

STATEMENT OF QUALIFICATIONS
TO PROVIDE COASTAL ENGINEERING
CONSULTING SERVICES
AS NEEDED PARISH WIDE
RESOLUTION NO. 144205



JULY 16, 2024

Prepared By:





July 16, 2024

Jefferson Parish Purchasing Department
C/O Mr. Mark Buttery, Purchasing Specialist II
Jefferson Parish General Government Building
200 Derbigny Street, Suite 4400
Gretna, LA 70053

**RE: SOQ - Coastal Engineering Consulting Services
As-Needed Parish Wide
(Resolution No. 144205)**

Dear Mr. Buttery:

It is our pleasure to submit this response to Jefferson Parish Government's request for Statements of Qualifications for Coastal Engineering Consulting Services. We are intimately familiar with Southeast Louisiana having designed and managed the construction of numerous coastal protection and restoration engineering projects including bulkhead systems, marsh creation, beach nourishment, breakwaters, hydrologic and hydraulic modeling, drainage conveyance, and levee systems. Our firm has extensive experience in all engineering disciplines and environmental compliance. Our services include providing professional engineering, project administration, permitting, construction management, and resident inspection. As such, our firm is very knowledgeable with preparation of budget estimates, engineering specifications and bid packages. We believe our expertise and proven track record of completing engineering projects on time and within budget will make us a strong candidate and valuable resource as one of the firms selected for this contract.

PEEC is a consulting engineering firm capable of providing engineering services for Capital Improvements, CDBG, FEMA, GOHSEP, and other State and Federal funded projects. PEEC has been licensed in the State of Louisiana since 1993 and we are proud of the fact that our firm has not had any record of substandard work nor engaged in any unethical practices in that time. Our staff and team we have assembled is excited and prepared to dedicate their efforts to any projects received through Jefferson Parish.

For over 31 years PEEC has consistently provided state of the art solutions to complex problems facing parishes and local governmental bodies. PEEC's innovative approach to problem solving has proven to be economically beneficial to our clients. Such technical ideas have been used for clients such as Jefferson Parish, St. Tammany Parish, Town of Grand Isle, City of Westwego, Grand Isle Independent Levee District, West Jefferson Levee District, Louisiana Department of Natural Resources, City of Morgan City, Texas Parks and Wildlife Department, Plaquemines Parish, St. Bernard Parish, St. Charles Parish, and numerous other private clients in the past.

We look forward to being selected as a qualified firm to provide coastal engineering and related services to Jefferson Parish Government. If you have any questions, please contact our office at (504) 347-1900.

Sincerely,

A handwritten signature in blue ink that reads "Mo Saleh". The signature is written in a cursive style with a blue ink color.

Mo Saleh, M.S., P.E.,
Principal

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Executive Summary of Qualifications

Professional Engineering and Environmental Consultants, Inc. (PEEC), is a registered professional engineering firm in Louisiana and Texas. PEEC offers highly qualified personnel, state-of-the-art equipment and the latest computer systems and software to our clients.

PEEC provides its clients a wide array of professional engineering services coupled with exceptional knowledge and experience in the fields of Civil, Structural, and Environmental Engineering, Coastal Restoration, Environmental Monitoring and Surveying, Project Administration, and Construction Management. Our personnel's qualifications also include scientific specialties, such as Geology, Hydrology, Hydrogeology, Ecology, Biology, and Wetland Delineations. PEEC clients enjoy our professionalism and team work that lead to successful completion of projects from start to finish.

PEEC is very knowledgeable and highly qualified with Capital Improvements, CDBG, FEMA, and GOHSEP program administration and management. Our firm has all the necessary personnel with the appropriate expertise, qualifications, and certifications to successfully perform all required services for Jefferson Parish within budget, and in a timely manner.

Over the past 31 years, PEEC has developed an extensive inventory of background technical information on relevant characteristics providing valuable information in preparation for engineering project tasks, objectives, and goals. We are intimately familiar with the region having designed and managed the construction of numerous coastal protection and restoration projects including bulkhead systems, beach nourishment, marsh creation, breakwaters, levee systems, drainage conveyance, pump stations, hydrologic analyses, environmental site assessment, computer graphic design, and computer modeling disciplines. PEEC recognizes the need for timely completion of projects and has proved itself capable of doing so in the past.

