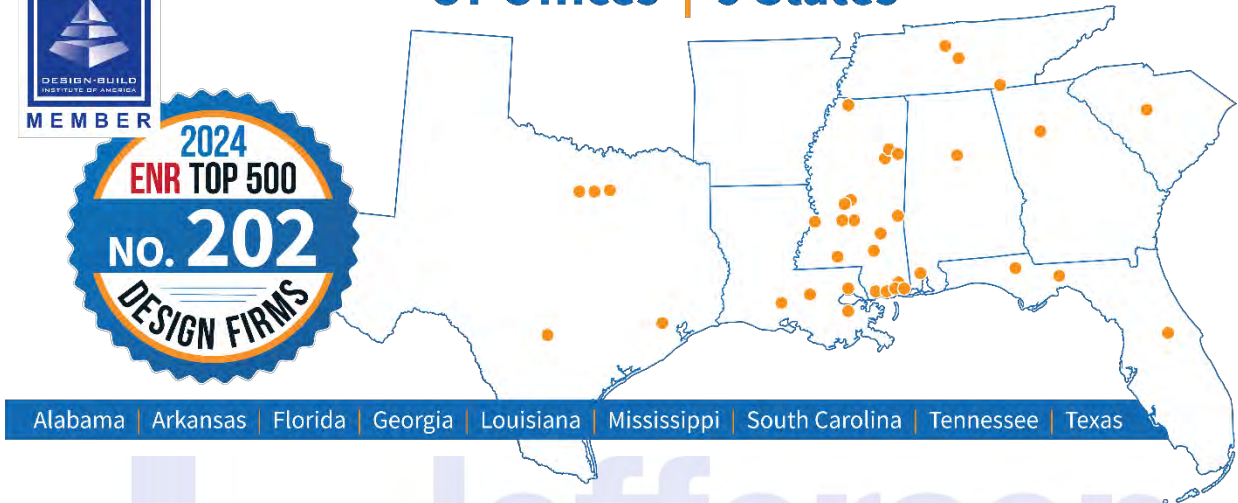
Parties:		Status / Result of Case:
Plaintiff:	Defendant:	
1.		
2.		
3.		
4.		

TEC Professional Services Questionnaire

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.



37 Offices | 9 States



Neel-Schaffer is a multi-disciplined engineering and planning firm that was founded in 1983 and today is one of the largest private, employee-owned firms in the South, with nearly 500 employees working out of 37 offices across nine states. A multi-disciplined engineering and planning firm, it encompasses a group of specialized companies with offices in Louisiana, Mississippi, Alabama, Florida, Georgia, Kentucky, Tennessee, and Texas. We provide engineering, emergency management, landscape architecture, environmental, surveying, geotechnical, strategic planning, and community development services to clients throughout the Southeast and Southwest.

Engineering News-Record has listed Neel-Schaffer among the Top 500 Design Firms in the United States annually since 1994, ranking 202 in 2024. Our corporate structure emphasizes local service, with a regional touch. It allows our engineers, geologists, biologists, technicians, and project managers to maintain deeply local connections with clients in the many communities we serve, while having the resources of a much larger regional firm at their disposal. This allows us to provide a full-service approach to program development, design, and construction management for your project.

COASTAL SCIENCE & ENGINEERING

Neel-Schaffer employs a highly qualified team of professionals skilled in a variety of coastal science and engineering disciplines. This multi-disciplinary approach allows for a more holistic blend of experience and services to meet every client's coastal needs.

A local presence ensures our work is informed and coordinated with the issues, governance, and opportunities unique to that region. As a result, we have been able to form effective partnerships with government agencies, non-profits, and other private companies, administering coastal initiatives to meet their needs and those of coastal communities.

We continue to seek opportunities to develop innovative partnerships, and to effectively develop forward-thinking ideas that help create and maintain a resilient Gulf Coast.

COASTAL SERVICES

Coastal Engineering, Science, and Planning:

- Modeling—Hydrodynamic, Wave, Sediment Transport & Morphology
- Coastal Master Plan Development

TEC Professional Services Questionnaire

- Permitting
- Coastal Wetland Science
- Coastal Program Management
- Construction Administration and Inspection

Coastal Engineering Design:

- Shoreline Restoration Design
- Flood Protection Design (Levees, Pump Stations, etc.)
- Diversion and Hydrologic Restoration Design
- Marsh Creation Design
- Dredged Fill Analysis and Placement

PROFESSIONAL TRAINING AND EXPERIENCE

Neel-Schaffer provides coastal and water resources engineers that are fully capable of conducting the most complex coastal engineering and design for coastal structures and hydrologic and hydraulic analyses. Our engineers utilize state-of-the-art modeling and GIS applications in all phases of water resources planning and engineering, including hydrodynamic, hydrologic, hydraulic, wave mechanics, and water quality analysis. Neel-Schaffer software competency includes Delft3D Flow, Delft3D-Wave (SWAN), HEC-RAS, HEC-2, WSPRO, HY-8, RiverCAD, HEC-6T, CulvertMaster, EPA-SWMM, MIKE URBAN, HEC-1, HEC-HMS, StormCAD, PondPack, FlowMaster, HydraFlow, LADOTD HYDRO6020, AutoCAD Storm & Sanitary Analysis, and custom GIS-based applications for hydraulics and hydrology. Typical coastal hydrodynamic and hydraulic projects include:

- Sediment Transport and Morphology Analyses
- Shoreline Stabilization, Protection and Restoration
- Coastal Restoration and Protection Master Planning
- Marsh Creation
- Coastal Hard Structure Engineering (Breakwater, Groins)
- Flood Damage Reduction Structures
- Streambank Erosion Protection
- Marine Structures
- Flood Insurance Studies (FIS)
- Hydrodynamic/Hydraulic Modeling
- Biological and Environmental Assessments of Wetlands
- Dredging

KEY PERSONNEL

Dain Gillen, PE joined Neel-Schaffer in 2023 as a Senior Project Manager with 20 years of experience in the field of Water Resources and Coastal Engineering. Prior to joining Neel-Schaffer, Mr. Gillen served as Engineer Manager for a staff of 10 engineers and technicians for the Louisiana Coastal Protection and Restoration Authority (CPRA). In this role, he was responsible for oversight of project planning, development, design, and construction of large-scale ecosystem restoration and flood risk reduction projects. He also has previous experience with many civil works and flood control projects during design and construction. Mr. Gillen has worked for state and Federal agencies and private engineering firms, giving him a diverse background and ability to communicate effectively with multiple stakeholders.

Nick Ferlito, Jr., PE, PTOE joined Neel-Schaffer in 1996. He is a Senior Vice President and serves as Louisiana Area Manager, overseeing all responsibilities for the state. An ITE-certified Professional Traffic Operations Engineer, he has more than 30 years of experience and manages a wide range of traffic and transportation projects. He has served as a project manager for many intersection/corridor signal timing studies, signal design projects, safety studies and other traffic engineering related projects for public and private projects. Mr. Ferlito is experienced with numerous traffic

TEC Professional Services Questionnaire

engineering software packages, including HCS, CORSIM, SYNCHRO, Tru-Traffic (TSPPDraft), and SIDRA. He also completed the Naztec TS1/TS2 Controller 2-Day training course. He has also completed the NEPA and Transportation Decision Making course (2004), the Highway Safety Manual Workshop (2011) as well as LADOTD's Traffic Engineering Process and Report (TEPR) training.

Don Lancaster, PE manages Neel-Schaffer's Mandeville office and has over 40 years of experience in civil engineering and project management. He is the Civil Design Manager for Neel-Schaffer's Louisiana offices and serves as the manager for Neel-Schaffer's current work as part of the \$570 million Port of Gulfport (MS) Restoration project. The design is completed and construction on new port facilities will be completed in September 2018. Prior to joining Neel-Schaffer in 2003, Mr. Lancaster was Design Manager for a national firm overseeing the Sewerage and Water Board of New Orleans' Sewer System Evaluation and Rehabilitation Program (SSERP) and the Sewerage and Water Board's (S&WB) Sewer System Rehabilitation for Hurricane Katrina Emergency Recovery Efforts. Soon after joining Neel-Schaffer, he managed the design and construction of over \$55 million of roadway, water, sewer and gas system repairs to Bay St. Louis (MS) infrastructure. This effort was funded by FEMA and is intended to restore the City infrastructure that was severely damaged in Hurricane Katrina.

Amanda Phillips, PE is a licensed civil engineer with over 20 years of coastal design and construction experience. She has designed and constructed numerous coastal projects throughout southern Louisiana. These projects include breakwater design, marsh creation projects, island restoration, inland waterways dredging, shoreline protection, levee construction and many other heavy civil construction project types. In addition to design work, Mrs. Phillips has spent more than 10 years working and learning the world of marine construction. This fast paced, real-world experience has provided her with successes and failures of inland waterway and heavy civil construction critical to furthering her understanding coastal engineering and construction challenges. This invaluable knowledge includes equipment usage and techniques, safety and hazard understanding, sediment resource and material management. Her background in biological engineering coupled with her years of construction experience, has provided a unique lens with which to view coastal projects. She is currently pursuing a Master's in Coastal Engineering and Sciences at the University of New Orleans.

Leah Selcer, PE has ten years of engineering experience. She has a broad range of project engineering and management experience, providing design, planning and budgeting, permits, plans and specifications, design calculations, reports and presentations for a variety of projects. Ms. Selcer has assisted in the engineering and design of several complex civil, water resources, and coastal projects for coastal ports, parish governments, the LaDOTD and the CPRA. Her experience includes hydrologic and hydraulic calculations and studies using water modeling software, USACE HEC Software (HEC-RAS and HEC-HMS), LADOTD HYDR 2009 (All programs), CulvertMaster, HydroCAD, HYDROWIN, and Civil3D Hydraulic Analysis Programs.

SIZE OF FIRM

Neel-Schaffer has over 600 professional and technical employees, including planners and engineers with specialization in roadway and bridge design. We have 47 staff members located in Louisiana offering the services of 24 registered Professional Engineers.

CAPACITY FOR TIMELY COMPLETION

Neel-Schaffer has a current monthly billing capacity in excess of \$5 million. As the following chart indicates, we can easily assimilate additional projects into our current workload.

PAST PERFORMANCE

In its performance rating of Neel-Schaffer, the US Army Corps of Engineers, Vicksburg District, concluded that we "consistently produced well organized, well-engineered, professional work." The rating also noted "their engineers and managers were a pleasure to work with. Their spirit of cooperation was a major asset to the contract. They not only met the specifics of their work orders but also were anxious to meet any reasonable desires of the Government

TEC Professional Services Questionnaire

representatives. This was especially noteworthy in maintaining milestone dates when government-furnished data was not available when specified and by beating several of their submission dates. Neel-Schaffer, Inc. is highly recommended for future work..."

In addition, NSI has been selected repeatedly by LADOTD for on-going retainer contracts over the past 12 years. We think this is an excellent indication of our performance ability on public contracts and our reputation as a consultant of choice by public agencies. We are currently working under three active retainer contracts with LADOTD. We also hold a retainer contract with the City of New Orleans Department of Public Works, The Sewerage and Water Board of New Orleans, the CPRA to provide Engineering Services for Coastal Restoration Projects, the Lafayette MPO to provide Roundabout Feasibility Studies, and Ascension Parish in support of their MOVE Ascension transportation program.

To continue improving our services, Neel-Schaffer recently surveyed our clients. We received over 100 responses to our survey involving mostly public clients and were pleased to find that the vast majority are satisfied with our commitment and performance and will more than likely retain our company again. Below is a summary:

- 92% are "likely" or "very likely" to recommend Neel-Schaffer
- 94% rated Neel-Schaffer as "easy" or "very easy" to do business with
- 95% are "satisfied" or "very satisfied" that Neel-Schaffer's deliverables meet your needs
- 96% are "satisfied" or "very satisfied" with Neel-Schaffer's project management capabilities
- 91% rated the overall value you receive from Neel-Schaffer as "good" or "very good"

LOCATION OF PRINCIPLE OFFICE

Our New Orleans LA office, located at 1340 Poydras Street, Suite 1950 will undertake the design for required improvements with support provided by other Neel-Schaffer offices as required.

ANALYSIS OF WORK RESULTING IN LITIGATION

Neel-Schaffer has not previously worked for Jefferson Parish; and we have never entered litigation with Jefferson Parish or other public sector clients.

PRIOR SUCCESSFUL COMPLETION OF PROJECTS

NSI employs a highly qualified team of professionals skilled in a variety of coastal science and coastal engineering disciplines. Our multi-disciplinary approach allows for a more holistic blend of experience and services to meet every client's coastal needs.

Our local presence ensures our work is informed and coordinated with the issues, governance, and opportunities unique to that region. As a result, we have been able to form effective partnerships with government agencies, non-profits, and other private companies, administering coastal initiatives to meet their needs and those of communities.

Neel-Schaffer routinely provides services on an *on-call* basis for our clients. We currently are providing services to CPRA for a three-year multiple task order award contract. We also hold four on-call contracts with LADOTD to provide various services. Our St. Tammany Coastal Master Plan is performed as a Task Order contract and most of our work on Corps of Engineers projects has been performed under task order contracts.

To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: _____

Title: Louisiana Area Manager

Print Name: Nick Ferlito Jr., PE, PTOE

Date: July 16, 2024



Coastal Engineering Consulting Services As-Needed Parish Wide



Section IV

ELOS Environmental

Environmental Permitting

Wetlands Biological Assessments

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Coastal Engineering Consulting Services as Needed Parish Wide
SOQ 24-020, Jefferson Parish

B. Firm Name & Address:

ELOS Environmental, LLC
607 W. Morris Ave.
Hammond, LA 70403

C. Name, title and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

Lucas Watkins, Principal
lwatkins@elosenv.com
985-662-5501

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline.

None

E. Please provide the number of employees whose primary function corresponds with each category:

<u>10</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u>1</u> Geologists	<u> </u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u> </u> Graduate Engineers
<u> </u> Civil Engineers	<u> </u> Interior Designers	<u>10</u> Project Managers
<u>2</u> Construction Inspectors	<u> </u> Landscape Architects	<u>6</u> Clerical
<u>28</u> Ecologists	<u> </u> Land Surveyor	<u>2</u> Grant/Funding Specialist
<u> </u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u> </u> Engineer Intern	<u> </u> Environmental Engineers	
<u> </u> Professional Land Surveyors		<u>59</u> TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES: NO: X

If marked "No" skip to Section I. If marked "yes" complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.

2.

H. Has this JOINT-VENTURE previously worked together? Please check:
YES: X NO

I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. ELOS Environmental, LLC 607 West Morris Ave Hammond, LA 70403	Environmental Consulting	Yes
2.		
3.		

J. Please specify the total number of support personnel that may assist in the completion of this Project:
 Total Number: 59

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Lucas Watkins, Principal

Project Assignment:

Principal

Name of Firm with which associated:

ELOS Environmental, LLC

Years' experience with this Firm:

18 years

Education: Degree(s)/Year/Specialization:

MS / 2005 / Biological Sciences

BS / 2000 / Forest Management

Active registration: Year first registered/discipline:

--2010/LA Arborist, License No. 19-1827; --LA Licensed Horticulturist; --LA Licensed Nuisance Wildlife Control Operator; --Certified FERC Regulatory Overview and Guidance; --Certified Prescribed Burn Manager; --Certified NPDES Erosion Inspector; --Certified Commercial Pesticide Applicator; --Certified National Highway Institute: NEPA and the Transportation Decision Making Process

Other experience and qualifications relevant to the proposed Project:

Mr. Watkins is the founding Principal of ELOS. Mr. Watkins ensures that ELOS acquires the best tools and techniques to guarantee efficient and cost-effective delivery of services to clients. His experience includes environmental regulatory compliance and project management. This includes the management of large-scale, multi-faceted projects, such as wetland restoration implementation, government grant management, complex construction projects, and disaster recovery debris removal efforts. His key strengths include wetland delineations, wetland permitting, wetland restoration, NEPA compliance, ASTM Phase I ESAs, stormwater management, FERC regulatory overview and guidance, endangered species surveys, and timber and forest management.

Mr. Watkins's applicable projects are listed on the following page.

TEC Professional Services Questionnaire

Jefferson Parish / ECM Consultants – Veterans and West Esplanade Pump Stations

Jefferson Parish, LA, Principal, 2018 – 2019 and 2022

ELOS was originally contracted in 2018 to prepare permit applications for the installation of two new drainage pump stations and force mains over an existing flood wall in Jefferson Parish. The applications included a joint application to USACE and LDENR, one to the Louisiana Coastal Protection and Restoration Authority (CPRA), and levee permits to the Southeast Louisiana Flood Protection Authority-East. Later, in 2022, ELOS was contracted to update the permit applications for the Veterans pump stations. Mr. Watkins reviewed the permit applications and updates prior to submission.

St. Charles Parish Government, Drainage Consulting Environmental Services

St. Charles Parish, LA, Principal, 2021 - Ongoing

ELOS has been contracted to perform environmental services related to permitting projects in St. Charles Parish. During the last year, ELOS has been working on a wetland delineation, a habitat analysis report (also involving drone services), and a joint permit application for two new pump stations in the Town of Montz. Also in 2023, ELOS began a Phase 1 Environmental Site Assessment for the Sunset pump station and the Crawford Canal widening. In 2021, one major task order involved submitting emergency authorization requests and environmental permits for a 607-acre (33.4 miles) waterway cleaning project in St. Charles Parish, Louisiana. Mr. Watkins coordinated with government agencies to expedite the emergency authorizations from the U.S. Army Corps of Engineers, the Louisiana Department of Energy and Natural Resources (LDENR), and the Office of Coastal Management (OCM).

Desktop Habitat Analysis for Mid-Breton Sediment Diversion, Coastal Protection and Restoration Authority

Plaquemines Parish, LA, President/Environmental Scientist, 2018

ELOS was contracted to conduct a Jurisdictional Determination and complete a desktop habitat analysis for approximately 26,985 acres of possible delta-influence area within the proposed Mid-Breton Sediment Diversion outfall area in Plaquemines Parish, Louisiana. Mr. Watkins provided oversight for each scope of the project. This included using publicly available data to quantify marsh acreage and distinguish marsh types within the proposed outfall area, including infrared aerial photographs, LIDAR data, USGS hydrologic unit code water data, NRCS soil survey, USFWS National Wetlands Inventory maps, and Louisiana Coastwide Reference Monitoring Systems (CRMS) Wetlands monitoring data. He also assisted in reviewing all data from the report that described freshwater forest/shrub wetland, freshwater marsh, intermediate marsh, brackish marsh, salt marsh, and open water habitats and their respective acreages.

East Bank Levee Lift and Plaquemines Parish Permittee Responsible Mitigation Plan

Plaquemines Parish, LA, President, 2021 - Present

ELOS obtained permits from the U.S. Army Corps of Engineers (USACE) and the Department of Energy and Natural Resources (DENR) to allow the Parish to upgrade and raise the southern section of the Plaquemines Parish East Bank Levee. This project included clearing, grading, excavating, depositing fill for temporary work areas, and levee right-of-way expansion to upgrade the Levee. To obtain permits from USACE and DENR for these activities, ELOS conducted wetland delineations, habitat characterizations, an environmental impact analysis, and collected other necessary data. ELOS performed conceptual design and permitting on the 30-acre Permittee Responsible Mitigation Project to offset impacts from improvements to the East Bank Hurricane Protection Levee System in Plaquemines Parish. This involved site selection and layout, impact and benefit assessment, property security, and negotiations with all relevant regulatory agencies, cost analysis, coordination with the Project Engineer and prospective contractors for a dedicated sediment delivery (dredge/fill) marsh restoration project.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Brian Fortson, Senior Project Manager
Project Assignment:
Senior Project Manager
Name of Firm with which associated:
ELOS Environmental, LLC
Years' experience with this Firm:
11 years
Education: Degree(s)/Year/Specialization:
BS / 1995 / Wetland Ecology
JD / 2006 / Civil Law
Active registration: Year first registered/discipline:
--Wetland Delineation Course, Louisiana State University Wetland Biochemistry Institute, 1996
Other experience and qualifications relevant to the proposed Project:
Mr. Fortson leads the permitting efforts for multiple projects for local development and infrastructure improvements efforts. Mr. Fortson provides technical expertise on many other projects for which he is not the lead scientist. He served as a Planning Technician, Land Use Planner, Environmental Specialist, and Coastal Wetland and Environmental Specialist, and Coastal Wetland and Environmental Resources Manager for St. Tammany Parish Government from 1988 to 2013. He was responsible for the administration of the St. Tammany Parish Local Coastal Program under the Coastal Zone Management Act and was responsible for managing the natural resource permitting efforts. Mr. Fortson was the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) representative for St. Tammany Parish and has proposed and presented multiple coastal restoration projects and facilitated the approval of projects through the permitting process. Mr. Fortson's applicable projects are listed on the following page.