Successful planning and completion of coastal protection and restoration projects in locations such as Jefferson Parish, St. Bernard Parish, Plaquemines Parish, Town of Grand Isle, and Galveston County in Texas have proven PEEC's ability in successfully handling complex projects.

For these reasons as well as the firm's experience and understanding the nature of the problems confronting coastal Louisiana, Professional Engineering and Environmental Consultants, Inc. is a highly qualified firm that is prepared and ready to provide coastal engineering and related services to Jefferson Parish Government Department of Ecosystem and Coastal Management.

**Jefferson Parish TEC Professional
Services Questionnaire**

For

PEEC, Inc.

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

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

B. Firm Name & Address:

Professional Engineering and Environmental Consultants, Inc.
1065 Muller Parkway Suite B
Westwego, LA 70094

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:

Mo Saleh, M.S., P.E.
Principal
(504) 347-1900 Ext. 25
mo@peecinc.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.

Mo Saleh, M.S., P.E.
Principal
(504) 347-1900 Ext. 25
mo@peecinc.com

LA P.E. No. 23806 1990, Civil Engineering
LA P.E. No. 23806 1994, Environmental Engineering

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	___ Graduate Engineers
<u>3</u> Civil Engineers	___ Interior Designers	<u>1</u> Project Managers
<u>1</u> Construction Inspectors	___ Landscape Architects	___ Clerical
<u>1</u> Draftsman	___ Land Surveyor	___ Grant/Funding Specialist
___ Electrical Engineers	___ Mechanical Engineers	___ Sanitary Engineers
___ Engineer Intern	<u>1</u> Environmental Engineers	
<u>1</u> Professional Land Surveyors		<u>9 TOTAL</u>

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. N/A		
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 <u>all subcontractors must submit a fully completed copy of this questionnaire</u>, 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. BFM Corporation, LLC 15 Veterans Memorial Blvd. Kenner, LA 70062	Professional Land Surveying	Yes
2. Gulf South Engineering and Testing Inc. 15 Veterans Memorial Blvd. Kenner, LA 70062	Geotechnical Engineering and Analysis	Yes
J. Please specify the total number of support personnel that may assist in the completion of this Project: (1)		

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:

Mo R. Saleh, M.S., P.E., Principal

Project Assignment:

Senior Project Engineer; Civil & Environmental

Name of Firm with which associated:

Professional Engineering and Environmental Consultants, Inc.

Years' experience with this Firm:

31

Education: Degree(s)/Year/Specialization:

M.S., Civil Engineering (1984), University of New Orleans; B.S., Civil Engineering (1980), University of New Orleans

Active registration: Year first registered/discipline:

Registered Professional Civil Engineer, LA P.E. No.23806; Registered Professional Environmental Engineer, LA P.E. No. 23806; Registered Professional Civil Engineer, FL P.E. No. 42728; Registered Professional Engineer, TX P.E. No. 86026; 40 Hour Hazmat Technician, Levels A, B, C, D, SCBA, SAR, APR, Certificate No. 1007; 8 Hour Hazmat Supervisor, Certificate No. 1012; Underground Storage Tank (UST) Removal Certification.

Other experience and qualifications relevant to the proposed Project:

Mr. Saleh has over (30) years of experience in coastal restoration, erosion control, marsh creation, and shoreline protection projects as project manager, supervisor, principal, construction inspector, construction project engineer, hydrologist, site developer, and computer modeler. He has over (10) years of experience in wetland delineation for the US Army Corps of Engineers and LA Department of Natural Resources including jurisdictional determination, and preparation of Environmental Documents according to NEPA. He has been in charge of numerous barrier island protections, coastal restoration, terracing, and marsh creation projects in south Louisiana and the Gulf Coast. Mr. Saleh has also been involved in performing noise and air quality analyses. As part of the environmental work, Mr. Saleh has performed Phases I and II Environmental Site Assessments. Mr. Saleh will assume the role of Senior Project Engineer and oversee all aspects of any awarded projects.

At Professional Engineering and Environmental Consultants, Inc., Mr. Saleh's engineering services include providing technical expertise and assistance to many local cities and parish's including Jefferson Parish, City of Westwego, Morgan City, Town of Grand Isle, Grand Isle Independent Levee District, West Jefferson Levee District, Grand Isle Port Commission, Plaquemines Parish, St. Charles Parish, St. Bernard Parish and St. Tammany Parish. Mr. Saleh will fulfill the role of Senior Project Engineer on any awarded projects.

TEC Professional Services Questionnaire

Fifi Island Restoration Project – Fifi Island, LA

Fifi Island has been eroding at an alarming rate. This island provides protection to Grand Isle as part of the Barrier Islands. A multi-task project was proposed for Fifi Island which included: breakwaters, beneficial use of dredged material, marsh creation, a containment levee, and access channels. Mr. Saleh was responsible for the actual design and layout of the project, project management, and cost analysis.

Plaquemines Parish Coastal Restoration Project – Plaquemines Parish, LA

Coastal Restoration of approximately (250) acres in Alexis Bay area by constructing terraces in a checkered, grid pattern to reverse wetland loss, encourage vegetation growth, retain suspended sediments, and expand emergent marshes. Mr. Saleh was responsible for the actual design and layout of the project, project management, and cost analysis.

Wetlands Restoration in Bessie Heights Complex – Port Arthur, TX

Beneficial use of dredged material and terracing to restore (222) acres of intermediate to brackish coastal wetlands. Special considerations include numerous active and inactive oil and gas lines, and extreme shallow water depth (as low as 2 ft.). Mr. Saleh was responsible for the actual design and layout of the project, project management, and cost analysis.

Coastal Restoration and Barrier Island Protection – Cheniere, LA

Construction of multiple segmented rock breakwaters. The breakwaters act as hurricane protection to the barrier island, protection of LA Highway 1 as the only evacuation route to and from the barrier island, and aid in building up lost land behind the structures. Mr. Saleh was responsible for the actual design and layout of the project, project management, and cost analysis.

Sabine National Wildlife Refuge Terracing Project – Sabine Parish, LA

PEEC provided the design of this terracing project to reverse wetland loss, encourage vegetation growth, retain suspended sediments and expand emergent marshes. Mr. Saleh was responsible for the actual design and layout of the project, project management, and cost analysis. This successful project served as standard for marsh creation projects in the region. Similar projects have created terraces in environmentally sensitive areas of neighboring parishes and states. Currently similar projects are being considered by the Texas Parks and Wildlife Department, as directed by Mr. Saleh.

Coastal Restoration and Barrier Island Protection – Breakwaters North of Grand Isle, LA

Construction of this project included the placement of rock breakwater to prevent shoreline erosion of barrier island and reduce the wave action force on the island during storm events. Breakwaters were constructed as segmented breakwaters with overlaps to provide tidal fluctuation. PEEC, Inc. was responsible for surveying, geotechnical analysis and design of the project. PEEC, Inc. conducted numerical simulations of tidal flow models, a cross-shore sediment transport model, and a 2-D scour model. The result of the models indicated the location, size, angle of break, and opening sizes of the breakwaters. Mr. Saleh was responsible for the actual design and layout of the project, project management, and cost analysis.

Beach Nourishment and Restoration – Grand Isle, LA

The beach on the south side of the Town of Grand Isle was eroded due to a tropical storm. The project required beach nourishment and restoration along with restoration of the earthen levee. Mr. Saleh was responsible for the actual design and layout of the project, project management, and cost analysis.

Jumbile Cove Restoration Project Phase I & II – Galveston, TX

The Galveston Bay area is subject to high energy wave action. An area of approximately (230) acres was considered for marsh creation. The proposed method included creation of (47) half-acre mounds using dredged material and sheltering tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. The purpose of this design was to reverse wetland loss, encourage vegetation growth, retain suspended sediments, and expand emergent marshes. The design criteria included the wave height, wave direction, storm surge, soil analysis, historical data review, tidal actuation, and construction management. Mr. Saleh was responsible for the actual design and layout of the project, project management, and cost analysis.