TEC Professional Services Questionnaire

Livingston NRCS Waterway Debris Removal

Livingston Parish, LA, Project Manager/Environmental Scientist, Ongoing

Livingston Parish retained ELOS to guide the Parish through the EWP program processes. Mr. Fortson utilized his experience to assist in the process of developing means and methods for the program. Mr. Fortson provided senior-level permitting process oversight in coordinating and corresponding with government agencies (USACE, DNR CUP, and LDWF Scenic Rives) to obtain the necessary permits and provided insight for coordination with adjacent landowners to allow the Parish to clear debris from the parish's waterways. His work aided in ensuring the quality of all work was conducted per USACE Section 404 permits, and State/Local regulations.

Montz Pump Station and Drainage

St. Charles Parish, LA, Senior Project Manager, April 2023 – March 2024

ELOS was currently contracted with St. Charles Parish to assist with environmental consulting service for the proposed a project to build two new pump stations and improve drainage on an approximately 200- acre site located in St. Charles Parish, Louisiana near the town of Montz. Mr. Fortson provided senior project management overseeing environmental consulting services for the pump station and drainage project. His role encompasses a range of responsibilities critical to the project's success. Mr. Fortson served as the primary liaison between the client, regulatory agencies, and stakeholders. He facilitated meetings, communications, and consensus-building among diverse groups. Mr. Fortson ensured adherence to environmental regulations and permits throughout all project phases.

Des Allemands Bulkhead Emergency Repair

St. Charles Parish, LA, Senior Project Manager, January 2022 - January 2023

ELOS was contracted with St. Charles Parish to assist with environmental consulting service for the 10-acre Des Allemands Bulkhead Emergency Repair project site located in Des Allemands, LA. Mr. Fortson ensure that all necessary environmental permits and approvals required for the repair work are obtained. He stayed updated and ensure compliance with local, state, and federal environmental regulations throughout the project. Mr. Fortson coordinated with various stakeholders, including regulatory agencies, contractors, and community members, to facilitate smooth project execution. He Maintain accurate project documentation, including reports, permits, and correspondence, for compliance and future reference. Also, prepared and presented comprehensive project reports to stakeholders, summarizing project progress, environmental assessments, and any findings or recommendations.

Jesuit Bend

Plaquemines Parish, LA, Project Manager/Environmental Scientist, 2020

ELOS was contracted to provide environmental compliance and permitting services for Jesuit Bend - Oakville to LA Reusitte 100-Year (1%) Flood Protection Project in Plaquemines Parish, LA. Mr. Fortson provided project management and administration. He coordinated with OCM, USACE, and Gulf Coast Railway. Mr. Fortson provided senior-level permitting efforts which involved collecting necessary data for the Joint Permit Application for Coastal Use, Section 404, Section 10, and Section 401. He managed the Environmental Inventory and Wetlands Delineation and Preliminary Environmental Assessment to address NEPA obligations of funding and other federal agency programs.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Basile Dardar, Project Manager
Project Assignment:
Project Manager and Environmental Scientist
Name of Firm with which associated:
ELOS Environmental, LLC
Years' experience with this Firm:
2.5 years
Education: Degree(s)/Year/Specialization:
BS / 2014 / Biological Sciences
Active registration: Year first registered/discipline:
--2018/USACE Wetland Delineation --2020/OLDEB Certified Oyster Biologist --2019/Open Water Diving Certification --TWIC Card
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Dardar is a project manager and environmental scientist who has a wide range of experience including: permitting, environmental surveying, damage surveying, developing reports, research, sampling, testing, and coordinating with agencies and clients. Mr. Dardar provides environmental expertise, accurate reporting, and a high degree of professionalism to every project. He is also a certified oyster biologist, as well as a certified diver. His experience with marine biology in Louisiana coastal waters, including his experience as a commercial fisherman, makes him a unique asset to the ELOS team.</p> <p>Mr. Dardar's applicable projects are listed on the following page.</p>

TEC Professional Services Questionnaire

LADOTD Rural Bridges Phases I & II

Statewide, LA, Project Manager, 2021 - Ongoing

ELOS has been contracted to provide professional environmental consulting services for the Department of Transportation and Development (LADOTD) Rural Bridge Replacement Initiative for two project phases. Phase I involved bridge replacements under 16 state project numbers and supplemental task orders, impacting 33 structures in Districts 03, 07, 61, and 62. Phase 2 is ongoing and involves bridge replacements under 9 state project numbers and supplemental task orders, impacting multiple structures in Districts 05, 08, 58. Almost all the projects have included a wetland delineation, permit applications, cultural resource survey, and a threatened and endangered species survey. Mr. Dardar has coordinated field crews, performed wetland delineations, collected and inputted data, written and produced reports, developed timelines, coordinated with LADOTD, worked on permit applications with state and federal agencies, and assisted with the surveys.

Move Ascension - Phases II & III

Ascension Parish, LA, Environmental Scientist, November 2021 - Ongoing

ELOS has been contracted to plan projects, perform wetland delineations, conduct cultural resource surveys, and submit permit applications for 60 roadway projects, varying from roundabouts to constructing new lanes and connecting roadways, located throughout Ascension Parish. Mr. Dardar has worked on the wetland report for the jurisdictional determination, reviewed multiple wetland delineation reports, and reviewed corresponding figures and data for the permit applications.

LADOTD Minnesota Park / Range Road Roundabout

Tangipahoa Parish, LA, Project Manager, 2023 - Ongoing

ELOS is contracted to complete a wetland delineation report to obtain a jurisdictional determination from the U.S. Army Corps of Engineers (USACE), submit a permit application, if necessary, as well as assist with a Categorical Exclusion (CATEX), Phase I Environmental Site Assessment (ESA), and the Solicitation of Views (SOVs) for a roundabout project (H.014340) covering 2.5 acres in Tangipahoa Parish. Mr. Dardar has worked on the SOVs, reviewed the CATEX sections and documentation, written permit applications, and coordinated with LADOTD.

Bollinger-Houma Dredge Disposal Site

Bollinger Lane, Houma, LA, Environmental Scientist, April 2022-June 2022

ELOS was contracted to collect data and prepare a report to support a wetland delineation to obtain a jurisdictional determination from USACE for the approximately 26.5-acre Bollinger-Houma Dredge Disposal Site located at 301 Bollinger Lane, Houma, LA. Mr. Dardar conducted wetland delineation, completed the wetland delineation report and submitted it to USACE.

Livingston Parish Gravity Drainage District No. 1

Livingston Parish, LA, Environmental Scientist, 2021-2022

Due to Hurricane Ida, substantial damage was done to the waterways in Livingston Parish. ELOS was contracted to collect and analyze drone footage and create a Damage Survey Report to support the acquisitions of EWP funding. Mr. Dardar analyzed drone footage and assisted in creating a Damage Survey Report.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Hunter Perrilloux, Project Manager
Project Assignment:
Project Manager and Environmental Scientist
Name of Firm with which associated:
ELOS Environmental, LLC
Years' experience with this Firm:
4.5 years
Education: Degree(s)/Year/Specialization:
BS / 2018 / Biological Science
Active registration: Year first registered/discipline:
--2021/FAA Drone Pilot --2020/USACE Wetland Delineation
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Perrilloux is a project manager and environmental scientist who specializes in wetland delineations. Mr. Perrilloux serves as a field crew leader for wetland delineations at ELOS and assists in the processing of data and the creation of wetland delineation reports. He has worked on various environmental projects including mitigation bank monitoring, endangered species monitoring, and cultural resources surveys. As an FAA licensed drone pilot, he is able to collect and process drone footage for applications such as damage survey reports and environmental investigations.</p> <p>Mr. Perrilloux's applicable projects are listed on the following page.</p>

TEC Professional Services Questionnaire

Pollard Branch Mitigation Bank Livingston Parish Canal Maintenance
Livingston Parish, LA, Environmental Scientist, 2019

As part of a grant from the NRCS, ELOS assisted Livingston Parish with improving drainage by identifying and documenting blockages within approximately 355 miles of waterways. Mr. Perrilloux monitored maintenance work within the waterways, using GPS units to document drainage blockage areas for Damage Survey Reports.

City Of Kinder Drainage Improvements

City Of Kinder, LA, Environmental Scientist, 2021 – 2022

ELOS was contracted to provide delineations, permit applications, and damage survey reports to support FEMA funding for the drainage canal debris cleanup in the City of Kinder. Mr. Perrilloux was responsible for completing required field efforts, data collection, and processing permit applications to USACE and LDENR.

St. Tammany Waterway Debris Removal Phases I & II

St. Tammany Parish, LA, Environmental Scientist, September 2021 - Ongoing

ELOS is contracted to provide waterway inspection services and permitting services to remove damage debris from waterways resulting from hurricanes and other storms. Mr. Perrilloux is responsible for completing required field efforts, collecting data, and developing permit applications to USACE and LDENR.

East Ascension Drainage District No. 1 – Wetland Delineations & Permitting

Ascension Parish, LA, Environmental Scientist, 2022 - Ongoing

Since 2018, ELOS has been contracted to complete wetland delineations and permitting consulting services, and under this contract, ELOS has completed work on 35 projects ranging from damage assessments and debris removal to lateral drainage work and levee construction. Mr. Perrilloux is responsible for completing required field efforts, collecting data, and developing permit applications to USACE and LDENR.

Livingston Parish Drainage Improvements – Environmental Services

Livingston Parish, LA, Environmental Scientist, March 2023 - Ongoing

ELOS is contracted to perform environmental services for the Parish's LWI project that involves lateral drainage work, reshaping banks, repairing levees, and removing debris from 145 miles of targeted waterways. Mr. Perrilloux is responsible for completing required field efforts, collecting data, and developing permit applications to USACE and LDENR.

Consolidated Gravity Drainage District No. 1 of Tangipahoa Parish

Tangipahoa Parish, LA, Environmental Scientist, 2019 - Present

ELOS is contracted to provide permits for maintaining drainage canals and waterways within Tangipahoa Parish. Mr. Perrilloux is responsible for completing required field efforts, managing the field work team, collecting data, and developing permit applications to the U.S. Army Corps of Engineers (USACE), and the Louisiana Department of Energy and Natural Resources (LEDNR).

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Michael Bellone, Director of Environmental Services and Regulatory Affairs
Project Assignment:
Director of Environmental Services and Regulatory Affairs
Name of Firm with which associated:
ELOS Environmental, LLC
Years' experience with this Firm:
1 year
Education: Degree(s)/Year/Specialization:
MS / 1991 / Environmental Sciences
BS / 1983 / Geological Sciences
Active registration: Year first registered/discipline:
--Registered Professional Geologist in the following states: Mississippi #520; Alabama #800; Tennessee #3924; Wisconsin #320; Texas #4344; --LA Licensed Contractor #50824; --LA Licensed Louisiana Contractor-Hazardous Waste Treatment or Removal #50824; --OSHA Certified Waste Site Supervisor; --Certified Hazardous Materials Manager #3849
Other experience and qualifications relevant to the proposed Project:
Mr. Bellone has directed multi-disciplinary environmental projects at over 1,200 sites throughout the United States, including 700 Phase I and Phase II Environmental Site Assessments (ESA) for governmental agencies, commercial clients, and private industry. He is experienced in conducting and managing multimedia environmental audits, Phase I, II, and III ESAs, contamination assessments, and remedial actions (soil, groundwater, and surface water). His specialties include hydrogeological investigations, site assessments, hazardous waste site closures, environmental permitting, compliance audits and health and safety audits, and the design of multimedia remedial systems. Mr. Bellone provides senior oversight and assists ELOS with fieldwork, report writing, data processing, and file organization to complete projects concerning Phase I and II ESAs and other NEPA-related environmental assessment documentation. Mr. Bellone's applicable projects are listed on the following page.

TEC Professional Services Questionnaire

SCP Crawford Canal – Sunset Pump Station

St. Charles Parish, LA, Environmental Director, 2023-Ongoing

ELOS is contracted to perform an American Society of Testing and Materials (ASTM) Phase I Environmental Site Assessment (Phase I ESA) for the Crawford Canal Widening located on approximately 46.15 acres. Mr. Bellone provides project oversight and coordinating various aspects of the assessment process to ensure compliance with environmental regulations and best practices. He oversees the entire Phase I ESA process, from initial planning to final reporting. This includes defining the scope of work, setting timelines, and managing resources effectively. Mr. Bellone provides necessary insights into the environmental conditions and potential risks associated with the pump station site.

Livingston Parish Sheriff's Office – Emergency Response/Evacuation Center, Part 1 & 2, Phase II & RECAP Investigation and Report,

Livingston Parish, LA, Environmental Director, July 2023 – Ongoing

After conducting a Phase I ESA, ELOS found no significant evidence of contaminants on the property. However, ELOS' environmental database and LDEQ file review revealed that contaminants likely existed due to adjacent site history, including a manufacturing plant within the vicinity. ELOS recommended a Phase II Environmental Site Assessment be conducted of subsurface soils and groundwater. Under the supervision of Senior Project Manager and Professional Geologist, Mike Bellone, 12 soil borings and 12 temporary wells were installed via direct push technology, focusing mainly on the perimeter of the site to identify potential contaminants that may have migrated on-site from the nearby facilities. The project is currently in Part 2 of the Phase II investigation, in which ELOS has installed six (6) more soil borings and temporary wells in the project's interior. ELOS submitted these samples for analyses, as well as requesting specific testing on the samples that may exceed the RECAP Screening Standards. All work is being completed under the direction and supervision of Senior Project Manager and Professional Geologist Michael Bellone.

Louisiana Fire and Emergency Training Institute- Phase II and RECAP Investigation,

Statewide, LA, Environmental Director, 2023-Ongoing

ELOS was contracted by LA Terre Engineering, LLC (LTE) to support a project that included Phase II, and Phase III Environmental Services for the Louisiana State Board of Supervisors of Louisiana State University A&M College. Mr. Bellone and his team are preparing the RECAP Site Investigation Workplan in coordination with the LDEQ and the client. Once approved, Mr. Bellone and his team will investigate the site by installing soil borings and temporary monitoring wells. Once all data is analyzed and compared to the RECAP Screening Standards, a Risk Assessment Report will be prepared to meet the detailed submittal requirements of the LDEQ RECAP.

Former Mandeville Landfill – CAP Closure Certification, Environmental Investigation for Non-Industrial Use and Seep Investigation

St. Tammany Parish, LA, Environmental Director, 2023-Ongoing

ELOS was contracted to conduct environmental and geological investigations of the former Mandeville Landfill's cap for 1) structural viability, 2) potential reuse as a recreational park, and 3) to investigate a potential seep emanating from the site onto neighboring properties. Mr. Bellone and his team are presently analyzing and comparing the results from the Seep Investigation to the LDEQ RECAP Screening Standards to determine if additional sampling may be required.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Karim Belhadjali, Senior Coastal Project Manager
Project Assignment:
Senior Coastal Project Manager
Name of Firm with which associated:
ELOS Environmental, LLC
Years' experience with this Firm:
1 year
Education: Degree(s)/Year/Specialization:
MS / 1994 / Fisheries
BS / 1991 / Marine Biology
Active registration: Year first registered/discipline:
-USACE Wetland Certification, 2017 -LDAF Commercial Pesticide Application #00177825, 20196 -Wetland Training Institute Delineator
Other experience and qualifications relevant to the proposed Project:
<p>With a profound understanding of habitat restoration and its vital role in fostering resilient communities, Karim Belhadjali brings forward-thinking expertise to coastal resilience planning. For the past two decades, he has led transformative coastal ecosystem restoration and flood risk reduction projects in Louisiana as the program manager for the State of Louisiana's Coastal Master Plan. With a track record of adeptly collaborating and fostering partnerships between diverse governmental agencies and the private sector, Mr. Belhadjali works with ELOS on various projects calling for significant environmental assessments and those impacting coastal resiliency and restoration.</p> <p>Mr. Belhadjali's applicable projects are listed on the following page.</p>

TEC Professional Services Questionnaire

U.S. Fish and Wildlife Service Regionwide Trustee Implementation Group Environmental Assessment
Gulf of Mexico, Project Director, May 2020 - May 2021

Mr. Belhadjali served as the project director, leading a technical team in the preparation of the draft restoration plan and environmental assessment focused on restoring living coastal and marine resources. Mr. Belhadjali facilitated the workgroup of trustee representatives from the four federal agencies and the five Gulf Coast states in the development of the plan. Mr. Belhadjali facilitated the workgroup of trustee representatives from the four federal agencies and the five Gulf Coast states in the development of the plan.

CPRA Mid Barataria Sediment Diversion (MBSD) Project Restoration Plan
Baton Rouge, LA, Project Director, April 2018 - May 2021

Mr. Belhadjali led a technical team in the preparation of the draft restoration plan and review of associated environmental documentation. The technical team also evaluated the socioeconomic impacts of the MBSD.

CPRA Louisiana Comprehensive Master Plan for a Sustainable Coast
Coastal LA, Program Manager, May 2012 - December 2016

Mr. Belhadjali managed and supervised staff members responsible for the preparation of the State's Comprehensive Master Plan for a Sustainable Coast. The master plan identifies specific projects and policies to be implemented over 50 years that will sustain coastal communities, industries, habitats, and the unique culture of South Louisiana. These measures are designed to address land loss due to climate change and provide flood risk reduction to improve the resilience of coastal communities.

CPRA Lake Pontchartrain Surge Barrier
Baton Rouge, LA, Project Director, April 2015 - April 2016

Mr. Belhadjali led a feasibility study in order to analyze multiple alternatives for a surge barrier across Bayou Rigolets to provide flood protection to New Orleans and communities on the northern shore of Lake Pontchartrain.

CPRA Upper Barataria Basin Risk Reduction Project
Baton Rouge, LA, Project Director, 2014 - 2015

Mr. Belhadjali led a feasibility study to analyze and model multiple alternatives for flood protection for the communities in the upper portions of the Barataria Basin. The results of the study were used to determine the inclusion of the project in the 2017 Coastal Master Plan.

CPRA Integrated Ecosystem Restoration and Hurricane Protection
Coastal Louisiana, Project Manager, 2009-2012

Mr. Belhadjali led the development of CPRA's Annual Plan for Fiscal Years 2010-2013. The Annual Plan outlines the comprehensive strategies and initiatives for a specific year to guide coastal protection and restoration efforts in Louisiana.

Coastal Restoration Division of LNDR
Baton Rouge, LA, Project Manager, 2006-2009

Mr. Belhadjali managed the Coastal Restoration Division's information management system that combines the CRD website with a GIS database and a coastal restoration project relational database that stores data from over

TEC Professional Services Questionnaire

9500 monitoring stations throughout coastal Louisiana. The system provides avenues of information exchange and transfer to the public and other state and federal agencies on past, present, and future coastal restoration activities. Also managed personnel that serve as lead ecologists for coastal restoration projects from all funding sources and as members of the project design team. Served on the Louisiana Coastal Area (LCA) Data Management Workgroup, tasked with developing the data management architecture that will efficiently and effectively link model development, monitoring data analysis, ecological forecasting, and planning activities into a science-based decision-support system.

CPRA Coastal Wetland Planning Protection and Restoration Act (CWPPRA) - Multiple Projects
Baton Rouge, LA, Lead Ecologist, 2001 - 2004

As state ecological lead, Mr. Belhadjali set desired ecological benchmarks. He evaluated the likelihood of success of different wetland restoration measures for 11 federally funded coastal ecosystem restoration projects across coastal Louisiana. These projects were worth \$234 Million and anticipated to benefit more than 4,000 acres of coastal wetlands.

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 1		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Bucktown Wheel Wash Emergency Authorization Requests (EUA) Jefferson Parish, LA</p> <p>Michelle M. Gonzales, CFM Director Ecosystem and Coastal Management Jefferson Parish Government 1221 Elmwood Pk Blvd Suite 310 Jefferson, LA 70123 mgonzales@jeffparish.net O: 504-736-6653 C: 225-223-2719</p>	<p>ELOS was contracted to prepare and submit emergency authorization requests and to prepare and submit formal permit applications requesting authorization from the U.S. Army Corps of Engineers (USACE) to conduct prop-washing at the mouth of Bucktown Marina basin near its confluence with Lake Pontchartrain on an approximately 1.50-acre site located in New Orleans, LA.</p> <p>ELOS obtained an emergency authorization requests and after-the-fact permit application from the USACE for identifying the possibility of impacting waters under federal jurisdiction, including wetlands and navigable waters. ELOS provided a clear documentation demonstrating the emergency nature of the situation, prompting USACE to swiftly evaluate the request and potentially issue authorization to proceed with necessary activities such as flood response or environmental remediation.</p> <p>The wheel wash system is positioned at exits of construction sites or quarries where vehicles are required to pass through before entering public roads to help in maintaining road safety by reducing the risk of accidents caused by slippery road conditions due to mud and debris from construction vehicles. Additionally, the wheel wash systems contributed to environmental protection by minimizing soil erosion and contamination of nearby water bodies with sediment-laden runoff from construction sites.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
April 2024	NA	\$30,000

TEC Professional Services Questionnaire

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Veterans Memorial Boulevard Pump Stations Jefferson Parish, LA Blake Vutera, P.E. Gulf South Engineering and Testing, Inc. 15 Veterans Memorial Blvd Kenner, LA 70062 504-305-4401 ex 103 bvutera@gulfsoutheng.com	ELOS is currently contracted to provide Environmental Services in support of the Jefferson Parish Pump Stations Project on Veterans Memorial Boulevard in Jefferson Parish, LA. ELOS is responsible for applying for Coastal Use, Clean Water Act Section 404, and Rivers and Harbors Act Section 408, and levee permits for two pump stations located north and south of Veterans Memorial Boulevard along the west bank of the 17th Street Canal in New Orleans. The designs include the outflow pipe being lifted above the existing levee and through the existing floodwall. Additional access gates are also included in the designs to allow for maintenance. Due to the proposed impacts to the levee and floodwalls, the project must be reviewed by the Completed Works section of the U.S. Army Corps of Engineers for compliance with Section 408. This review process includes preparing an Environmental Assessment to determine potential impacts on cultural resources, threatened and endangered species, essential fish habitat, water quality, air quality, etc. The project's purpose is to improve street drainage at the Veterans Boulevard crossing of the 17th Street Canal.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2023	NA	\$46,969

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
West Esplanade Boulevard Pump Station Jefferson Parish, LA Kazem Alikhani ECM Consultants, Inc. 1301 Clearview Parkway Suite 200 Metairie, LA 70001 504.885.4080 kazem@ecmconsultants.com	ELOS is currently contracted to provide Environmental Services in support of the Jefferson Parish Pump Station Project on West Esplanade Boulevard in Jefferson Parish, LA. ELOS is responsible for applying for Coastal Use, Clean Water Act Section 404, and Rivers and Harbors Act Section 408, and levee permits for a proposed pump station to be located in the neutral ground of West Esplanade Boulevard across Orpheum Avenue from the 17th Street Canal. The designs include the outflow pipe being lifted above the existing levee and floodwall into the canal. Due to the proposed impacts to the levee from outflow pipe support piles, the project must be reviewed by the Completed Works section of the U.S. Army Corps of Engineers for compliance with Section 408. This review process includes preparing an Environmental Assessment to determine potential impacts on cultural resources, threatened and endangered species, essential fish habitat, water quality, air quality, etc. The project's purpose is to improve street drainage in the West Esplanade/Lake Avenue vicinity.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	NA	\$24,306

TEC Professional Services Questionnaire

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Lafitte Area Levees Jefferson Parish, LA Mark Schutt Engineer Meyer Engineers 4937 Hearst Street, Suite 1B Metairie, LA 70001 504-885-9892	<p>ELOS was contracted to perform a wetland delineation and submit a joint permit application to the U.S. Army Corps of Engineers and the Louisiana Department of Energy and Natural Resources, Office of Coastal Management for several proposed levee improvements including levee lifts, new levee segments, and corresponding pump stations for those levee systems. ELOS also conducted environmental assessments and cultural resources surveys for several of these sites: Lower Lafitte Orange Street, Goose Bayou, Pen Levee, Goose Bayou Rachel Street Pump Station, Jones Point Levee, Jones Point Carmelite Pump Station, Jones Point Trahan & Jones Point Pump Station, Paillet Levee, Town of Jean Lafitte Gloria Drive Pump Station, Town of Jean Lafitte Highway 45 Pump Station, and Upper LA 45. The scope of work included: wetland delineations, permitting, agency communication, cultural resources surveys, environmental assessments, and section 106 reviews.</p> <p>Project Sites: Lower Lafitte Orange Street Goose Bayou Pen Levee Goose Bayou Rachel Street Pump Station Jones Point Levee Jones Point Carmelite Pump Station Jones Point Trahan & Jones Point Pump Station Paillet Levee Town of Jean Lafitte Gloria Drive Pump Station Town of Jean Lafitte Highway 45 Pump Station Upper LA 45</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing	NA	\$975,586

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Tangipahoa Parish RESTORE Act Breakwater Project Tangipahoa Parish, LA</p> <p>Robby Miller Parish President 206 E Mulberry St Amite City, LA 70422 985-748-3211</p>	<p>To move forward several projects in Tangipahoa Parish's multiyear plan under the RESTORE Act, which dedicated oil spill funds to restoring the Gulf Coast region, ELOS was contracted to complete a feasibility study for dredging the bar channel at the mouth of the Tangipahoa River and restoration of a boat launch. The study included a summary of economic and environmental benefits, a mitigation plan and its costs, a permitting plan, and other regulatory requirements.</p> <p>ELOS also updated prior Geographic Information System (GIS) analysis of sediment and land accretion behind a previously built rock breakwater. Land loss between 1989 and 2013 at the shoreline in this area was calculated to be 55 acres. Between 2014, when the first phase of the project was completed, and 2016, approximately 45 acres of land and sediment have been captured behind the breakwater through natural processes. This analysis was not only key to securing additional funding from the U.S. Army Corps of Engineers (USACE), but more importantly, it enabled the parish to use the dredged material beneficially to accelerate the natural land-building process.</p> <p>During Phase II of the breakwater project, ELOS prepared the and received the complex construction permits, completed cultural resources management services to relocate any existing, submerged, or eroding archaeological sites, and monitored construction and the project's post-construction, land-building success. The "Lake Pontchartrain Shoreline Protection Project" was given the Best Restored Shores Award for 2023 by the American Shore & Beach Preservation Association.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing	NA	\$130,000

TEC Professional Services Questionnaire

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
<p>West Shore Lake Pontchartrain Connector Levee St. James Parish, LA</p> <p>Kevin O’Gorman, P.E. Intracoastal Consultants, LLC 2351 Energy Dr, Ste 1010 Baton Rouge, LA 70808 225-308-3213</p>	<p>ELOS has been contracted for environmental services related to the installation of the West Shore Lake Pontchartrain Connector Levee. The project includes installation of earthen levees, a pump station, a gravity drainage system, and water control structures as flood control measures to allow the levee to remain an open system until circumstances require closure. Specifically, ELOS is completing a geotechnical boring survey and permit application (the survey requires 11 soil boring locations and 14 cone penetration test locations), completing a joint permit application to the U.S. Army Corps of Engineers (USACE) and the Louisiana Department of Energy and Natural Resources (Office of Coastal Management), performing a wetland delineation and final report to receive a jurisdictional determination from USACE, performing a Section 106 consultation and desktop review, and coordinating agencies for the approximately 99-acre site in St. James Parish. The preliminary actions will also determine whether ELOS will complete permits for additional agency coordination under the Clean Water Act and Rivers and Harbors Act in addition to levee permits. One important aspect of this project is coordinating not only agencies, but also adjacent land owners and securing access to complete data collection and surveys.</p> <p>After receiving a notice to proceed in March 2024, ELOS has already completed the wetlands delineation report and submitted it for consideration to receive a jurisdictional determination. The Section 106 consultation and desk review is also underway, showing that ELOS works diligently and quickly to ensure the project moves forward effectively.</p>	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing	NA	\$144,000

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Plaquemines Parish Coastal Team Consulting Plaquemines Parish, LA</p> <p>Vincent Frelich Director of Coastal Restoration Plaquemines Parish Government 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chasse, LA 70037 (504) 297-5629 vfrelich@ppgov.net</p>	<p>ELOS participated as a consulting team member for the implementation of the seven primary Plaquemines Parish Coastal Strategic Implementation Plan ridge restoration projects, conceptualized as part of the Plaquemines Parish Coastal Plan. ELOS assisted in designing, evaluating, and permitting a series of potential ridge and marsh restoration projects in Plaquemines Parish. The ridge projects are evaluated for their potential to reduce impacts. The assessment for these projects evaluated plant species, height, diameter, and densities along the ridges. ELOS performed ecological assessments for the large-scale coastal ridge and marsh restoration projects for inclusion in its Coastal Master Plan.</p> <p>ELOS worked with different engineering firms to design and assess the benefits and impacts associated with the construction of ridge formations and adjacent marsh platform creation through the use of dedicated sediment delivery from dredging in the Mississippi River and transporting the sediment through long distance pipelines to the project site. ELOS also coordinated the geotechnical and soil boring effort associated with the design and compiled the design footprint information from A&E Teams associated with the Plaquemines Parish Ridge Restoration Projects and worked with those A&E Teams to ensure that the ratio between marsh impacts from ridge construction and benefits resulting from marsh creation was adequate to establish a net benefit in habitat credits when constructed.</p> <p>All teams have submitted shape files and tabulated impact data which has been assessed and compiled by ELOS. A spreadsheet containing all relevant impact estimations has been produced and published on the Coastal Team Project Management website at Huddle.com.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2014	NA	\$143,000

TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Tangipahoa Parish Coastal Master Plan</p> <p>Robby Miller Parish President 206 E Mulberry St Amite City, LA 70422 985-748-3211</p>	<p>ELOS has been contracted to provide consulting services to Tangipahoa Parish Government in developing and updating its Coastal Master Plan. The primary objective of this plan is to develop a comprehensive and actionable strategy for coastal resilience, protection, and sustainable development in the parish. The plan addresses the critical challenges and opportunities associated with the coastal region of Tangipahoa Parish, including wetland restoration, shoreline protection, drainage improvements, and floodplain management. It is a multifaceted approach that integrates scientific, engineering, economic, and community perspectives to ensure the long-term sustainability and resilience of the parish's coastal areas.</p> <p>To develop the original plan, ELOS collected and analyzed data related to the coastal geography, storm surge modeling, hazard data, and existing studies on coastal restoration and flood protection throughout the region. Stakeholder meetings with residents, local businesses, governmental agencies, and non-governmental agencies were held to make sure the plan's components aligned with the needs and aspirations of Tangipahoa Parish residents. The resilience strategies were then aligned with priorities of similar plans including coastal plans and RESTORE Act plans. The final component of the plan involved feasibility and financial implementation with reliable funding sources and timelines.</p> <p>ELOS is currently working with the Parish to add new projects into the plan using the same comprehensive approach.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing	NA	\$148,640

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Bayou Terre Aux Boeufs Ridge Restoration Armoring</p> <p>St. Bernard Parish, LA</p> <p>John Lane St. Bernard Parish Government 8201 West Judge Perez Drive Chalmette, LA 70043 504.278.4223 jlane@sbpg.net</p>	<p>ELOS was contracted to provide the wetlands delineation and permitting for 20,420 linear feet of armoring of the Bayou Terre Aux Boeufs Ridge Restoration Project in Delacroix, LA. ELOS field crews collected soil, vegetation, and hydrology data for the wetlands delineation of 16 acres, and prepared a request for jurisdictional determination (JD). The JD was approved in August 2017. ELOS prepared a permitting strategy prior to submitting any applications that accounted for the need for a cultural resource survey as a condition of permits for both the geotechnical borings as well as construction. ELOS identified sensitive areas within the project and worked with geotechnical engineers to modify the boring plan to avoid these. Subsequently, ELOS arranged a pre-application meeting with the LASHPO and received approval on the modified work plan. This strategy prevented cost overruns and delays. Approximately 250 shovel test plots were investigated for the presence of artifacts, which were then evaluated and cataloged. All data points were located with GPS points and organized in a GIS database allowing ELOS to share the data by way of shapefiles and map displays that are accurate at sub-meter resolution. ELOS submitted the geotechnical permit application to the USACE (borings are assigned a No Determination of Significant Impacts by the Office of Coastal Management). ELOS also provided on-site monitoring once the construction phase of the project commenced.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2019	NA	\$126,000

TEC Professional Services Questionnaire

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Lake Lery Marsh Creation and Rim Restoration St. Bernard Parish, LA John Lane St. Bernard Parish Government 8201 West Judge Perez Drive Chalmette, LA 70043 504.278.4223 jlane@sbgp.net	ELOS was contracted to assist St. Bernard Parish Government with professional environmental and cultural resource investigations to support the large-scale marsh creation and rim restoration initiative. The project created 177 acres of vital marsh within Lake Lery, nourished an additional 209 acres, and developed a rock embankment along the northwestern sector of Lake Lery that improved shoreline protection. ELOS personnel have collected data with the assistance of our marine archaeologist and completed an environmental review of site conditions to support a joint permit application to the regulatory agencies authorizing the project. ELOS has concurrently consulted with the U.S. Army Corps of Engineers and the Louisiana State Historic Preservation Office to establish the Area of Potential Effect and determine the required level of cultural resource investigations. Subsequently, ELOS personnel have completed a review of available cultural resource data and previous investigations to determine the potential likelihood of the presence of cultural resources. The collected information and data are to be provided to Parish personnel for use in completing the project.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	NA	\$121,440

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. None	None	None
2.		
3.		
4.		

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

See attached items below.

TEC Professional Services Questionnaire



έλος (élos)
1. marsh, swamp, bog

Overview & History

Established in 2006 by two young entrepreneurs from southeast Louisiana, ELOS is a professional consulting firm with a background in environmental services, offering an interdisciplinary approach to program and project management. We are part of Environmental Systems Group, backed by Bernhard Capital.

Our familiarity with federal, state, and local agencies — combined with rich expertise in relevant scientific technologies — has resulted in streamlined services for our clients, saving them immeasurable time and money while achieving their goals. Because of our familiarity with government programs and project processes, ELOS can provide invaluable services and support to private businesses and government entities at all levels — giving them more time to do what matters.

We help manage resources, develop grant proposals, and secure environmental clearances and permits for various projects. Our storied company history and background allow us to provide world-class program management, environmental consulting, Geographic Information System (GIS) services, and other innovative technological solutions to meet even the most complex client needs.



541620, 541370GIS

www.elosenv.com
985.662.5501

TEC Professional Services Questionnaire

Our Services

Program & Project Management

- Program Management
- Grant Management
- FEMA Public Assistance
- Disaster Recovery
- Construction Management

Permitting Applications and Regulatory Compliance

- Wetland Delineations / Jurisdictional Determinations
- Permitting
- Biological Assessments and Monitoring
- Cultural Resources

Environmental Services

- NEPA Compliance
- Environmental Due Diligence
- Environmental Impact Analysis
- Categorical Exclusions
- Phase I, Phase II and Phase III Environmental Site Assessments
- Brownfields Program
- Soil and Ground Water Investigations
- Environmental Remediation Services
- Air Quality Services
- Water/ Wastewater / Storm Water Permitting
- Solid and Hazardous Waste
- Industrial Hygiene Services

Coastal Restoration and Resilience Services

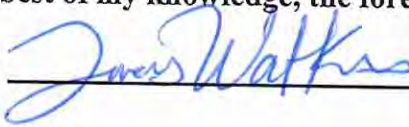
- Coastal Restoration Planning, Project Development, and Funding
- Coastal Resilience Planning
- Site Assessment and Analysis
- Ecosystem Restoration
- Climate Adaptation Strategies
- National Environmental Protection Act (NEPA) Compliance
- Coastal Use Permitting & Mitigation
- Construction Management and Environmental Monitoring
- Grant Procurement for Local Communities
- Watershed Management and Flood Mitigation Planning, Project Development, and Funding

Innovative Technologies

- Renewable Energy Site Selection
- Leak-Detection & Repair (LDAR)
- GIS
- Drones
- Abstracting Services

TEC Professional Services Questionnaire

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature:  Print Name: Lucas Watkins

Title: Principal Date: 7-3-2024





Coastal Engineering Consulting Services
As-Needed Parish Wide



Section V

Gulf South Engineering

**Onshore & Nearshore
Geotechnical Services**

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

As-Needed Parish-Wide

Coastal Engineering Consulting Services

SOQ 24-020 | Resolution No. 144205

B. Firm Name & Address:



Gulf South Engineering and Testing, Inc.

15 Veterans Memorial Boulevard | Kenner LA 70062

C. Name, title, and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

Chad M. Poché, P.E., Executive Vice President

504-305-4401 | 504-460-5239 cell | cpoche@gulfsoutheng.com

Registered Professional Civil Engineer (Louisiana No. 27667; since 1998)

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline:

Chad M. Poché, P.E., Executive Vice President

504-305-4401 | 504-460-5239 cell | cpoche@gulfsoutheng.com

Registered Professional Civil Engineer (Louisiana No. 27667; since 1998)

E. Please provide the number of employees whose primary function corresponds with each category:

<u>7</u>	Administrative	<u> </u>	Estimators	<u> </u>	Specification Writers
<u> </u>	Architects (Licensed)	<u> </u>	Geologists	<u> </u>	Structural Engineers
<u> </u>	Chemical Engineers	<u>2</u>	Geotechnical Engineers	<u> </u>	Graduate Engineers
<u> </u>	Civil Engineers	<u> </u>	Interior Designers	<u>1</u>	Project Managers
<u>10</u>	Construction Inspectors	<u> </u>	Landscape Architects	<u> </u>	Clerical (<i>see Administrative</i>)
<u> </u>	Ecologists	<u> </u>	Land Surveyor (<i>Apprentice</i>)	<u> </u>	Grant/Funding Specialist
<u> </u>	Electrical Engineers	<u> </u>	Mechanical Engineers	<u> </u>	Sanitary Engineers
<u> </u>	Engineer Intern	<u> </u>	Environmental Engineers	<u>1</u>	CMT Supervisor
<u>1</u>	Professional Land Surveyors	<u> </u>		<u>1</u>	Construction Svcs Manager
				<u>4</u>	Laboratory Personnel
				<u>3</u>	Soil Boring Personnel
				<u>30</u>	TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES NO X

If marked "no", skip to Section I. If marked "yes", complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.		
1. N/A		
2.		
H. Has this JOINT-VENTURE previously worked together? Please check: YES _____ NO _____ N/A		
I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.		
Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. N/A		
2.		
3.		
J. Please specify the total number of support personnel that may assist in the completion of the Project: 30 (all personnel will be available for assignment to the project)		

TEC Professional Services Questionnaire

- K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e., résumé) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.**

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Chad M. Poché, P.E.

Executive Vice President / Registered Professional Geotechnical Engineer

Project Assignment:

Geotechnical Engineer / Principal In Charge

Name of Firm with which associated:



ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

Years' experience with this Firm:

13 years (founded Gulf South in 2011);
31 years total (1993)

BFM Corporation, LLC | 2017 to present
Gulf South Engineering and Testing, Inc. | 2011 to present
Ardaman and Associates, Inc. | 2007 to 2011
Soil Testing Engineers, Inc. | 2001 to 2007
Eustis Engineering | 1996 to 2001
Soil Testing Engineers, Inc. | 1993 to 1996

Education: Degree(s)/Year/Specialization:

M.S., 1998, Civil Engineering, University of New Orleans
B.S., 1993, Civil Engineering, Louisiana State University

Active Registration: Year first registered/discipline:

1998, Civil Engineer (Louisiana No. 27667)
2002, Civil Engineer (Mississippi No. 15405)

Other experience and qualifications relevant to the proposed Project:

Chad M. Poché, P.E., is Executive Vice President, co-founder, and a Principal in Gulf South. He has been a consulting geotechnical engineer for nearly 30 years in South Louisiana, working on traditional and unique geotechnical engineering projects (shallow and deep foundation design, slope stability, pavement design, etc.). Mr. Poché has also provided construction oversight for virtually every type of earthwork related project. He has been the geotechnical engineer of record for thousands of projects throughout his career.