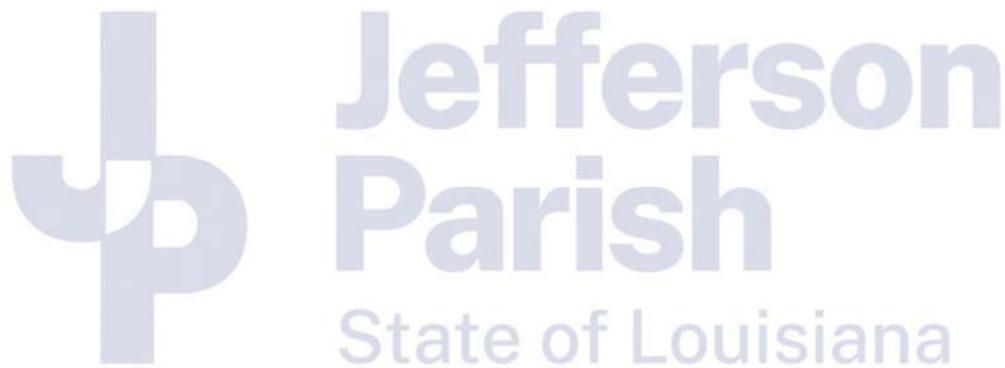
TEC Professional Services Questionnaire

Starvation Gap Coastal Restoration and Marsh Creation Project – Galveston, TX

The Galveston Bay area is subject to high energy wave action. An area of approximately (30) acres was considered for marsh creation. The proposed method include creation of (21) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. The design criteria included the wave height, wave direction, storm surge, soil analysis, historical data review, tidal actuation, and construction management. Mr. Saleh was responsible for the actual design and layout of the project, project management, and cost analysis.

Hoecker's Cut Marsh Creation Project – Galveston, TX

An area of approximately (25) acres was considered for marsh creation. This area was hit very hard by Hurricane Ike and Gustav. The proposed method included creation of (30) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. Mr. Saleh was in charge of the engineering design of improvements, funding process, conducting bid process, construction administration, and construction management.



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Delmar R. Caldwell, P.E.
Project Assignment:
Civil Engineer
Name of Firm with which associated:
Professional Engineering and Environmental Consultants, Inc.
Years' experience with this Firm:
31
Education: Degree(s)/Year/Specialization:
B.S., Civil Engineering, Tulane University, 1982
Active registration: Year first registered/discipline:
Registered Professional Civil Engineer, LA P.E. No. 23127; Registered Professional Environmental Engineer, LA P.E. No. 23127; Registered Professional Civil Engineer, MS P.E. No. 10847; Hazardous Waste Contractor, LA No. 26898; LA DEQ Underground Storage Tank Worker Certificate No. IRC-0539.
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Caldwell is a registered Civil Engineer with more than (30) years of experience in Civil and Environmental engineering projects. His experience is broad based, including office administration and management, construction administration and supervision, and a technical background that includes GIS development and implementation, roadway design, permitting, environmental site remediation, hydraulic and hydrologic analyses and study. Mr. Caldwell will assume the role of Civil Engineer regarding coastal engineering projects.</p> <p>Fifi Island Restoration Project – Fifi Island, LA Fifi Island has been eroding at an alarming rate. This island provides protection to Grand Isle as part of the Barrier Islands. A multi-task project was proposed for Fifi Island which included: breakwaters, beneficial use of dredged material, marsh creation, a containment levee, and access channels. Mr. Caldwell performed construction inspection for the rock breakwater system designed to protect Fifi Island from future flood, land loss, and damage associated with hurricanes, high rains, and storm surges.</p> <p>Wetlands Restoration in Bessie Heights Complex – Port Arthur, TX Beneficial use of dredged material and terracing to restore (222) acres of intermediate to brackish coastal wetlands. Special considerations include numerous active and inactive oil and gas lines, and extreme shallow water depth (as low as 2 ft). Mr. Caldwell was responsible for project administration and management, construction administration and supervision and a technical GIS implementation, permitting, and hydraulic and hydrologic analyses.</p>

TEC Professional Services Questionnaire

Coastal Restoration and Barrier Island Protection – Cheniere, LA

Construction of multiple segmented rock breakwaters. The breakwaters act as hurricane protection to the barrier island, protection of LA Highway 1 as the only evacuation route to and from the barrier island, and aid in building up lost land behind the structures. Mr. Caldwell performed construction inspection for the rock breakwater system designed to protect the island from future land loss and habitat change.