Mr. Poché's experience includes the development of appropriate scopes of work and proposals for a broad range of projects; planning and coordinating analyses; preparing technical reports; foundation and geotechnical engineering design; construction recommendations; Miss. River facility permitting; managing personnel and office operations and serving as an Expert Witness.

TEC Professional Services Questionnaire

Other experience and qualifications: **Chad M. Poché, P.E. (continued)**

Mr. Poché has logged soil borings; overseen the installation of ground water monitoring wells, piezometers, and inclinometers; overseen and evaluated pile load tests; overseen, performed, and evaluated dynamic pile testing (PDA and PIT); performed CMT field testing and inspection; and performed laboratory testing.

Marsh Island Restoration Project, Lafreniere Park, Metairie, Jefferson Parish, LA. Geotechnical investigation for construction of a new bulkhead wall around Marsh Island. Gulf South's scope includes drilling two soil borings each to a depth of 30 feet on the island, lab testing, and geotechnical engineering analyses including sheetpile and/or retaining wall design parameters, earth pressures, and general construction procedures and recommendations. (\$5,000 (fee); 2017)

Tchefuncte Marsh Shoreline Protection Project: New Borrow Fill Area, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for shoreline protection along the Lake Pontchartrain coastline by construction of a rock dike (approx. 15,000 lf) and marsh fill area located east of the mouth of the Tchefuncte River in St. Tammany Parish, LA. Scope includes drilling 14 borings within the lake, each to a depth of 40 feet below the water surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates. (\$90,000 (fee); 2021)


Northshore Living Shoreline Protection, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for shore protection along the northshore of Lake Pontchartrain coastline in two areas by constructing rock dikes in St. Tammany Parish, LA. Gulf South's scope includes drilling 16 borings each to a depth of 30 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates. (\$65,000 (fee); 2023)

Tchefuncte Marsh Shoreline Protection - New Rock Dikes, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for the shore protection along Lake Pontchartrain coastline by constructing a rock dike at Tchefuncte Marsh in St. Tammany Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (18 at 30 ft) in Lake Pontchartrain, laboratory testing (including consolidation tests), engineering analyses (bearing values, settlement, slope stability, construction procedures & recommendations). The project utilized shallow-draft barge equipment. (\$65,000 (fee); 2020)

Proposed Estuary Mitigation Bank (EMB) GIWW - Deadend Canal, Vendome Canal, Hockey Stick Canal, Crown Point, Jefferson Parish, LA. Geotechnical investigation for construction of a new wetland restoration project near Crown Point, LA. Gulf South's scope includes drilling nine soil borings to depths of 15 and 40 feet in water and marsh, lab testing (including settlement column test), and geotechnical engineering analysis including estimates of settlement, time rate of settlement, borrow/fill ratios, and general construction recommendations. (\$26,500 (fee); 2016)

Engineering Analysis Review (EAR) - Lafitte Tidal Protection Project (Phase I), Lafitte, Jefferson Parish, LA. Engineering analysis review of alternative pile type/size recommendations (provided by Client) for drainage structure site in Jefferson Parish, near Lafitte, LA. Gulf South's scope includes engineering analysis consisting of LPILE analysis and general construction recommendations. (\$5,000 (fee); 2016)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Bryson S. Beard, P.E., ACI Associate Geotechnical Engineer/Field Engineer	
Project Assignment:	
Associate Geotechnical Engineer/Field Engineer	
Name of Firm with which associated:	
<div style="display: flex; align-items: center;">  <div> ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants </div> </div>	
Years' experience with this Firm:	
2 years (joined Gulf South in 2022); 3 years total (2021)	<i>Gulf South Engineering and Testing, Inc. 2022 to present</i> <i>TetraTech, Inc. 2021 to 2022</i>
Education: Degree(s)/Year/Specialization:	
B.S., Geological Engineering (2021; University of Mississippi)	
Active Registration: Year first registered/discipline:	
Louisiana P.E. License Passed October 2023 Georgia, Engineering Intern (No. EIT029180, 2022)	
Other experience and qualifications relevant to the proposed Project:	
<p>Bryson S. Beard, P.E., is an Associate Geotechnical Engineer/Field Engineer who serves as a Project Manager. He has performed geotechnical engineering analyses consisting of shallow and deep foundations, slope stability, TRS and sheetpile wall design, settlement, pavement design, etc., and has prepared engineering reports. Mr. Beard's experience in the field includes surface and subsurface soil sampling, water sampling, and soil classification. His work experience further includes core logging and oversight of groundwater monitoring well installations, piezometers, and inclinometers. He has been responsible for the preparation of reports and Facility Response Plans. He is experienced with laboratory sample preparation and testing as well as air sampling and soil gas sampling.</p> <p>Mr. Bryson recently passed his Louisiana Professional Engineering test and will be a noted P.E. for the State of Louisiana once he fulfills the apprenticeship requirements set forth by LAPELS.</p> <p>Northshore Living Shoreline Protection, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for shore protection along the northshore of Lake Pontchartrain coastline in two areas by constructing rock dikes in St. Tammany Parish, LA. Gulf South's scope includes drilling 16 borings each to a depth of 30 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates. (\$65,000 (fee); 2023)</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Bryson S. Beard, P.E., ACI (continued)**

LaPlace Water Source Project: New Intake, Pump Stations & Pretreatment Facility, LaPlace, St. John the Baptist Parish, LA. Geotechnical engineering services for the construction of a new water source infrastructure project between the Mississippi River (MSR; east bank) and railway just north of 5th street in LaPlace, LA. Proposed structures will consist of water intake structure, pump stations, pipeline crossing levee, below grade pipelines, and a pretreatment plant. Gulf South's scope includes permitting, clearing, drilling ten undisturbed soil borings (3 at 80 ft, 3 at 30 ft, 3 at 100 ft, and 1 at 150 ft) below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. (\$100,000 (fee); ongoing)

Barber Road Bank Stabilization, Paradis, St. Charles Parish, LA. Geotechnical engineering services for portions of the road that have failed or are failing into the ditch along Barber Road in Paradis, LA. Gulf South's scope includes drilling five borings (depth of 40 feet below ground surface), laboratory testing, engineering analyses (slope stability analyses, pavement design) and general construction procedures and recommendations. (\$12,000 (fee); 2022)


Bucktown Paddlers Launch, Metairie, Jefferson Parish, LA. Gulf South provided construction materials testing and inspection during construction of the project. Gulf South's scope of work includes building earthwork, paving & concrete, concrete testing, soil density tests, pile inspection and modeling, and vibration monitoring. (\$15,000; 2023)

Geotechnical Exploration Proposal (LED Site Certification), Port of Terrebonne, Houma, LA. Geotechnical services regarding LED Certification for a 35-acre site along Rome Woodard Drive for the Port of Terrebonne in Houma, LA. Drilled undisturbed soil borings. Geotechnical laboratory testing performed in accordance with ASTM standards, and includes strength tests (unconfined and/or triaxial), classification tests (Atterberg Limits and/or particle size), and other testing as appropriate. Geotechnical evaluation includes subsoil conditions, allowable soil bearing values, allowable pile load capacities, settlement estimates, and general construction procedures & recommendations. (\$5,900 (fee); 2024)

City of New Orleans Municipal Yacht Harbor Fishing Pier and Restroom, City of New Orleans, LA. Gulf South performed the Geotechnical Investigation for the project, which consists of a new fishing pier and restroom building at the Municipal Yacht Harbor along the south shore of Lake Pontchartrain in New Orleans, LA. The restroom will be an elevated structure, approximately 700 square feet, and constructed on land. The pier will be approximately 300 to 400 feet in length and extend from shore into Lake Pontchartrain. The project involves field investigation, laboratory testing, and geotechnical engineering services. (\$42,070 (fee); 2023)

Bucktown Harbor New Dock and Loading Area, Metairie, Jefferson Parish, LA. Geotechnical engineering services for construction of a new dock and bulkhead at Jefferson Parish's Bucktown Harbor in Metairie, LA. Gulf South's scope includes drilling one boring to a depth of 50 feet below the ground surface and one boring in Lake Pontchartrain to a depth of 50 feet below mudline, laboratory testing, engineering analyses (allowable pile load capacities, slope stability, sheetpile wall analyses), and general construction procedures and recommendations. (\$10,500 (fee); 2022)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Joseph H. “Trey” Binder, III, ACI Laboratory Manager	
Project Assignment:	
Laboratory Manager; Laboratory Technician	
Name of Firm with which associated:	
<div style="display: flex; align-items: center;">  <div> ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants </div> </div>	
Years’ experience with this Firm:	
13 years (joined Gulf South in 2011); 13 years total (2011)	<i>Gulf South Engineering and Testing, Inc. 2011 to present</i> <i>Ardaman and Associates, Inc. 2007 to 2011</i> <i>Soil Testing Engineers, Inc. 2006 to 2007</i>
Education: Degree(s)/Year/Specialization:	
A.D., General Studies (2006; Nunez Community College)	
Active Registration: Year first registered/discipline:	
HAZMAT Awareness HAZMAT Operations Training ACI Aggregate Base Testing Technician ACI Concrete Strength Testing Technician	
Other experience and qualifications relevant to the proposed Project:	
<p>Trey Binder has direct experience with field and laboratory testing services. Mr. Binder’s field work includes soil inspection and testing consisting of nuclear density testing and soil boring logging, vibration monitoring, pile inspection, concrete testing and inspection, asphalt testing and inspection, and pavement coring. In the laboratory, Mr. Binder has performed soil laboratory testing consisting of unconfined compression strength tests, triaxial strength tests, Atterberg limits, organic content tests, moisture and density tests, Proctor compaction tests, sieve analyses, and sample extrusion.</p> <p>Tchefuncte Marsh Shoreline Protection Project: New Borrow Fill Area, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for shoreline protection along the Lake Pontchartrain coastline by construction of a rock dike (approximately 15,000 linear feet) and marsh fill area located east of the mouth of the Tchefuncte River in St. Tammany Parish, LA. Gulf South's scope includes drilling 14 borings within the lake, each to a depth of 40 feet below the water surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates. (\$90,000 (fee); 2021)</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Joseph H. "Trey" Binder, III, ACI (continued)**

Northshore Living Shoreline Protection, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for shore protection along the northshore of Lake Pontchartrain coastline in two areas by constructing rock dikes in St. Tammany Parish, LA. Gulf South's scope includes drilling 16 borings each to a depth of 30 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates. (\$65,000 (fee); 2023)


Bayou Des Allemands Gate, Upper Barataria Risk Reduction Program Segment 3, St. Charles Parish, LA. Geotechnical investigation for construction of a new swinging barge gate structure within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 2 at 120 ft., 1 at 100 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. One boring was performed over water; the remaining borings were performed over land. (\$145,885 (fee); 2021)

Highway 90 Tie-In Levee, Upper Barataria Risk Reduction Program Segment 4, St. Charles Parish, LA. Geotechnical investigation for construction of a new earthen levee within the flood protection/risk reduction system in St. Charles Parish, LA. Scope includes drilling undisturbed soil borings, CPT probes, lab testing, and engineering analyses (site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship), estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. (\$174,720 (fee); 2021)

Bayou Gauche/Sunset Levee - New Roller Gate, Upper Barataria Risk Reduction Program Segment 2, St. Charles Parish, LA. Geotechnical investigation for construction of a new roller gate and T-wall structures. Gulf South's scope includes drilling undisturbed soil borings (2 at 200 ft.), CPT probes (2 at 200 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, design levee lift stability, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. The borings and CPT were performed over water using barge-mounted equipment. (\$110,880 (fee); 2020)

Airline Highway Backwater Protection Project, St. John the Baptist Parish, LA. Geotechnical engineering services for the construction of a new water source infrastructure project between the Mississippi River (MSR; east bank) and railway just north of 5th street in LaPlace, LA. Proposed structures will consist of water intake structure, pump stations, pipeline crossing levee, below grade pipelines, and a pretreatment plant. Gulf South's scope includes permitting, clearing, drilling ten undisturbed soil borings below the ground surface, execution of laboratory testing, provision of engineering analyses (bearing values, bedding & backfills settlement, pile capacities, earth pressures, slope stability, cofferdam analyses, levee analyses) and establishing general construction procedures and recommendations. (\$55,000 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Eric A. Paille, C.E.T., ACI Construction Services Manager	
Project Assignment:	
Construction Services Manager	
Name of Firm with which associated:	
 ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants	
Years' experience with this Firm:	
13 years (joined Gulf South in 2011); 35 years total (1989)	<i>Gulf South Engineering and Testing, Inc. 2011 to present</i> <i>Ardaman and Associates, Inc. 2007 to 2011</i> <i>Soil Testing Engineers, Inc. 1988 to 2007</i>
Education: Degree(s)/Year/Specialization:	
High School Diploma	
Active Registration: Year first registered/discipline:	
<i>ACI-I Field Technician (since 1991; No. 929012)</i> <i>Certified Engineering Technician (since 1992)</i> <i>Nuclear Gauge Safety Training (since 1994; No. 061321)</i> <i>Pile Driving Analyzer/CAPWAP, OSHA 40 HAZWOPER</i>	
Other experience and qualifications relevant to the proposed Project:	
<p>Eric A. Paille, C.E.T., ACI, serves as Gulf South's Construction Services Manager as well as the manager of our Gonzales office. He has experience as a technician, inspector, and testing manager, and is knowledgeable in all aspects of construction materials testing and construction inspection. Mr. Paille has performed all applicable field and soil tests over the past 30+ years. In addition, he is certified in the safe use and handling of the nuclear density gauge. He received PDA training in 2003 and has knowledge of PDA testing along with significant experience with pile driving analyzers. Mr. Paille is one of the most knowledgeable people in our industry.</p> <p>Highway 90 Tie-In Levee, Upper Barataria Risk Reduction Program Segment 4, St. Charles Parish, LA. Geotechnical investigation for construction of a new earthen levee within the flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 3 at 75 ft.), CPT probes (6 at 75 ft.), lab testing, and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. (\$174,720 (fee); 2021)</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Eric A. Paille, C.E.T., ACI (continued)**

Marsh Island Wildlife Refuge Levee/Bulkhead Repairs (Louisiana DNR), Vermillion Bay, New Iberia, Iberia Parish, LA. Geotechnical investigation for various repairs to a dam, levee, and bulkhead at Marsh Island Wildlife Refuge in Iberia Parish, LA. Gulf South's scope of work includes drilling five soil borings each to a depth of 60 feet using marsh drilling equipment, laboratory testing, and geotechnical engineering services consisting of providing allowable soil bearing values, allowable pile capacities, bulkhead design parameters, slope stability analyses, estimates of settlement, and general construction recommendations. (\$51,250 (fee); 2014)


Proposed Estuary Mitigation Bank (EMB) GIWW - Deadend Canal, Vendome Canal, Hockey Stick Canal, Crown Point, Jefferson Parish, LA. Geotechnical investigation for construction of a new wetland restoration project near Crown Point, LA. Gulf South's scope includes drilling nine soil borings to depths of 15 and 40 feet in water and marsh, lab testing (including settlement column test), and geotechnical engineering analysis including estimates of settlement, time rate of settlement, borrow/fill ratios, and general construction recommendations. (\$26,500 (fee); 2016)

Marsh Island Restoration Project, Lafreniere Park, Metairie, Jefferson Parish, LA. Geotechnical investigation for construction of a new bulkhead wall around Marsh Island within Lafreniere Park in Metairie, LA. Gulf South's scope includes drilling two soil borings each to a depth of 30 feet on the island, lab testing, and geotechnical engineering analyses including sheetpile and/or retaining wall design parameters, earth pressures, and general construction procedures and recommendations. (\$5,000 (fee); 2017)

South Lafourche Levee District - Morganza to the Gulf (Reach K Mitigation Area), Lafourche Parish, LA. Geotechnical investigation for a wetlands mitigation project in Lafourche Parish, LA. Project consists of dredging various canals (totaling approx. 2.6 miles or 13,750 lf) and creating wetlands (approx. 40 acres). Gulf South's scope includes drilling 18 undisturbed soil borings to depths of 10 feet (12 borings in canals) and 30 feet (6 borings in fill area) below apparent mud line, lab testing (including consolidation tests & Settlement Column tests), and engineering analyses (inclusive of estimates of settlement, borrow/fill ratios, time rate settlement, slope stability analyses), and general construction recommendations. All borings were performed over water using barge and marsh buggy equipment. Analyses submitted, reviewed, and approved by the Louisiana Department of Natural Resources and the U.S. Army Corps of Engineers. (\$42,000 (fee); 2017)

Bayou Des Allemands Gate, Upper Barataria Risk Reduction Program Segment 3, St. Charles Parish, LA. Geotechnical investigation for construction of a new swinging barge gate structure within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 2 at 120 ft., 1 at 100 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. One boring was performed over water; the remaining borings were performed over land. (\$145,885 (fee); 2021)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Ian Kerner Poché, ACI Assistant Laboratory Supervisor	
Project Assignment:	
Assistant Laboratory Supervisor	
Name of Firm with which associated:	
<div style="display: flex; align-items: center;">  <div> ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants </div> </div>	
Years' experience with this Firm:	
7 years (joined Gulf South in 2017); Gulf South Engineering and Testing, Inc. 2017 to present 7 years total (2017)	
Education: Degree(s)/Year/Specialization:	
High School Diploma	
Active Registration: Year first registered/discipline:	
ACI Concrete Field Testing Technician - Grade 1 (exp 2028 03) ACI Aggregate Testing Technician - Level 1 (exp 2029 02 27)	
Other experience and qualifications relevant to the proposed Project:	
<p>Ian Poché has worked in Gulf South's laboratory for several years and has experience with virtually every type of soil test. He has also helped when needed in the CMT department and has concrete testing experience, and is an ACI-certified Concrete Field Testing Technician.</p> <p>Bayou Des Allemands Gate, Upper Barataria Risk Reduction Program Segment 3, St. Charles Parish, LA. Geotechnical investigation for construction of a new swinging barge gate structure within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 2 at 120 ft., 1 at 100 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. One boring was performed over water; the remaining borings were performed over land. (\$145,885 (fee); 2021)</p> <p>City of New Orleans Municipal Yacht Harbor Fishing Pier and Restroom, City of New Orleans, LA. Gulf South performed the Geotechnical Investigation for the project, which consists of a new fishing pier and restroom building at the Municipal Yacht Harbor along the south shore of Lake Pontchartrain in New Orleans, LA. The restroom will be an elevated structure, approximately 700 square feet, and constructed on land. The pier will be approximately 300 to 400 feet in length and extend from shore into Lake Pontchartrain. The project involves field investigation, laboratory testing, and geotechnical engineering services. (\$42,070 (fee); 2023)</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Ian Kerner Poché, ACI (continued)**

Geotechnical Exploration Proposal (LED Site Certification), Port of Terrebonne, Houma, LA. Geotechnical services regarding LED Certification for a 35-acre site along Rome Woodard Drive for the Port of Terrebonne in Houma, Drilled undisturbed soil borings. Geotechnical laboratory testing performed in accordance with ASTM standards, and includes strength tests (unconfined and/or triaxial), classification tests (Atterberg Limits and/or particle size), and other testing as appropriate. Geotechnical evaluation includes subsoil conditions, allowable soil bearing values, allowable pile load capacities, settlement estimates, and general construction procedures & recommendations. (\$5,900 (fee); 2024)

Improvements to Sewer Lift Station M-11-3 (13th & Farrington) and Force Main, Marrero, Jefferson Parish, LA. Gulf South provided the materials testing and inspection during construction. Gulf South's scope of services included vibration monitoring, bedding and backfill testing, compaction/density tests, and concrete testing and inspection. (\$15,000 (fee); 2019)


Lake Cataouatche Drainage Pump Station Replacement (Chighizola Lane), Grand Isle, Jefferson Parish, LA. Geotechnical engineering services for the construction of a replacement Lake Cataouatche drainage pump station at the end of Chighizola Lane in Grand Isle. Gulf South's scope includes drilling one undisturbed soil borings to a depth of 80 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Pump station is close to a USACE floodwall so coordination and geotechnical engineering analyses were required to show the new pump station would not adversely affect the integrity of the floodwall. (\$7,500 (fee); 2020)

Lift Station F-8-3 Replacement, Metairie, Jefferson Parish, LA. Geotechnical engineering services for the construction of a new lift station to replace the existing Jefferson Parish lift station (LS F-8-3) station off West Esplanade Avenue (between Houma Boulevard and Hudson Street) in Metairie, LA. Gulf South's scope includes drilling a single undisturbed soil boring to a depth of 100 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. (\$8,500 (fee); 2020)

Ole Miss Sewer Force Main, City of Kenner, LA. Geotechnical engineering services for the construction of a new sewer force main along Ole Miss Drive from the John Hopkins Lift Station to 35th Street within Kenner, LA. The force main will be 10-inches in diameter, approximately 2,100 linear feet, and installed 10 to 15 feet deep via directional drilling. Gulf South's scope includes drilling four undisturbed soil borings to depths of 20 feet below the ground surface, laboratory testing, engineering analyses (including soil bearing values, bedding & backfill, and settlement) and general construction procedures and recommendations. (\$8,000 (fee); 2021)

Lift Station Upgrade (24th St. and Delaware Ave.), City of Kenner, LA. Geotechnical engineering services for construction of a new generator pad and wet well located at 24th Street and Delaware Avenue in Kenner, LA. Gulf South's scope of services includes drilling two borings to a depths of 70 feet (1 boring for wet well) and 50 feet (1 boring for generator pad) below the ground surface, laboratory testing, engineering analyses (soil bearing values, pile capacities, bedding & backfill, and estimates of settlement) and general construction procedures and recommendations. (\$7,500 (fee); 2022)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Brandon A. Paille, ACI Construction Materials Testing (CMT) Supervisor/Project Manager	
Project Assignment:	
Construction Materials Testing (CMT) Supervisor/Project Manager	
Name of Firm with which associated:	
<div style="display: flex; align-items: center;">  <div> ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants </div> </div>	
Years' experience with this Firm:	
5 years (2012-2016; 2023 to present); 14 years total (2010)	<i>Gulf South Engineering and Testing, Inc. 2023 to present</i> <i>Ascension Parish Sheriff's Office 2016 to 2023</i> <i>Gulf South Engineering and Testing, Inc. 2012 to 2016</i> <i>Ardaman and Associates, Inc. 2010 to 2012</i>
Education: Degree(s)/Year/Specialization:	
<i>High School Diploma</i>	
Active Registration: Year first registered/discipline:	
APNGA Nuclear Gauge Safety ACI Field Technician Level 1 OSHA Safety Training – 8 hr.	
Other experience and qualifications relevant to the proposed Project:	
<p>Brandon A. Paille, ACI has performed soil laboratory testing consisting of unconfined compression strength tests, triaxial strength tests, hydrometers, Atterberg limits, organic contents, moisture contents, proctor compaction tests, sieve analyses, as well as extrusion of samples. Mr. Paille's field experience includes soil inspection and testing consisting of nuclear density testing, soil boring logging, concrete testing and inspections, timber and precast pile logging and vibration monitoring. In Mr. Paille's years in the construction materials testing industry, he has obtained a vast amount of knowledge and experience which makes him an integral part of our Gulf South Team.</p> <p>Bayou Sauvage Water Control Pipe Replacement, U.S. Wildlife & Fisheries, New Orleans, LA. Geotechnical investigation for drainage pipe replacement at 2 sites for the U. S. Fish and Wildlife in New Orleans, LA. New drainage pipes will be 6 feet in diameter. Drill 1 boring to 20 feet in depth at each site and perform laboratory testing and geotechnical engineering analyses consisting of allowable soil bearing values, bedding and backfill recommendations, estimates of settlement, and general construction recommendations. (\$3,500 (fee); 2012)</p> <p>Bucktown Paddlers Launch, Metairie, Jefferson Parish, LA. Gulf South provided construction materials testing and inspection during construction of the project. Gulf South's scope of work includes building earthwork, paving & concrete, concrete testing, soil density tests, pile inspection and modeling, and vibration monitoring. (\$15,000; 2023)</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Brandon A. Paille, ACI (continued)**

Bonanza Pump Station Flood Protection, Houma, Terrebonne Parish, LA. Geotechnical investigation for replacement of an existing bulkhead at Terrebonne Parish's Bonanza Pump Station in Houma, LA. Gulf South's scope of work included performing a soil boring to a depth of 80 feet, laboratory testing, and geotechnical engineering analyses consisting of bulkhead design parameters (tip depth, bending moment, anchor force, etc.), and general construction recommendations. (\$4,500 (fee); 2013)

Casing Installation - 40 Arpent Canal Floodwall, Chalmette, St. Bernard Parish, LA. Geotechnical investigation for casing installations at 40 Arpent Canal floodwall in Chalmette, LA. Casings installed to perform sonic tests to determine sheet pile lengths. Casings installed to depths of 40 to 60 feet below the ground surface and within 15 feet of the existing sheet pile. (\$18,900 (fee); 2014)

Bonnabel Boat Launch Ramp Replacement, Jefferson Parish, LA. Geotechnical investigation for improvement/replacement of the existing boat ramps at the Bonnabel Boat Launch in Metairie, LA. The expansion consists of 3 (50'x60') pile supported concrete ramps. Scope of work included drilling two (2) soil borings to a depth of 60 feet each and providing laboratory testing, and geotechnical engineering analysis consisting of pile load capacities, estimates of settlement, and general construction recommendations. (\$4,000 (fee), 2014)

Drainage System Engineering Analysis – CCTV Drain Line Inspections, City of New Orleans, LA. Project management and oversight of cleaning/flushing and inspection of sewer drainage pipelines in New Orleans, LA. Gulf South oversaw field operations and coordinated project phases with subcontractors. Subcontractor's inspection methods will utilize CCTV camera equipment to record drain line data. During post processing phase, all data was compiled and consolidated to create a digital database of the drain line information. (\$20,000 (fee); 2014)

New Pump/Lift Station, Airline Park Boulevard at West Metairie Avenue, Jefferson Parish, LA. Geotechnical investigation for a new pump/lift station for Jefferson Parish near the intersection of Airline Park Blvd. and W. Metairie Avenue. Scope of work consisted of performing one soil boring to 50 feet, laboratory testing, and geotechnical engineering analyses consisting of allowable soil bearing values, bedding and backfill recommendations, estimates of settlement, and general construction recommendations. (\$5,000 (fee); 2013)

Taft Park Drainage Improvements, Jefferson Parish, LA. Perform inspection and testing during construction of various drainage improvements at Taft Park. Scope of services provided by Gulf South included asphalt and/or concrete testing and inspection, field density tests, on-site inspection and documentation, and laboratory testing. (\$25,000 (fee); 2015)

Water Sampling in Mobile Bay, U.S. Coast Guard – Aviation Training Center, Mobile, AL. Surface water sampling in Mobile Bay at 3 locations, 2 times per month for period of 1 year. Samples were tested for Enterococci, Organic Carbon, and TSS. Gulf South reported every event as well as summarized every 3 months of sampling, and further compared results to EPA thresholds. Report rainfall levels were noted 3 days prior and after sampling. (\$33,000 (fee); 2012)

TEC Professional Services Questionnaire

- L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this project. Please include and all work performed for Jefferson Parish. Please attach additional pages if necessary.**

PROJECT NO. 1

Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:
Tchefuncte Marsh Shoreline Protection Project: New Borrow Fill Area, Lake Pontchartrain, St. Tammany Parish, Louisiana Volkert, Inc. 9448 Brookline Ave Baton Rouge LA 70809 Matt Salmon, 225-218-9440 matt.salmon@volkert.com	Geotechnical engineering services for shoreline protection along the Lake Pontchartrain coastline by construction of a rock dike (approximately 15,000 linear feet) and marsh fill area located east of the mouth of the Tchefuncte River in St. Tammany Parish, LA. Gulf South's scope includes drilling 14 borings within the lake, each to a depth of 40 feet below the water surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates.
Completion Date (Actual or estimated:)	Estimated Cost:
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> Entire Project: N/A </div> <div style="text-align: center;"> Work for which Firm was Responsible: \$90,000 (fee) </div> </div>
December 2021	

PROJECT NO. 2

Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:
Proposed Estuary Mitigation Bank (EMB) GIWW - Deadend Canal, Vendome Canal, Hockey Stick Canal, Crown Point, Jefferson Parish, Louisiana The Natural Resources Investment Group, LLC 3801 Woodland Heights Rd Ste 110 Little Rock AR 72217 Robert Stainton III, PE, 501-716-2884 robert@tnrig.com	Geotechnical investigation for construction of a new wetland restoration project near Crown Point, LA. Gulf South's scope includes drilling nine soil borings to depths of 15 and 40 feet in water and marsh, lab testing (including settlement column test), and geotechnical engineering analysis including estimates of settlement, time rate of settlement, borrow/fill ratios, and general construction recommendations.
Completion Date (Actual or estimated:)	Estimated Cost:
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> Entire Project: N/A </div> <div style="text-align: center;"> Work for which Firm was Responsible: \$26,500 (fee) </div> </div>
October 2016	

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Northshore Living Shoreline Protection, Lake Pontchartrain, St. Tammany Parish, Louisiana</p> <p>Barowka & Bonura Engineers 209 Canal Street Metairie LA 70005</p> <p>Jeff Bonura, P.E., 504-828-0030 jbonura@bbecllc.com</p>	<p>Geotechnical engineering services for shore protection along the northshore of Lake Pontchartrain coastline in two areas by constructing rock dikes in St. Tammany Parish, LA. Gulf South's scope includes drilling 16 borings each to a depth of 30 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
February 2023	N/A	\$65,000 (fee)

PROJECT NO. 4		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Marsh Island Wildlife Refuge Levee/ Bulkhead Repairs (Louisiana DNR), Vermillion Bay, New Iberia, Iberia Parish, Louisiana</p> <p>Royal Engineers & Consultants, LLC 3909 Ambassador Caffery Pkwy. Lafayette LA 70503</p> <p>Beau Tate, 337-456-5351 btate@royalengineering.net</p>	<p>Geotechnical investigation for various repairs to a dam, levee, and bulkhead at Marsh Island Wildlife Refuge in Iberia Parish, LA. Gulf South's scope of work includes drilling five (5) soil borings each to a depth of 60 feet using marsh drilling equipment, laboratory testing, and geotechnical engineering services consisting of providing allowable soil bearing values, allowable pile capacities, bulkhead design parameters, slope stability analyses, estimates of settlement, and general construction recommendations.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2015	N/A	\$51,250 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Tchefuncte Marsh Shoreline Protection - New Rock Dikes, Lake Pontchartrain, St. Tammany Parish, Louisiana Principal Engineering, Inc. 1011 North Causeway Blvd, Suite 19 Mandeville LA 70471 Andre Monnot, P.E., 985-624-5001 andre@pi-aec.com	Geotechnical engineering services for the shore protection along Lake Pontchartrain coastline by constructing a rock dike at Tchefuncte Marsh in St. Tammany Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (18 at 30 ft) in Lake Pontchartrain, laboratory testing (including consolidation tests), engineering analyses (bearing values, settlement, slope stability, construction procedures & recommendations). The project utilized shallow-draft barge equipment.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2020	N/A	\$65,000 (fee)

PROJECT NO. 6		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Highway 90 Tie-In Levee, Upper Barataria Risk Reduction Program (UBRR) Segment 4, St. Charles Parish, Louisiana Lafourche Basin Levee District 21380 Highway 20 Vacherie LA 70090 Donald Ray Henry, 225-265-7545 drhenry@lbld.us.com	Geotechnical investigation for construction of a new earthen levee within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 3 at 75 ft.), CPT probes (6 at 75 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
January 2021	N/A	\$174,720 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Marsh Island Restoration Project, Lafreniere Park , Metairie, Jefferson Parish, Louisiana Mathes Brierre Architect 201 St. Charles Street, Suite 4100 New Orleans LA 70170-4100 Scott Evans, AIA , 504-586-9303 sevans@mathiesbrierre.com	Geotechnical investigation for construction of a new bulkhead wall around Marsh Island within Lafreniere Park in Metairie, LA. Gulf South's scope includes drilling two soil borings each to a depth of 30 feet on the island, lab testing, and geotechnical engineering analyses including sheetpile and/or retaining wall design parameters, earth pressures, and general construction procedures and recommendations.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2017	N/A	\$5,000 (fee)

PROJECT NO. 8		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Bayou Des Allemands Gate, Upper Barataria Risk Reduction (UBRR) Program Segment 3 , St. Charles Parish, Louisiana Lafourche Basin Levee District 21380 Highway 20 Vacherie LA 70090 Donald Ray Henry , 225-265-7545 drhenry@lbld.us.com	Geotechnical investigation for construction of a new earthen levee within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 3 at 75 ft.), CPT probes (6 at 75 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
February 2021	N/A	\$145,885 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Engineering Analysis Review (EAR) - Lafitte Tidal Protection Project (Phase I), Lafitte, Jefferson Parish, Louisiana G&S Engineering, LLC Post Office Box 71 Mandeville LA 70470 Scott Gros, 504-744-0630 scottgros@gmail.com	Engineering analysis review of alternative pile type/size recommendations (provided by Client) for drainage structure site in Jefferson Parish, near Lafitte, LA. Gulf South's scope includes engineering analysis consisting of LPILE analysis and general construction recommendations.	
Completion Date (Actual or estimated:)	Estimated Cost:	
June 2016	Entire Project:	Work for which Firm was Responsible:
June 2016	N/A	\$5,000 (fee)

PROJECT NO. 10		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Laketown Boat Launch Improvements - New Rock Jetty, South Shore Lake Pontchartrain, City of Kenner, Jefferson Parish, Louisiana Jefferson Parish 1221 Elmwood Park Blvd Ste 310 Jefferson LA 70123 Michelle M. Gonzales, CFM, 504-736-6653 mgonzales@jeffparish.net	Geotechnical engineering services for the construction of a rock jetty dike and boat launch protection along the Lake Pontchartrain shoreline at the Laketown Boat Launch in Kenner. Gulf South's scope includes drilling undisturbed soil borings (two at 50 ft bgs), laboratory testing, engineering analyses and general construction procedures and recommendations. One boring was drilled within Lake Pontchartrain (using barge-mounted drilling equipment) and one boring was drilled on land.	
Completion Date (Actual or estimated:)	Estimated Cost:	
January 2021	Entire Project:	Work for which Firm was Responsible:
January 2021	N/A	\$21,500 (fee)

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1.	<div>Gulf South Engineering and Testing, Inc. is not currently, nor has it previously been involved, in litigation with Jefferson Parish.</div>	
2.		
3.		
4.		

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.



ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

CRITERIA 1 | PROFESSIONAL TRAINING AND EXPERIENCE

Gulf South Engineering and Testing, Inc. (Gulf South) is a geotechnical engineering and construction materials testing and inspection company which began operations in 2011. Since that time, we have grown to two offices and nearly three dozen employees.

Gulf South provides a broad range of geotechnical related services, completing more than 100 geotechnical engineering projects and 300 construction materials testing and inspection projects each year. These projects typically include soil borings (shallow and deep borings), laboratory testing (AASHTO, ASTM methods, etc.), soil classification (USCS), geotechnical engineering, and construction material testing and field inspection.

Gulf South is a woman-owned, Hudson Initiative-certified small entrepreneurship in Louisiana. Our laboratory is AASHTO and CCRL certified and USACE validated.

Geotechnical Engineering Services

Gulf South's ownership and senior management have decades of combined experience in the profession and have completed thousands of projects. One of Gulf South's Principals, Chad M. Poché, P.E., a founding principal and Professional Engineer registered in Civil Engineering in Louisiana and Mississippi, has specific and extensive training & experience in geotechnical engineering. He has three decades of experience in planning, administering, and conducting geotechnical investigations.

TEC Professional Services Questionnaire

N. continued.

The firm has specific engineering experience and training in **Geotechnical Engineering, Foundation Design, and Geology & Geohydrology**; our staff has extensive experience in all aspects of soil mechanics and geotechnical engineering with specific knowledge in the following areas:

- Shallow and deep foundations (piles, shafts, augercast, screw/anchor piles)
- Deep excavations, cofferdams, retaining walls
- Levees and soft ground construction; slope stability & seepage
- Earthwork; settlement analyses
- Shoreline protection
- Scour analyses
- LRFD Design
- Mechanically Stabilized Earth (MSE) Walls
- Development of load test programs
- Geotechnical instrumentation and construction monitoring
- Canals and pump station foundations
- Pipe bedding and backfill
- Roadways, bridges, pavements

Field Investigation Services

Gulf South owns truck mounted (ARDCO C-1000) and track mounted (ARDCO SD 350) drilling rigs with associated and appurtenant support equipment (water trucks and buggy). Our equipment and crews are capable of drilling soil borings to depths of up to 300 feet and installing monitor wells, piezometers, and inclinometers. We can also perform CPT soundings, geoprobe borings, and field testing at any site. Our staff has extensive experience in planning, oversight, and direction of field investigations.

Laboratory Testing Services

Gulf South's laboratory is equipped to serve the specific needs of our clients and managed by trained and experienced personnel. All testing is performed in accordance with ASTM, AASHTO, and/or other approved procedures. Gulf South routinely performs soil and concrete strength testing (unconfined and triaxial), soil classification tests (Atterberg limits, moisture content, density, particle size), soil and aggregate sieves, organic content, pH, soil resistivity, and moisture/density relationships (Proctor tests). Gulf South's laboratories are managed by full time, experienced, managers and staff. Further, Gulf South's Kenner laboratory is AASHTO and CCRL certified and USACE validated.

Construction Materials Testing & Inspection

Gulf South provides a full range of construction materials testing & inspection services for structures, earthwork, foundations, pipelines, and pavements. The range of services provided includes:

- Fill and base compaction and density testing
- Vibration monitoring
- Pre- and post-construction inspection

TEC Professional Services Questionnaire

N. continued.

- Concrete testing and inspection
- Soil testing (field and laboratory)
- Asphalt testing
- Pile (driven & augercast) and shaft installation monitoring
- Load tests
- Earthwork/proof roll inspection
- Welding inspection
- Steel inspection
- Noise monitoring
- Prepare daily field reports and/or field books
- Maintain records per the client's directive

We have provided construction testing & oversight for projects as small as a house pad to as large as the **\$1.2 billion Louis Armstrong New Orleans International Airport North Terminal** project.

Please refer to our projects included in Item L and in our personnel listings in Item K for specific type project examples and an overview of our professional experience with this project type.

CRITERIA 2 | SIZE OF FIRM

At over 30 employees, Gulf South has the appropriate number of employees and personnel for this project. We will complete our scope of services on time and within budget. Further said, Gulf South can readily meet the time and budget constraints for projects assigned to this contract. Our current workload is such that we can expeditiously complete projects for this contract.

CRITERIA 3 | CAPACITY FOR TIMELY COMPLETION

Activity is dependent on the scope of work as well as site access and conditions, however; typically soil borings can be started within one week of receiving notice to proceed with a final product delivered within 3 to 4 weeks of completing the borings. Gulf South's workload & scheduling, coupled with our headquarters being nearby, will allow for assignment of key personnel shortly after any project is assigned.

CRITERIA 4 | PAST PERFORMANCE ON PARISH CONTRACTS

Gulf South has worked both directly and indirectly for various Jefferson Parish Departments (Public Works, Engineering Department, Drainage Department, Jefferson Parish School Board, etc.) throughout our history. Beyond the projects included within this form, additional project information (including listings, background, & client contacts) are available upon request. We have also completed similar services for Public and Private concerns throughout the region.

CRITERIA 5 | LOCATION OF THE PRINCIPAL OFFICE

Gulf South Engineering and Testing has been headquartered in Jefferson Parish since beginning operations in 2011; our principal office is located in Jefferson Parish at 15 Veterans Memorial Boulevard in Kenner. We also maintain an office in Gonzales, LA.

TEC Professional Services Questionnaire

N. continued.

CRITERIA 6 | LEGAL STATEMENT

As stated in Item M, Gulf South has had no litigation, past or present, with Jefferson Parish, nor any of our clients.

CRITERIA 7 | PRIOR SUCCESSFUL COMPLETION OF PROJECTS

The Principals and key employees of Gulf South have many years of applicable experience in working for and with Government Agencies and private industry. Founding principal and Executive Vice President of Gulf South, Chad M. Poché, P.E., has been a practicing registered geotechnical engineer in South Louisiana since 1998. He has specialized training and experience in geotechnical engineering throughout Louisiana.