Beach Nourishment and Restoration – Grand Isle, LA

The beach on the south side of the Town of Grand Isle was eroded due to a tropical storm. The project required beach nourishment and restoration along with restoration of the earthen levee. Mr. Caldwell was responsible for the construction management and layout of the project. He conducted the Beach Elevation Survey of the damaged area and designed a new levee system that could provide better protection for the island. The design included the use of containment bags with fabric material as the core of the levee system.

Coastal Restoration and Barrier Island Protection – Breakwaters North of Grand Isle, LA

Construction of this project included the placement of rock breakwater to prevent shoreline erosion of barrier island and reduce the wave action force on the island during storm events. Breakwaters were constructed as segmented breakwaters with overlaps to provide tidal fluctuation. PEEC, Inc. was responsible for surveying, geotechnical analysis and design of the project. PEEC, Inc. conducted numerical simulations of tidal flow models, a cross-shore sediment transport model, and a 2-D scour model. The result of the models indicated the location, size, angle of break, and opening sizes of the breakwaters. Mr. Caldwell was responsible for project administration and management, construction administration and supervision and a technical GIS implementation, permitting, and hydraulic and hydrologic analyses.

Starvation Gap Coastal Restoration and Marsh Creation Project – Galveston, TX

The Galveston Bay area is subject to high energy wave action. An area of approximately (30) acres was considered for marsh creation. The proposed method include creation of (21) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. The design criteria included the wave height, wave direction, storm surge, soil analysis, historical data review, tidal actuation, and construction management. Mr. Caldwell assessed the damages to the marsh as a result of the wave action, proposed alternative solutions, and developed project plans and specifications.

Hoecker's Cut Marsh Creation Project – Galveston, TX

An area of approximately (25) acres was considered for marsh creation. This area was hit very hard by Hurricane Ike and Gustav. The proposed method included creation of (30) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. Mr. Caldwell assessed the damages to the marsh as a result of the wave action, proposed alternative solutions, and developed project plans and specifications.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Dr. Morris Sade, Ph.D., P.H., P.E.
Project Assignment:
Environmental Engineer
Name of Firm with which associated:
Professional Engineering and Environmental Consultants, Inc.
Years' experience with this Firm:
19
Education: Degree(s)/Year/Specialization:
Ph.D./1990/University of Illinois/Civil & Agric. Engineering M.S./1981/University of Arizona/Civil Engineering B.S./ 1971/University of Azerbaijan/Civil & Agric. Engineering
Active registration: Year first registered/discipline:
P.E. 1997, Civil Engineer/Louisiana No. 27412; P.E. 2002, Civil Engineer/Arizona No. 38010; P.E. 2003, Civil Engineer/Texas No. 91381; P.H. 1992, Professional Hydrologist, AIH 990
Other experience and qualifications relevant to the proposed Project:
<p>Dr. Sade has served in various technical and administrative capacities during his many years of experience as a professional engineer. He has multi-disciplinary education and extensive professional experiences in Design, Research and Development, Teaching, Planning and Management in the field of Water Resources and Environmental Engineering, Hydraulics and Hydrology. He has prepared and published numerous technical reports and design projects. He has an established record of knowledge and practical experiences in various physical and environmental aspects of Louisiana's Flat terrain Hydrology, Flood Control Structures, Stormwater Management, Hydrologic and Hydraulic Design (H&H), Soil Erosion, Risk Assessment and Dam Safety Analysis, Coastal Wetlands and Groundwater Technology. He has a broad background in computer modeling and simulation techniques for design of Hydrologic and Hydraulic (H&H) systems and GIS application. He has worked extensively with hydrologic models and has comprehensive working knowledge of HEC1, HEC2, HECRAS, HEC-HMS, HYDRAIN, STORM, SWMM, TR55, WSPRO, SMS, UNET, TABS, RMAX & SED2D, WQRRS, BASINS, QUAL-2E. Dr. Sade will assume the role of Environmental Engineer regarding coastal engineering projects.</p> <p>Starvation Gap Coastal Restoration and Marsh Creation Project – Galveston, TX The Galveston Bay area is subject to high energy wave action. An area of approximately (30) acres was considered for marsh creation. The proposed method include creation of (21) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. The design criteria included the wave height, wave direction, storm surge, soil analysis, historical data review, tidal actuation, and construction management. Dr. Sade was responsible for environmental permitting and environmental impact assessment.</p>