As evidenced in the provided projects and personnel résumés, key personnel experience includes the completion of thousands of projects in the region throughout their careers for a broad range of clients, including both the government and private sectors. We can submit data in formats acceptable and customized to our clients' needs.

Gulf South invites you to contact any of our clients for a candid discussion of our service and professionalism, and offer these direct references:

Neil Schneider, CCM, P.E., Director, Capital Projects, Jefferson Parish
(504-736-6783 | JPPW@jeffparish.net)

Ben Lepine, Acting Director, Drainage Department, Jefferson Parish
(504-736-6751 | JPDrainage@jeffparish.net)

Angela DeSoto, P.E., Director, Engineering Department, Jefferson Parish
(504-736-6511 | ADeSoto@jeffparish.net)

Mark R. Drewes, P.E., Director, Public Works Department, Jefferson Parish
(504-736-6783 | JPPW@jeffparish.net)

Michael B. Cooper, Parish President, St. Tammany Parish
(985-898-2362 | president@stpgov.org)

Joey Tureau, Director of Transportation, Ascension Parish
(225-450-1013 | jtureau@apgov.us)

José A. Gonzales, CAO, City of Kenner
(504-468-4090 | jgonzalez@kenner.la.us)

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: _____

Print Name: Chad M. Poché, P.E.

Title: Executive Vice President

Date: June 25, 2024



Section VI

BFM Corporation

Hydrographic Surveying

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

As-Needed Parish-Wide

Coastal Engineering Consulting Services

SOQ **24-020** | Resolution No. **144205**

B. Firm Name & Address:



BFM Corporation, LLC

15 Veterans Memorial Boulevard | Kenner LA 70062

C. Name, title, and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

Ralph P. Fontcuberta, Jr., PLS, Executive Vice President

504-468-8800 | 504-468-8800 cell | ralph@bfmcorporation.com

Registered Professional Land Surveyor (**Louisiana No. 4329; since 1974**)

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline:

Ralph P. Fontcuberta, Jr., PLS, Executive Vice President

504-468-8800 | 504-468-8800 cell | ralph@bfmcorporation.com

Registered Professional Land Surveyor (**Louisiana No. 4329; since 1974**)

E. Please provide the number of employees whose primary function corresponds with each category:

<u>4</u>	Administrative	<u> </u>	Estimators	<u> </u>	Specification Writers
<u> </u>	Architects (Licensed)	<u> </u>	Geologists	<u> </u>	Structural Engineers
<u> </u>	Chemical Engineers	<u>1</u>	Geotechnical Engineers	<u> </u>	Graduate Engineers
<u> </u>	Civil Engineers	<u> </u>	Interior Designers	<u>2</u>	Project Managers
<u> </u>	Construction Inspectors	<u> </u>	Landscape Architects	<u> </u>	Clerical (<i>see Administrative</i>)
<u> </u>	Ecologists	<u>1</u>	Land Surveyor (<i>Apprentice</i>)	<u> </u>	Grant/Funding Specialist
<u> </u>	Electrical Engineers	<u> </u>	Mechanical Engineers	<u> </u>	Sanitary Engineers
<u> </u>	Engineer Intern	<u> </u>	Environmental Engineers	<u>1</u>	<i>Researcher/Archivist</i>
<u>2</u>	Professional Land Surveyors	<u> </u>		<u>3</u>	<i>CADD Technicians</i>
				<u>6</u>	<i>Survey Crew Chief</i>
				<u>6</u>	<i>Survey Crew Instrumentman</i>
				<u>26</u>	TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES NO X

If marked "no", skip to Section I. If marked "yes", complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.		
1. N/A		
2.		
H. Has this JOINT-VENTURE previously worked together? Please check: YES _____ NO _____ N/A		
I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.		
Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. N/A		
2.		
3.		
J. Please specify the total number of support personnel that may assist in the completion of the Project: 26 (all personnel will be available for assignment to the project)		

TEC Professional Services Questionnaire

- K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e., résumé) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.**

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Ralph P. Fontcuberta, Jr., PLS

Executive Vice President / Registered Professional Land Surveyor

Project Assignment:

Registered Professional Land Surveyor

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

42 years (Founding Principal of BFM in 1982); Gulf South Engineering and Testing, Inc. | 2017 to present
57 years total (1967) BFM Corporation, LLC | 1982 to present
Surveys, Inc. | 1967 to 1982
The Boeing Company | 1964 to 1967

Education: Degree(s)/Year/Specialization:

2 yr, Building Trade Curriculum, Delgado, New Orleans
2 yr, Mathematics Curriculum, University of New Orleans

Active Registration: Year first registered/discipline:

1974 / Professional Land Surveyor (Louisiana No. 4329)
1974 / Professional Land Surveyor (Mississippi No. 1633)

Other experience and qualifications relevant to the proposed Project:

Ralph P. Fontcuberta, Jr., PLS has provided services on an almost incalculable number of surveying projects throughout southeastern Louisiana in the past half century and has been a registered Professional Land Surveyor (PLS) since 1974. He is thoroughly knowledgeable in all aspects of surveying: topographic, hydrographic, boundary, right-of-way surveying, and all facets thereof. He has provided surveying services for residential, plant, and industrial layout projects, ranging from small private lots & buildings to multi-million-dollar programs, including the New Orleans FEMA Streets/Recovery Roads Program. Since the beginning of his career, his work has entailed computations, drafting, and field work for various industrial, commercial, municipal, and private clients.

Project work has included topographic surveying needed for a wide variety of engineering, architectural, construction, and other related endeavors. This has included projects for numerous branches of virtually every regional city/parish/town government, multiple State agencies (LA Dept. of Natural Resources (LADNR), Coastal Protection & Restoration Administration (CPRA), LA

TEC Professional Services Questionnaire

Other experience and qualifications: **Ralph P. Fontcuberta, Jr., PLS (continued)**

Dept. of Transportation & Development (LADOTD), MS Dept. of Transportation (MDOT), and others), Federal agencies (U.S. Army Corps of Engineers (USACE), Dept. of the Navy, etc.), private/public companies (Entergy, BellSouth, Cox Cable, etc.), and numerous other public/private entities.

Mr. Fontcuberta's surveying experience with Jefferson Parish can be traced back to BFM's inception in 1982, and to 1967 then while working as a surveyor with another firm. He has over half a century of experience with surveying throughout the region and specifically with Jefferson Parish. He has served as the PLS for projects throughout every corner of Jefferson Parish. Relevant project history includes, but is certainly not limited to, the following:

- Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, LA
- Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, LA
- The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, LA
- Abita River Regional Detention Pond Expansion, St. Tammany Parish, LA
- Tchefuncte Marsh Shoreline Protection Project (Magnetometer & Hydrographic Survey), St. Tammany Parish, LA
- Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, LA
- Fisher Basin Alignment Extension (Fisher/Lafitte Tidal Protection Alignment), Jefferson Parish, LA
- Marsh Island (Lafreniere Park), Metairie, Jefferson Parish, LA
- Alexis Bay Marsh Creation Project, Venice, Plaquemines Parish, LA
- Bayou Segnette Topographic Survey, Westwego, Jefferson Parish, LA
- Trapp Canal Improvements, Bayou Fatma to Bayou Barataria, Jefferson Parish, LA
- Grand Isle State Park Breakwater Survey for Erosion, Jefferson Parish, LA
- Lower Lafitte Shoreline Stabilization at Bayou Rigolets, Segments AU1 and AU5, Jefferson Parish, LA
- Elmer's Island Surveying Services, Grand Isle, Jefferson Parish, LA
- Grand Isle Jetty Project, Grand Isle, Jefferson Parish, LA
- Fifi Island Restoration Extension, Jefferson Parish, LA
- Hydrographic Survey of the Mississippi River Range Line 1-9, Westwego, Jefferson Parish, LA
- Bayou Segnette Fronting Protection/New Pump Station, Westwego, Jefferson Parish, LA
- Lake Pontchartrain LPV149 - Caernarvon Canal Floodwall Construction Layout Survey, St. Bernard/Plaquemines Parish, LA
- Tchefuncte River Area Surveys, Tchefuncte River, LA
- Multibeam Hydrographic Survey, Pelican Island, Plaquemines Parish, LA
- SLFPA-E Levee Certification Phase 2 Survey - 40 Arpent & Maxent Levees, Orleans & St. Bernard Levee Systems, Orleans Parish, LA
- Forested Ridge Reach B-2, Fort Jackson to Venice, Plaquemines Parish, LA
- Bayou Sale Shoreline Protection Project (TV-20), Terrebonne Parish, LA
- Bayou Henderson, Ascension Parish, LA

TEC Professional Services Questionnaire

Other experience and qualifications: **Ralph P. Fontcuberta, Jr., PLS (continued)**

- LPV 107 Lincoln Beach Levee & Gate, Orleans Parish, LA
- Lac Des Allemands Shoreline Protection & Restorations, St. John the Baptist Parish, LA
- Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, LA
- Hydrographic/Reclamation Monitoring at Multiple Sites, Terrebonne Parish, LA
- Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 4, St. Charles Parish, LA
- Lake Pontchartrain Shoreline Projection and Enhancement Design Survey, St. Charles Parish, LA
- Louisiana DNR 2503-00-40; Bathymetric Surveying for Lake Borgne at Shell Beach (PO-30), LA
- Lincoln Beach Restoration, Orleans Parish, LA
- Goose Bayou Ridge Creation and Shoreline Protection Project, Goose Bayou at Cypress Bayou, LA
- Barataria Bridge, Jonathan Davis Wetland Restoration, LA
- USCG Belmont Ranges, St. James Parish, Gramercy, LA
- Barataria Basin Landbridge Shoreline Protection, LA
- Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 1, St. Charles Parish, LA
- Walnut Street, Orleans Street, and Oak Park Pond, St. Tammany Parish, LA
- Central Wetlands Unit and 40 Arpent Canal Access & Enhancement Project, St. Bernard Parish, LA
- WBV-MRL 4.1, English Turn Bend to Belle Chasse, Plaquemines Parish, LA
- Plaquemines Parish Coastal Restoration, Plaquemines Parish, LA
- Louisiana DNR 2503-00-40; Violet Canal - South of Chalmette on LA 46, St. Bernard Parish, LA
- Naomi Siphon Outfall Management (BA-03C) and Barataria Bay Waterway East Bank Protection (BA-26), LA
- WBV-MRL 6.1, Parish Line to English Turn Bend, Orleans & Plaquemines Parishes, LA
- USA Right-of-Way Line, Intracoastal Waterway in Belle Chasse, Plaquemines Parish, LA
- Shrimp Factory Alternative Site, SE Louisiana Flood Protection Authority - East, St. Bernard Parish, LA
- Rigolets Shoreline Protection Development, Third District, Orleans Parish, LA
- Deer Island Pass, St. Mary Parish, LA
- Fort Pike (State Historic Site), Slidell, St. Tammany Parish, LA
- Cat Island Restoration Project, Plaquemines Parish, LA
- Bayou Dupre Flood Gate, St. Bernard Parish, LA
- Black Bayou Surveying Services, Lake Charles, Calcasieu Parish, LA
- Bayou St. John Hydrographic Survey, New Orleans, LA
- Port of Manchac Soundings, Lake Pontchartrain, Manchac, Tangipahoa Parish, LA
- Tiger Pass Hydrographic Survey, Venice Boat Harbor Road, Belle Chasse, LA
- Intracoastal Waterway Cross Sections (including Engineers Road), Belle Chasse, Plaquemines Parish, LA
- Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 2, Lafourche Parish, LA

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Chad M. Poché, P.E.

Executive Vice President / Registered Professional Geotechnical Engineer

Project Assignment:

Engineering Liaison

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

7 years (became partial owner of BFM in 2017);
31 years total (1993)

BFM Corporation, LLC | 2017 to present
Gulf South Engineering and Testing, Inc. | 2011 to present
Ardaman and Associates, Inc. | 2007 to 2011
Soil Testing Engineers, Inc. | 2001 to 2007
Eustis Engineering | 1996 to 2001
Soil Testing Engineers, Inc. | 1993 to 1996

Education: Degree(s)/Year/Specialization:

M.S., 1998, Civil Engineering, University of New Orleans
B.S., 1993, Civil Engineering, Louisiana State University

Active Registration: Year first registered/discipline:

1998, Civil Engineer (Louisiana No. 27667)
2002, Civil Engineer (Mississippi No. 15405)

Other experience and qualifications relevant to the proposed Project:

Chad M. Poché, P.E. is an Executive Vice President with (and partial owner of) BFM Corporation, LLC, and a co-founder of BFM's sister company, Gulf South Engineering and Testing, Inc. He has been a consulting geotechnical engineer for nearly 30 years in South Louisiana, working on traditional and unique geotechnical engineering projects (shallow and deep foundation design, slope stability, pavement design, etc.). Mr. Poché has also provided construction oversight for waste facilities and virtually every type of earthwork related project. He has been the geotechnical engineer of record for thousands of projects throughout his career.

Mr. Poché's experience includes the development of appropriate scopes of work and proposals for a broad range of projects; planning and coordinating analyses; preparing technical reports; foundation and geotechnical engineering design; construction recommendations; Miss. River facility permitting; managing personnel and office operations, and; serving as an Expert Witness. Mr. Poché has logged soil borings; overseen the installation of ground water monitoring wells, piezometers, and inclinometers; overseen and evaluated pile load tests; overseen, performed, and evaluated dynamic pile testing (PDA and PIT); performed CMT field testing and inspection; and performed laboratory testing.

TEC Professional Services Questionnaire

Other experience and qualifications: **Chad M. Poché, P.E. (continued)**

Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. Scope included establishing three static GPS observation points at major turns on the levee to ensure baseline is constrained to State Plane Coordinates; BFM also established a baseline along the centerline of the existing earthen levee (referenced to NAD 1983 2011). BFM set vertical control Temporary Benchmarks (TBM) which were referenced to horizontal control points (NAVD 1988 Geoid 12B). Plotted a cross section depicting the ground, edge of water, top and toe of earthen levee, and levee centerline at typical widths of 100 feet. Located visible above-ground utilities as well as underground utilities with visible surface evidence (where available, BFM obtained record drawings from relevant agencies to further plot utilities), as well as existing wall, center of pumps, and discharge pipes at the existing pump station. Trees and large shrubbery & etc. were located and described. Existing improvements (such as sheds, piers, and buildings) and trees were included in general location surveying. Deliverables included hardcopy, PDF, and AutoCAD DWG files. (\$150,000 (fee); 2018)

The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, LA. BFM provided Boundary and Route Topographic & Hydrographic Surveying for the project in Ascension Parish, LA; as established, the project was executed in two phases. BFM executed a Route Topographic Survey; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. (\$477,340 (fee); 2023)

Tchefuncte Marsh Shoreline Protection Project (Magnetometer & Hydrographic Survey), St. Tammany Parish, LA. BFM provided Magnetometer & Hydrographic surveying services for the Tchefuncte Marsh Shoreline Protection Project. Prior to field work, BFM reviewed the Prime's design work plan (September 2021), reviewing existing and previous CPRA projects to identify previously permitted and approved marsh fill borrow areas in Lake Pontchartrain within 6 miles of the project's area. The scope of services included conducting a Magnetometer Survey throughout the site to identify any potential pipelines or other metallic obstructions. Services included surveying along four transects, parallel to the shoreline. A Hydrographic Survey of two 50-acre borrow pit locations was conducted. Cross Sections were taken at 250 ft. intervals within the borrow pits. (\$68,300 (fee); 2022)

Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, LA. BFM's scope of services included all topographic & hydrographic surveying as directed; magnetometer surveying was utilized to determine the presence of pipelines within the subject survey area. BFM established as client-supplied baseline and Temporary Benchmarks (TBM). Provided cross sections along Bayou Des Allemands and located elements & existing improvements within the designated limits of survey, as well as above- & below-ground utilities. As-built data was also considered. (\$118,873 (fee); 2019)

Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 1, St. Charles Parish, LA. BFM provided topographic and hydrographic surveying services for Segment 1 of the Upper Barataria Basin Risk Reduction (UBRR) Project; this involved the Davis Pond West Guide Levee in St. Charles Parish. (\$19,147 (fee); 2019)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Gary J. Lambert, Jr., PLS

Vice President / Registered Professional Land Surveyor

Project Assignment:

Project Manager/Drafting Supervisor

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

6 years (joined BFM in 2018);
13 years total (2011)

BFM Corporation, LLC | 2018 to present
Riverlands Surveying | 2016 to 2018
Bertucci Contracting | 2011 to 2016

Education: Degree(s)/Year/Specialization:

B.S., 2018, Geomatics, Nicholls State University

B.S., 2014, Construction Management, Louisiana State University

Active Registration: Year first registered/discipline:

2021, Professional Land Surveyor (Louisiana No. 5929)

Other experience and qualifications relevant to the proposed Project:

Gary J. Lambert, Jr., is a registered Professional Land Surveyor in Louisiana and provides Project Management and Drafting Oversight for BFM Corporation. He is the first point of contact for clients on technical matters, scheduling, and deliverables for project work, and conducts meetings with engineering, architectural, and government officials to discuss various project needs. His project work has encompassed all manner of surveying services, from basic home lots to 100+ acre tract boundary surveys.

In the field, Mr. Lambert has provided services as a Survey Crew Chief, using both traditional and robotic surveying methods, since the start of his professional career, and has experience with Leica, Hypack, AutoCAD, AutoCAD 3D, Trimble, and RTK surveying technologies. He further trains employees in the use of an aerial drone, laser scanner, and remote-controlled hydrographic survey boat. This survey experience includes topographic, boundary, ALTA/NSPS, FEMA, and various construction surveying. Mr. Lambert has also conducted hydrographic surveys in the Mississippi River and various other bodies of water throughout the Gulf Coast area.

Mr. Lambert has completed Basic OSHA Training and holds license with the Gulf Coast Safety Council (08SSV, ID429523).

TEC Professional Services Questionnaire

Other experience and qualifications: **Gary J. Lambert, Jr., PLS (continued)**

Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. Scope included establishing three static GPS observation points at major turns on the levee to ensure baseline is constrained to State Plane Coordinates; BFM also established a baseline along the centerline of the existing earthen levee (referenced to NAD 1983 2011). BFM set vertical control Temporary Benchmarks (TBM) which were referenced to horizontal control points (NAVD 1988 Geoid 12B). Plotted a cross section depicting the ground, edge of water, top and toe of earthen levee, and levee centerline at typical widths of 100 feet. Located visible above-ground utilities as well as underground utilities with visible surface evidence (where available, BFM obtained record drawings from relevant agencies to further plot utilities), as well as existing wall, center of pumps, and discharge pipes at the existing pump station. Trees and large shrubbery & etc. were located and described. Existing improvements (such as sheds, piers, and buildings) and trees were included in general location surveying. Deliverables included hardcopy, PDF, and AutoCAD DWG files. (\$150,000 (fee); 2018)

Tchefuncte Marsh Shoreline Protection Project (Magnetometer & Hydrographic Survey), St. Tammany Parish, LA. BFM provided Magnetometer & Hydrographic surveying services for the Tchefuncte Marsh Shoreline Protection Project. Prior to field work, BFM reviewed the Prime's design work plan (September 2021), reviewing existing and previous CPRA projects to identify previously permitted and approved marsh fill borrow areas in Lake Pontchartrain within 6 miles of the project's area. The scope of services included conducting a Magnetometer Survey throughout the site to identify any potential pipelines or other metallic obstructions. Services included surveying along four transects, parallel to the shoreline. A Hydrographic Survey of two 50-acre borrow pit locations was conducted. Cross Sections were taken at 250 ft. intervals within the borrow pits. (\$68,300 (fee); 2022)

Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, LA. BFM's scope of services included all topographic & hydrographic surveying as directed; magnetometer surveying was utilized to determine the presence of pipelines within the subject survey area. BFM established as client-supplied baseline and Temporary Benchmarks (TBM). Provided cross sections along Bayou Des Allemands and located elements & existing improvements within the designated limits of survey, as well as above- & below-ground utilities. As-built data was also considered. (\$118,873 (fee); 2019)

Abita River Regional Detention Pond Expansion, St. Tammany Parish, LA. BFM provided topographic and hydrographic surveying services for the project, whose Limits of Survey consisted of Parcel A3-A, a portion of Lambert Investments Minor Subdivision, in St. Tammany Parish. BFM established two temporary benchmarks (TBMs) along Harrison Avenue near the project site, with the vertical datum referenced to NAVD 1988. Surveying services included location of the existing pond, adjoining swales and culverts, and two ditches which exist within the remainder of Parcel A3-A. Spot elevations were taken at 200 ft. intervals on land and 50 ft. within the limits of the pond. Deliverables included detailed indelible prints showing plan & profile views with cross-sections along with digital files. (\$68,400 (fee); 2019)

The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, LA. BFM provided Boundary and Route Topographic & Hydrographic Surveying for the project in Ascension Parish, LA; as established, the project was executed in two phases. BFM executed a Route Topographic Survey; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. (\$477,340 (fee); 2023)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Christopher Lemley
Field Operations Manager/Survey Crew Chief

Project Assignment:

Field Operations Manager/Survey Crew Chief

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

10 years (joined BFM in 2014); BFM Corporation, LLC | 2014 to present
18 years total (2006) G.E.C., Inc. | 2010 to 2014
Krebs, LaSalle, LeMieux Consultants, Inc. | 2006 to 2010

Education: Degree(s)/Year/Specialization:

High School Diploma

Active Registration: Year first registered/discipline:

American Traffic Safety Service Assn. – Traffic Flagger
Louisiana Boater Education - Boating Safety Certificate
Norfolk Southern Roadway Worker Protection Contractor Safety Certificate

Other experience and qualifications relevant to the proposed Project:

Chris Lemley's services as BFM's Field Operations Manager includes overseeing all field work and activity by company personnel. His surveying experience includes over 8 years as a Survey Crew Chief. His survey software experience includes projects involving Trimble, Topcon, Leica, and Hypack, and has maintained and operated GPS, Auto-Level, and Total Station. Notable past project work has included the New Orleans Museum of Art, Jackson Barracks Restoration, US Highway 11, NASA Michoud Cells 3 & 4, the St. Bernard Lot Next Door Program, and multiple Orleans Parish School Recovery projects (including L.B. Landry, George Washington Carver, and Alice M. Harte schools).

Lafitte Area Levee Repair (BA-82) (CPRA 4400007082, Task 8), Jefferson Parish, LA. BFM provided all topographic and hydrographic surveying services as required by the project. This included establishing a baseline parallel to the shoreline, establishing temporary benchmarks, plotting location of improvements, determining pipeline aspects (size, depth, etc.), and taking cross sections, as well as all elements of the hydrographic survey of the waterway. (\$8,924 (fee); 2017)

Lower Lafitte Waterline, Jefferson Parish, LA. BFM provided surveying services associated with the location of a 16 inch plastic waterline in the Barataria Waterway as part of the Lower Lafitte Shoreline Stabilization project. BFM provided stakeout surveying for the project, staking the water

TEC Professional Services Questionnaire

Other experience and qualifications: **Christopher Lemley (continued)**

line every 50 feet (with 4 ft. wooden stakes). Certain areas were very deep and the line was not accurately located in this area. BFM set markers where approximate locations were based on the areas where the line was found. (\$38,205 (fee); 2017)

Fisher Basin Alignment Extension (Fisher/Lafitte Tidal Protection Alignment), Jefferson Parish, LA. BFM provided topographic, bathymetric, and boundary surveying services for the project. The scope of services included extension of the project baseline along the shoreline of Bayou Barataria and towards LA45. The topographic survey was executed with sufficient intermittent shots to establish grade, and located all topographic features that could interfere with the proposed floodwalls and levee. Cross sections were also taken, with hydrographic surveys continuing out into the water and terminating at the thalweg. Overall, the surveying and mapping included sufficient topographic surveys and cross sections necessary to design, layout, access, construct, and perform the work. (\$12,197 (fee); 2015)


Tchefuncte Marsh Shoreline Protection Project (Magnetometer & Hydrographic Survey), St. Tammany Parish, LA. BFM provided Magnetometer & Hydrographic surveying services for the Tchefuncte Marsh Shoreline Protection Project. Prior to field work, BFM reviewed the Prime's design work plan (September 2021), reviewing existing and previous CPRA projects to identify previously permitted and approved marsh fill borrow areas in Lake Pontchartrain within 6 miles of the project's area. The scope of services included conducting a Magnetometer Survey throughout the site to identify any potential pipelines or other metallic obstructions. Services included surveying along four transects, parallel to the shoreline. A Hydrographic Survey of two 50-acre borrow pit locations was conducted. Cross Sections were taken at 250 ft. intervals within the borrow pits. (\$68,300 (fee); 2022)

Alexis Bay Marsh Creation Project, Venice, Plaquemines Parish, LA. BFM provided multiple survey services for this marsh creation project, including elevations, locations, establishing control points, and plat preparation. The project, which specifically involved the creation of a terrace field in Alexis Bay near Venice, Louisiana, also included general topographic surveying services of the project's island location. Hydrographic surveying via airboat was a project element. (\$8,625 (fee); 2015)

Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 1, St. Charles Parish, LA. BFM provided topographic and hydrographic surveying services for Segment 1 of the Upper Barataria Basin Risk Reduction (UBRR) Project; this involved the Davis Pond West Guide Levee in St. Charles Parish. (\$19,147 (fee); 2019)

Hydrographic/Reclamation Monitoring at Multiple Sites, Vermilion Parish, LA. BFM provided topographic and hydrographic surveying services for ongoing reclamation monitoring at multiple sites, including Blue Hammock, Bay Goreau, Bay Goreau (West), and Hellhole Bay. GPS surveying services included elevations based on NAVD 1988 vertical (Geoid 12A epoch 2006.85), which utilized land-based laser scanning. Spot elevations were also provided. For the hydrographic surveying elements, BFM's dual frequency Z-boat took soundings in the same area (to show depth of silt and hard pan with a minimum water depth of 18 inches to show dual frequency); as the soundings got closer to the water's edge the surface of the silt was utilized to tie into the bank. Further, BFM plotted location of improvements within the designated limits of the survey. Deliverables included hardcopy, PDF, and AutoCAD DWG files. (\$35,500 (fee); 2016)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
John Philip Thayer Procurement Director (Proposals & Project Management Support)	
Project Assignment:	
Project Management Support	
Name of Firm with which associated:	
 BFM CORPORATION, LLC Professional Land & Hydrographic Surveying	
Years' experience with this Firm:	
16 years (joined BFM in 2008); 17 years total (2007)	<i>BFM Corporation, LLC 2008 to present</i> <i>Delle Land Surveying 2007 to 2008</i>
Education: Degree(s)/Year/Specialization:	
Certificate, 2015, Land Surveying Services B.S., 2007, Physical Education, Trevecca Nazarene University	
Active Registration: Year first registered/discipline:	
N/A	
Other experience and qualifications relevant to the proposed Project:	
<p>Phil Thayer serves as BFM's Procurement Director, providing proposal preparation and Project Management Support, having considerable experience in field surveying services, including ALTA/as-built surveying, construction layout, boundary, topographic, cross-sections, GPS use, and numerous other surveying types.</p> <p>Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, LA. BFM's surveying services on the project included establishing horizontal & vertical control (referenced to established benchmark and LA State Plane Coordinate System, NAD 1983 2011), coordination of proposed bulkhead/I-wall centerline, and collection of spot elevation every 25 feet along the centerline. BFM also plotted collected data with centerline overlaid for reference purposes. Deliverables include hardcopy, PDF, and AutoCAD DWG files. (\$23,220 (fee); 2017)</p> <p>Lac Des Allemands Shoreline Restorations, St. John the Baptist Parish, LA. BFM provided surveying services for the project, which extended from Vacherie Canal southeast along the shoreline of Lac Des Allemands to Pointe Aux Herbes, a distance of approximately 11,000 feet. Surveying services included the research & review of any existing survey data and establishing a project baseline along the existing shoreline. Cross-sections extended from the baseline, 100 ft. in shore to 500 ft. off shore, every 300 ft. and perpendicular along the baseline. Hydrographic surveying included the mouth of the Vacherie Canal and mouth of Oil Well Canal, noting any significant features. Geotechnical borings were located (for plan identification). BFM further</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **John Philip Thayer (continued)**

established control (for use by contractor during construction), and prepared drawings of the survey results to include a plan view of the survey and a profile view of each transect. (\$38,399 (fee); 2010)

Lake Pontchartrain Shoreline Projection and Enhancement Design Survey, St. Charles Parish, LA. For the project, BFM provided topographic and hydrographic survey in the Labranche Wetlands area on the south shore of Lake Pontchartrain. The project begins at the easterly end of the previously constructed shoreline protection project east to the St. Charles-Jefferson Parish line. BFM also surveyed canals, sloughs and bayous that emptied into Lake Pontchartrain a minimum of 100 feet from the point of entry into the lake. Controls were established following the shoreline of Lake Pontchartrain for the entire project length. All sections taken were stationed along this baseline, which was based on the Louisiana State Plane Coordinate System, Lambert Grid, NAD 1983 (2007) as established by GPS observations. Elevations were established on each control point (based on NAVD 1988) and transects along the survey baseline taken at 300 ft. intervals (shorter intervals where necessary to define the shoreline). Transects extended 100 ft. inland to 500 ft. off the shoreline, with additional shots taken in-between to define it accurately. BFM further located existing weirs, dams or levees constructed across canals, sloughs or bayous, as well as any soil boring sites in the project area. (\$32,295 (fee); 2010)

Lower Lafitte Shoreline Stabilization at Bayou Rigolets, Segments AU1 and AU5, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. (\$33,370 (fee); 2010)

Fifi Island Restoration Extension, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. The scope of services involved mapping of property lines and existing servitudes for the railroad, cemetery, private residences, and a commercial establishment (Dive Shop) north of Airline Boulevard. The project also included preparation of a servitude document across the railroad property. (\$10,210 (fee); 2011)

Port of Manchac Soundings, Lake Pontchartrain, Manchac, Tangipahoa Parish, LA. BFM provided surveying services for the project involving a centerline of channel soundings from Lake Pontchartrain to the Port of Manchac Harbor on North Pass. (\$3,300 (fee); 2010)

Alexis Bay Marsh Creation Project, Venice, Plaquemines Parish, LA. BFM provided multiple survey services for this marsh creation project, including elevations, locations, establishing control points, and plat preparation. The project, which specifically involved the creation of a terrace field in Alexis Bay near Venice, Louisiana, also included general topographic surveying services of the project's island location. Hydrographic surveying via airboat was a project element. (\$8,625 (fee); 2015)

Goose Bayou Ridge Creation and Shoreline Protection Project, Goose Bayou at Cypress Bayou, LA. BFM located the western shoreline of Goose Bayou from the Pen in Lafitte to its intersection with Cypress Bayou. Surveying services included cross sections every 300 feet extending 100 feet into the marsh and sounding out the centerline of Goose Bayou. (\$25,325 (fee); 2009)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Dawn Hoffman Researcher/Archivist	
Project Assignment:	
Researcher/Archivist	
Name of Firm with which associated:	
 BFM CORPORATION, LLC Professional Land & Hydrographic Surveying	
Years' experience with this Firm:	
15 years (joined BFM in 2009); 27 years total (1997)	<i>BFM Corporation, LLC 2009 to present</i> <i>Fluor Corporation 2007 to 2009</i> <i>Geographic Computer Technologies, LLC 2000 to 2007</i>
Education: Degree(s)/Year/Specialization:	
A.D., 1999, Computer-Aided Drafting, Southeast College of Technology Certificate, 2003, Introduction to ArcGIS, Louisiana State University	
Active Registration: Year first registered/discipline:	
N/A	
Other experience and qualifications relevant to the proposed Project:	
<p>Dawn Hoffman serves as BFM's primary researcher and has more than 25 years of experience in this field. She is extremely knowledgeable with researching in various parishes and cities.</p> <p>Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. Scope included establishing three static GPS observation points at major turns on the levee to ensure baseline is constrained to State Plane Coordinates; BFM also established a baseline along the centerline of the existing earthen levee (referenced to NAD 1983 2011). BFM set vertical control Temporary Benchmarks (TBM) which were referenced to horizontal control points (NAVD 1988 Geoid 12B). Plotted a cross section depicting the ground, edge of water, top and toe of earthen levee, and levee centerline at typical widths of 100 feet. Located visible above-ground utilities as well as underground utilities with visible surface evidence (where available, BFM obtained record drawings from relevant agencies to further plot utilities), as well as existing wall, center of pumps, and discharge pipes at the existing pump station. Trees and large shrubbery & etc. were located and described. Existing improvements (such as sheds, piers, and buildings) and trees were included in general location surveying. Deliverables included hardcopy, PDF, and AutoCAD DWG files. (\$150,000 (fee); 2018)</p> <p>Fisher Basin Alignment Extension (Fisher/Lafitte Tidal Protection Alignment), Jefferson Parish, LA. BFM provided topographic, bathymetric, and boundary surveying services for the project. The scope of services included extension of the project baseline along the shoreline of Bayou Barataria and towards LA45. The topographic survey was executed with sufficient intermittent shots to</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Dawn Hoffman (continued)**

establish grade, and located all topographic features that could interfere with the proposed floodwalls and levee. Cross sections were also taken, with hydrographic surveys continuing out into the water and terminating at the thalweg. Overall, the surveying and mapping included sufficient topographic surveys and cross sections necessary to design, layout, access, construct, and perform the work. (\$12,197 (fee); 2015)

Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, LA. BFM's surveying services on the project included establishing horizontal & vertical control (referenced to established benchmark and LA State Plane Coordinate System, NAD 1983 2011), coordination of proposed bulkhead/I-wall centerline, and collection of spot elevation every 25 feet along the centerline. BFM also plotted collected data with centerline overlaid for reference purposes. Deliverables include hardcopy, PDF, and AutoCAD DWG files. (\$23,220 (fee); 2017)

Marsh Island (Lafreniere Park), Metairie, Jefferson Parish, LA. BFM Corporation provided bathymetric and topographic surveying services for the Marsh Island project at Lafreniere Park in Jefferson Parish, Louisiana. The survey encompassed the island and surrounding waters up to and including the sidewalk. Cross sections of the island and surrounding waters were cut after the topographic and hydrographic surveying was completed. (\$9,568 (fee); 2016)

SLFPA-E Levee Certification Phase 2 Survey - 40 Arpent & Maxent Levees, Orleans & St. Bernard Levee Systems, Orleans Parish, LA. BFM surveyed the centerline of the 40 Arpent "Back" Levee (in excess of 124,000 lf on a 100 ft grid). Control points were established utilizing RTK GPS. In addition, each pump station was surveyed and all grade breaks/roads were obtained along the centerline of the levee. The old shrimp building at Violet Canal was also located as part of the survey. Surveys included utility locations (based on field evidence, investigation, and available utility records) as well as foundation of above-ground utility poles, wet wells, and pipeline crossings. Bathymetry information was incorporated into cross-section point file and combined with ground survey; this information was further converted to the same elevations as the levee profile work. Additional cross sections were surveyed to support detailed geotechnical analysis; locations were coordinated with the geotechnical engineer of record for the project. These cross sections extended 100 ft from the toe of the levee in both directions and included bathymetry of the lake, wetland, or canal, depending on location, and extended until depth of the body was determined. (\$166,500 (fee); 2013)

Tchefuncte Marsh Shoreline Protection Project (Magnetometer & Hydrographic Survey), St. Tammany Parish, LA. BFM provided Magnetometer & Hydrographic surveying services for the Tchefuncte Marsh Shoreline Protection Project. Prior to field work, BFM reviewed the Prime's design work plan (September 2021), reviewing existing and previous CPRA projects to identify previously permitted and approved marsh fill borrow areas in Lake Pontchartrain within 6 miles of the project's area. The scope of services included conducting a Magnetometer Survey throughout the site to identify any potential pipelines or other metallic obstructions. Services included surveying along four transects, parallel to the shoreline. A Hydrographic Survey of two 50-acre borrow pit locations was conducted. Cross Sections were taken at 250 ft. intervals within the borrow pits. (\$68,300 (fee); 2022)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Anthony Watson

CADD Technician (AutoCADD Drafting Services)

Project Assignment:

CADD Technician (AutoCADD Drafting Services)

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

13 years (joined BFM in 2011);
33 years total (1991)

BFM Corporation, LLC | 2011 to present
Krebs LaSalle Lemieux / GEC | 2008 to 2011
Doug Connally and Associates Land Surveying (Dallas, TX) | 1995-2008
Electrician | 1991 to 1995
City of Plano TX (Part-Time Drafting Services) | 1991

Education: Degree(s)/Year/Specialization:

Coursework - CAD, Avatech Solutions, Los Colinas, TX

Active Registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Anthony Watson has experience as a draftsman/survey technician, having started his career as an intern with the Surveying Department of the City of Plano, Texas. His experience through the years includes manual and computer-aided drafting for a wide range of projects, ranging from small lot surveys to subdivisions to municipal treatment and private industrial plants. He has experience in all facets of surveying (boundary, topographic, ALTA/ACSM, plan & profile, etc.) in both drafting and field environments.

Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, LA. BFM's surveying services on the project included establishing horizontal & vertical control (referenced to established benchmark and LA State Plane Coordinate System, NAD 1983 2011), coordination of proposed bulkhead/I-wall centerline, and collection of spot elevation every 25 feet along the centerline. BFM also plotted collected data with centerline overlaid for reference purposes. Deliverables include hardcopy, PDF, and AutoCAD DWG files. (\$23,220 (fee); 2017)

Fisher Basin Alignment Extension (Fisher/Lafitte Tidal Protection Alignment), Jefferson Parish, LA. BFM provided topographic, bathymetric, and boundary surveying services for the project. The scope of services included extension of the project baseline along the shoreline of Bayou Barataria and towards LA45. The topographic survey was executed with sufficient intermittent shots to establish grade, and located all topographic features that could interfere with the proposed

TEC Professional Services Questionnaire

Other experience and qualifications: **Anthony Watson (continued)**

floodwalls and levee. Cross sections were also taken, with hydrographic surveys continuing out into the water and terminating at the thalweg. Overall, the surveying and mapping included sufficient topographic surveys and cross sections necessary to design, layout, access, construct, and perform the work. (\$12,197 (fee); 2015)

Tchefuncte Marsh Shoreline Protection Project (Magnetometer & Hydrographic Survey), St. Tammany Parish, LA. BFM provided Magnetometer & Hydrographic surveying services for the Tchefuncte Marsh Shoreline Protection Project. Prior to field work, BFM reviewed the Prime's design work plan (September 2021), reviewing existing and previous CPRA projects to identify previously permitted and approved marsh fill borrow areas in Lake Pontchartrain within 6 miles of the project's area. The scope of services included conducting a Magnetometer Survey throughout the site to identify any potential pipelines or other metallic obstructions. Services included surveying along four transects, parallel to the shoreline. A Hydrographic Survey of two 50-acre borrow pit locations was conducted. Cross Sections were taken at 250 ft. intervals within the borrow pits. (\$68,300 (fee); 2022)

The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, LA. BFM provided Boundary and Route Topographic & Hydrographic Surveying for the project in Ascension Parish, LA; as established, the project was executed in two phases. BFM executed a Route Topographic Survey; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. (\$477,340 (fee); 2023)

Bayou Segnette Fronting Protection/New Pump Station, Westwego, Jefferson Parish, LA. BFM's surveying services included establishment of vertical control for a new pump station. Total Station services were utilized for the project. (\$3,435 (fee); 2012)

Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. Scope included establishing three static GPS observation points at major turns on the levee to ensure baseline is constrained to State Plane Coordinates; BFM also established a baseline along the centerline of the existing earthen levee (referenced to NAD 1983 2011). BFM set vertical control Temporary Benchmarks (TBM) which were referenced to horizontal control points (NAVD 1988 Geoid 12B). Plotted a cross section depicting the ground, edge of water, top and toe of earthen levee, and levee centerline at typical widths of 100 feet. Located visible above-ground utilities as well as underground utilities with visible surface evidence (where available, BFM obtained record drawings from relevant agencies to further plot utilities), as well as existing wall, center of pumps, and discharge pipes at the existing pump station. Trees and large shrubbery & etc. were located and described. Existing improvements (such as sheds, piers, and buildings) and trees were included in general location surveying. Deliverables included hardcopy, PDF, and AutoCAD DWG files. (\$150,000 (fee); 2018)

Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, LA. BFM's scope of services included all topographic & hydrographic surveying as directed; magnetometer surveying was utilized to determine the presence of pipelines within the subject survey area. BFM established as client-supplied baseline and Temporary Benchmarks (TBM). Provided cross sections along Bayou Des Allemands and located elements & existing improvements within the designated limits of survey, as well as above- & below-ground utilities. As-built data was also considered. (\$118,873 (fee); 2019)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Curtis "Jay" Barrios
Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

34 years (joined BFM in 1990);
39 years total (1985)

BFM Corporation, LLC | 1990 to present
Benson Mercedes Benz | 1989 to 1990
SECO Electric | 1987
Frishhertz Electric | 1986 to 1987
Plain Construction | 1985 to 1986

Education: Degree(s)/Year/Specialization:

High School Diploma

Active Registration: Year first registered/discipline:

American Traffic Safety Service Assn. – Traffic Flagger
Basic OSHA Training Class Completion
Transportation Work Identification Card (TWIC)

Other experience and qualifications relevant to the proposed Project:

Jay Barrios' surveying experience includes boundary, hydrographic, and topographic. He has been the Survey Crew Chief for thousands of projects and is one of the more experienced surveyors in the area. Further, Mr. Barrios has been involved on major transmission projects for Entergy and South Central Bell (AT&T).

Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, LA. BFM's surveying services on the project included establishing horizontal & vertical control (referenced to established benchmark and LA State Plane Coordinate System, NAD 1983 2011), coordination of proposed bulkhead/I-wall centerline, and collection of spot elevation every 25 feet along the centerline. BFM also plotted collected data with centerline overlaid for reference purposes. Deliverables include hardcopy, PDF, and AutoCAD DWG files. (\$23,220 (fee); 2017)

Lake Pontchartrain Shoreline Projection and Enhancement Design Survey, St. Charles Parish, LA. For the project, BFM provided topographic and hydrographic survey in the Labranche Wetlands area on the south shore of Lake Pontchartrain. The project begins at the easterly end of the previously constructed shoreline protection project east to the St. Charles-Jefferson Parish line. BFM also surveyed canals, sloughs and bayous that emptied into Lake Pontchartrain a minimum of

TEC Professional Services Questionnaire

Other experience and qualifications: **Curtis "Jay" Barrios (continued)**

100 feet from the point of entry into the lake. Controls were established following the shoreline of Lake Pontchartrain for the entire project length. All sections taken were stationed along this baseline, which was based on the Louisiana State Plane Coordinate System, Lambert Grid, NAD 1983 (2007) as established by GPS observations. Elevations were established on each control point (based on NAVD 1988) and transects along the survey baseline taken at 300 ft. intervals (shorter intervals where necessary to define the shoreline). Transects extended 100 ft. inland to 500 ft. off the shoreline, with additional shots taken in-between to define it accurately. BFM further located existing weirs, dams or levees constructed across canals, sloughs or bayous, as well as any soil boring sites in the project area. (\$32,295 (fee); 2010)

Fisher Basin Alignment Extension (Fisher/Lafitte Tidal Protection Alignment), Jefferson Parish, LA. BFM provided topographic, bathymetric, and boundary surveying services for the project. The scope of services included extension of the project baseline along the shoreline of Bayou Barataria and towards LA45. The topographic survey was executed with sufficient intermittent shots to establish grade, and located all topographic features that could interfere with the proposed floodwalls and levee. Cross sections were also taken, with hydrographic surveys continuing out into the water and terminating at the thalweg. Overall, the surveying and mapping included sufficient topographic surveys and cross sections necessary to design, layout, access, construct, and perform the work. (\$12,197 (fee); 2015)

Fifi Island Restoration Extension, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. The scope of services involved mapping of property lines and existing servitudes for the railroad, cemetery, private residences, and a commercial establishment (Dive Shop) north of Airline Boulevard. The project also included preparation of a servitude document across the railroad property. (\$10,210 (fee); 2011)

Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. Scope included establishing three static GPS observation points at major turns on the levee to ensure baseline is constrained to State Plane Coordinates; BFM also established a baseline along the centerline of the existing earthen levee (referenced to NAD 1983 2011). BFM set vertical control Temporary Benchmarks (TBM) which were referenced to horizontal control points (NAVD 1988 Geoid 12B). Plotted a cross section depicting the ground, edge of water, top and toe of earthen levee, and levee centerline at typical widths of 100 feet. Located visible above-ground utilities as well as underground utilities with visible surface evidence (where available, BFM obtained record drawings from relevant agencies to further plot utilities), as well as existing wall, center of pumps, and discharge pipes at the existing pump station. Trees and large shrubbery & etc. were located and described. Existing improvements (such as sheds, piers, and buildings) and trees were included in general location surveying. Deliverables included hardcopy, PDF, and AutoCAD DWG files. (\$150,000 (fee); 2018)

The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, LA. BFM provided Boundary and Route Topographic & Hydrographic Surveying for the project in Ascension Parish, LA; as established, the project was executed in two phases. BFM executed a Route Topographic Survey; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. (\$477,340 (fee); 2023)

TEC Professional Services Questionnaire

- L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this project. Please include and all work performed for Jefferson Parish. Please attach additional pages if necessary.**

PROJECT NO. 1

Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:
Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, Louisiana APTIM 2424 Edenborn Avenue Suite 450 Metairie LA 70001 Gene S. Gillen, P.E., 504-832-4881 info@aptim.com	BFM provided topographic and hydrographic surveying; scope included establishing three static GPS observation points at major turns on the levee to ensure baseline is constrained to State Plane Coordinates; also established a baseline along the centerline of the existing earthen levee. Set vertical control TBMs and plotted a cross section depicting the ground, edge of water, top and toe of earthen levee, and levee centerline at typical widths of 100 feet. Located utilities, existing wall, center of pumps, and discharge pipes at the existing pump station. Existing improvements (sheds, piers, buildings) and trees were included in general location surveying.
Completion Date (Actual or estimated:)	Estimated Cost:
	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: center;">Entire Project:</div> <div style="width: 45%; text-align: center;">Work for which Firm was Responsible:</div> </div>
June 2018	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: center;">N/A</div> <div style="width: 45%; text-align: center;">\$150,000 (fee)</div> </div>

PROJECT NO. 2

Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:
Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, Louisiana Greenup Industries, LLC 2200 Veterans Memorial Blvd Ste 114 Kenner LA 70062 Rodney Greenup, Jr., 225-283-4843 rodney@greenupind.com	BFM's scope of services included all topographic & hydrographic surveying as directed; magnetometer surveying was utilized to determine the presence of pipelines within the subject survey area. BFM established as client-supplied baseline and Temporary Benchmarks (TBM). Provided cross sections along Bayou Des Allemands and located elements & existing improvements within the designated limits of survey, as well as above- & below-ground utilities. As-built data was also considered.
Completion Date (Actual or estimated:)	Estimated Cost:
	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: center;">Entire Project:</div> <div style="width: 45%; text-align: center;">Work for which Firm was Responsible:</div> </div>
July 2019	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: center;">N/A</div> <div style="width: 45%; text-align: center;">\$118,873 (fee)</div> </div>

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, Louisiana Burk-Kleinpeter, Inc. 4176 Canal Street New Orleans LA 70119 David Boyd, P.E., 504-483-6271 dboyd@bkusa.com	BFM provided Boundary and Route Topographic & Hydrographic Surveying for the project in Ascension Parish, LA; as established, the project was executed in two phases. BFM executed a Route Topographic Survey; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
October 2023	N/A	\$477,340 (fee)

PROJECT NO. 4		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Abita River Regional Detention Pond Expansion, St. Tammany Parish, Louisiana CSRS Inc. 6767 Perkins Road, Suite 200 Baton Rouge LA 70808 Scott Hoffeld, 225-769-0546 scott.hoffeld@csrsinc.com	BFM provided topographic and hydrographic surveying for the project, whose Limits of Survey consisted of Parcel A3-A, a portion of Lambert Investments Minor Subdivision, in St. Tammany Parish. BFM established two temporary benchmarks (TBMs) along Harrison Avenue near the project site, with the vertical datum referenced to NAVD 1988. Surveying services included location of the existing pond, adjoining swales and culverts, and two ditches which exist within the remainder of Parcel A3-A. Spot elevations were taken at 200 ft. intervals on land and 50 ft. within the limits of the pond. Deliverables included detailed indelible prints showing plan & profile views with cross-sections along with digital files.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
July 2019	N/A	\$68,400 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Tchefuncte Marsh Shoreline Protection Project (Magnetometer & Hydrographic Survey), St. Tammany Parish, Louisiana Volkert, Inc. 7967 Office Park Blvd 2nd Floor Baton Rouge LA 70809 Matt Salmon, P.E., 214-478-4754 matt.salmon@volkert.com	BFM provided Magnetometer & Hydrographic surveying services for the Tchefuncte Marsh Shoreline Protection Project. Prior to field work, BFM reviewed the Prime's design work plan (September 2021), reviewing existing and previous CPRA projects to identify previously permitted and approved marsh fill borrow areas in Lake Pontchartrain within 6 miles of the project's area. The scope of services included conducting a Magnetometer Survey throughout the site to identify any potential pipelines or other metallic obstructions. Services included surveying along four transects, parallel to the shoreline. A Hydrographic Survey of two 50-acre borrow pit locations was conducted. Cross Sections were taken at 250 ft. intervals within the borrow pits.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2022	N/A	\$63,800 (fee)

PROJECT NO. 6		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, Louisiana BCG Engineering & Consulting, Inc. 9619 Interline Avenue, Suite A Baton Rouge LA 70809 David T. Dodgen, 225-924-3116	BFM's surveying services on the project included establishing horizontal & vertical control (referenced to established benchmark and LA State Plane Coordinate System, NAD 1983 2011), coordination of proposed bulkhead/I-wall centerline, and collection of spot elevation every 25 feet along the centerline. BFM also plotted collected data with centerline overlaid for reference purposes. Deliverables include hardcopy, PDF, and AutoCAD DWG files.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2017	N/A	\$23,220 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Fisher Basin Alignment Extension (Fisher/Lafitte Tidal Protection Alignment), Jefferson Parish, Louisiana Brown Cunningham Gannuch 3012 26th Street Metairie LA 70002 Ann L. Springston, P.E., 504-454-3866 aspringston@ardurragroup.com	BFM provided topographic, bathymetric, and boundary surveying services for the project. The scope of services included extension of the project baseline along the shoreline of Bayou Barataria and towards LA45. The topographic survey was executed with sufficient intermittent shots to establish grade, and located all topographic features that could interfere with the proposed floodwalls and levee. Cross sections were also taken, with hydrographic surveys continuing out into the water and terminating at the thalweg. Overall, the surveying and mapping included sufficient topographic surveys and cross sections necessary to design, layout, access, construct, and perform the work.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
April 2015	N/A	\$12,197 (fee)

PROJECT NO. 8		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Marsh Island (Lafreniere Park), Metairie, Jefferson Parish, Louisiana Mathes Brierre Architects 201 St. Charles Avenue, Suite 4100 New Orleans LA 70170-4100 Scott Evans, AIA, 504-586-9303 talfortish@mathesbrierre.com	BFM Corporation provided bathymetric and topographic surveying services for the Marsh Island project at Lafreniere Park in Jefferson Parish, Louisiana. The survey encompassed the island and surrounding waters up to and including the sidewalk. Cross sections of the island and surrounding waters were cut after the topographic and hydrographic surveying was completed.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
February 2016	N/A	\$9,568 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Alexis Bay Marsh Creation Project, Venice, Plaquemines Parish, Louisiana Manchac Consulting Group, Inc. 2137-A Quail Run Drive, Suite A Baton Rouge LA 70808 Daniel Duhon, 225-448-3972	BFM provided multiple survey services for this marsh creation project, including elevations, locations, establishing control points, and plat preparation. The project, which specifically involved the creation of a terrace field in Alexis Bay near Venice, Louisiana, also included general topographic surveying services of the project's island location. Hydrographic surveying via airboat was a project element.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
February 2015	N/A	\$8,625 (fee)

PROJECT NO. 10		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Lower Lafitte Waterline Stakeout, Jefferson Parish, Louisiana CB&I 2424 Edenborn Avenue Suite 450 Metairie LA 70001 Gene S. Gillen, P.E., 504-832-4881 gene.gillen@cbi.com	BFM provided surveying services associated with the location of a 16 inch plastic waterline in the Barataria Waterway as part of the Lower Lafitte Shoreline Stabilization project. BFM provided stakeout surveying for the project, staking the water line every 50 feet (with 4 ft. wooden stakes). Certain areas were very deep and the line was not accurately located in this area. BFM set markers where approximate locations were based on the areas where the line was found.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
January 2017	N/A	\$38,205 (fee)

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1.	<div>BFM Corporation is not currently, nor has it previously been involved, in litigation with Jefferson Parish.</div>	
2.		
3.		
4.		

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

CRITERIA 1 | PROFESSIONAL TRAINING AND EXPERIENCE

Established in 1982, **BFM Corporation, LLC, Professional Land & Hydrographic Surveying**, provides services to public & private concerns throughout Louisiana and the Gulf South. For over 40 years, BFM has provided surveying services covering all facets of engineering, construction, and forensics; topographic, and hydrographic, as well as drone-based surveying and high-definition laser scanning.

BFM Corporation is a majority Woman-Owned Business Enterprise (WBE) as well as a Hudson Initiative certified Small & Emerging Business and Small Entrepreneurship in Louisiana.

Our capabilities include the following and more:

- Topographic Surveying
- Drone Surveying
- Photogrammic & LiDAR and 3D Laser Scanning
- Bathymetric / Hydrographic Surveys
- Property, Boundary, and Right-of-Way Surveys
- Maps, Cross-Sections, & Data Sets; Benchmarks

TEC Professional Services Questionnaire

N. continued.

- Construction-Related Surveying and Builder's Package Surveys
- American Land Title Association (ALTA) Surveys

BFM's project work routinely involves **extensive records and related research** as an element of successful completion, as well as coordination with the client, agency or department. BFM has the personnel to make sure this is done correctly and expeditiously.

Our **Survey Field Crews** are equipped with Leica Viva and Leica Captivate Data Collectors, as well as Leica GPS Smart Antennas. Each GPS unit is linked to the Leica SmartNet Network, giving each crew the ability for Real Time Kinematic Positioning (RTK), derived from the Global Navigation Satellite System (GNSS). Furthermore, each crew is outfitted with Leica TS series robotic total stations, simplifying and expediting projects. BFM can also use in-house drones and 3D scanners to further analyze sites and projects. BFM's crews are trained to use this equipment to its full potential to maximize accuracy and efficiency in the field.

BFM offers **Drone Surveying Services**, featuring a DJI Matrice 600 Pro drone outfitted with a Sony A7R3 42-megapixel camera, Pixhawk Triggering System, VMAP PPK system, and an A3 Pro Flight Controller. It can capture 50 acres of land allowing BFM to quickly & accurately capture data and facilitates quicker field work to produce highly accurate and precise surveying information. Deliverables feature Clean Point Cloud, 3D Mesh, Orthomosaic, and AutoCAD DWG Topographic.

BFM's **3D modeling capabilities** allow us to process & model for any design purpose. High-definition scanner data is processed using software from Leica and Autodesk. BFM is working on non-traditional survey deliverables, including virtual tours, live walkthroughs, detailed pipe rack modeling, and modeling for use with Autodesk Revit Architecture.

When needed, BFM provides **bathymetric surveying** to handle **any hydrographic surveying tasks**. For large rivers and bodies of water, we are equipped with Teledyne Odom Hydro Solutions' Hydro Trac Single Beam Echo Sounder. For smaller bodies of water, BFM uses an SL20 Remote Controlled Boat equipped with CEE Scope Dual Channel Echo Sounder. We use Hypack Software to process collected data. Further, BFM can execute multi-beam scans, side scans and magnetometer surveys upon request.

Please refer to our projects included in Item L and in our personnel listings in Item K for specific type project examples and an overview of our surveying experience with this project type.

CRITERIA 2 | SIZE OF FIRM

As noted, BFM has the manpower and equipment to execute any surveying task within the reasonable time set forth by the contract or project engineer. BFM has no issue with meeting the project deadlines set forth by our clients, both municipal and private. It is our continual goal to keep this reputation solid. Further, we establish base costs and fees for our services, and work with our clients to meet all project budgets.

TEC Professional Services Questionnaire

N. continued.

As noted in **item E** of this form, BFM currently has a **full-time staff of two dozen people**, including **two Registered Professional Land Surveyors, Survey Field Crew Personnel, and AutoCAD drafting personnel**, as well as **complete administrative and support staff**.

CRITERIA 3 | CAPACITY FOR TIMELY COMPLETION

BFM has the manpower and equipment to execute any surveying task within the reasonable time set forth by a contract or project engineer. It is our goal to keep this reputation solid. We establish base costs and fees for our services, and work with our clients to meet all project budgets. Our workload and scheduling, and proximity to the project site, will allow for quick assignment of personnel to any directed project.

BFM Corporation's **Ralph P. Fontcuberta, Jr., PLS**, Executive Vice President, is a **Louisiana-Registered Professional Land Surveyor (since 1974)** and meets or exceeds any minimum requirements for any surveying project. He has been **providing surveying services in Louisiana for over 50 years** and brings an almost incalculable wealth of experience in the region to any project, especially in Southeast Louisiana.

Chad M. Poché, P.E., Executive Vice President, brings **more than 25 years of experience** to assist in completing projects on time and within budget. He has been a consulting geotechnical engineer for more than 20 years in South Louisiana and has been the geotechnical engineer of record for thousands of projects.

Gary J. Lambert, Jr., PLS, Vice President is a **registered Professional Land Surveyor** and provides Project Management & Drafting Oversight and is the first point of contact for clients on technical matters. He meets with engineering, architectural, and government officials to discuss various project needs.

Our personnel included **multiple survey crews** and a **fully-staffed drafting department** to handle any project needs; they are thoroughly trained and extensively familiar with the region and needs of various types of surveying projects.

CRITERIA 4 | PAST PERFORMANCE ON PARISH CONTRACTS

BFM Corporation has provided **surveying services in Jefferson Parish since 1982**, both **directly to Parish agencies and as a consultant to firms serving the Parish**. The firm has executed many hundreds of projects in the Parish, including both direct Parish projects and State agency projects (CPRA, Louisiana DOTD, etc.), not to mention the scores of surveying projects for private individuals and industry.

As noted, Mr. Fontcuberta has **over half a century of professional land surveying experience**, including over 40 years with BFM. **He has provided professional surveying services for thousands of projects for and throughout Jefferson Parish.**

TEC Professional Services Questionnaire

N. continued.

CRITERIA 5 | LOCATION OF THE PRINCIPAL OFFICE

BFM has called Jefferson Parish home office location since the firm's inception in 1982; our principal office is located in Jefferson Parish at 15 Veterans Memorial Boulevard in Kenner.

CRITERIA 6 | LEGAL STATEMENT

BFM Corporation is **not involved in litigation with Jefferson Parish** nor with any of our clients, as is noted in Item M of this form.

CRITERIA 7 | PRIOR SUCCESSFUL COMPLETION OF PROJECTS

For over 40 years, BFM Corporation has completed thousands of projects throughout Jefferson Parish and Southeast Louisiana, both to municipal and various private clients, similar to the project at hand, not to mention other drainage projects in a wide range of sizes, from small lot to Parish-wide endeavors. **Multiple examples of this work are included throughout this form in both the Personnel Résumés section (Item K) and Representative Project Work (Item L).** Further, BFM has worked with virtually every municipality in the region. We enjoy a high repeat-business rate with all our clients. We offer the following specific references for contact:

Mark R. Drewes, P.E., Director, Jefferson Parish Public Works Department
(504-736-6783 | JPPW@jeffparish.net)

Neil Schneider, CCM, P.E., Director, Capital Projects, Jefferson Parish Public Works Dept.
(504-736-6783 | JPPW@jeffparish.net)

José A. Gonzales, CAO, City of Kenner
(504-468-4090 | jgonzalez@kenner.la.us)

Angela DeSoto, P.E., Director of Engineering, Jefferson Parish
(504-736-6511 | ADeSoto@jeffparish.net)

Sid Trouard, P.E., Program Manager, Jefferson Parish Sewerage Capital Improvement Program
(504-736-6386 | STrouard@jeffparish.net)

Ben Lapine, Acting Director, Department of Drainage, Jefferson Parish
(504-736-6661 | JPSewerage@jeffparish.net)

Our professional work history is exemplary. We strive to provide on-time and technically thorough project deliverables at the budget set by our clients.

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: 

Print Name: Chad M. Poché, P.E.

Title: Executive Vice President

Date: June 25, 2024