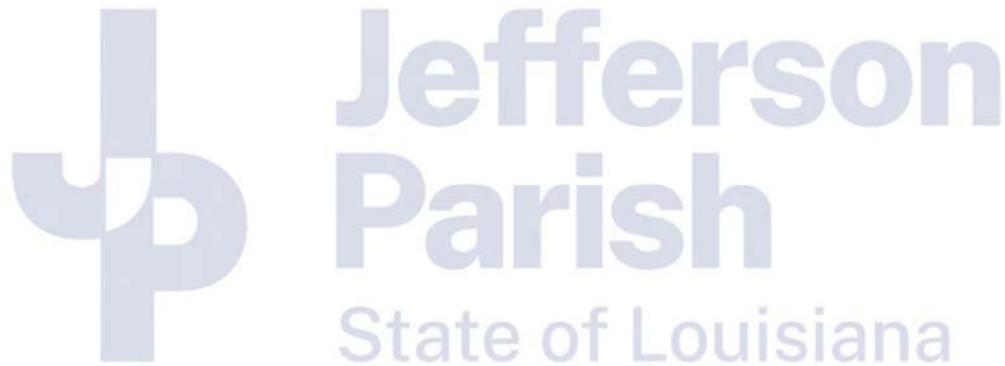
TEC Professional Services Questionnaire

Hoecker's Cut Marsh Creation Project – Galveston, TX

An area of approximately (25) acres was considered for marsh creation. This area was hit very hard by Hurricane Ike and Gustav. The proposed method included creation of (30) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. Dr. Sade was responsible for environmental permitting and environmental impact assessment.

Plaquemines Parish Coastal Restoration Project – Plaquemines Parish, LA

The wetland area in Alexis Bay has been subject to erosion and rapid loss of marsh area. The project area was approximately (250) acres and consisted of constructing terraces in a checkered, grid pattern to reverse wetland loss, encourage vegetation growth, retain suspended sediments, and expand emergent marshes. Dr. Sade was responsible for environmental permitting and environmental impact assessment.



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Al Almassi, P.E.
Project Assignment:
Civil Engineer
Name of Firm with which associated:
Professional Engineering and Environmental Consultants, Inc.
Years' experience with this Firm:
28
Education: Degree(s)/Year/Specialization:
B.S./ 1983 University of New Orleans/Civil Engineering
Active registration: Year first registered/discipline:
Civil Engineering, TX PE No. 88027
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Almassi is a Civil Engineer with over (30) years of experience in various aspects of the civil and environmental engineering fields. His experience includes: hydraulic analysis, environmental permitting, hydrologic study, topographic survey, creating plans and specifications, and construction administration. Mr. Almassi will assume the role of Civil Engineer and will provide engineering and planning support for coastal engineering projects.</p> <p>Starvation Gap Coastal Restoration and Marsh Creation Project – Galveston, TX The Galveston Bay area is subject to high energy wave action. An area of approximately (30) acres was considered for marsh creation. The proposed method include creation of (21) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. The design criteria included the wave height, wave direction, storm surge, soil analysis, historical data review, tidal actuation, and construction management. Mr. Almassi was responsible for the land loss and habitat survey, and preparation of plans and specifications.</p> <p>Plaquemines Parish Coastal Restoration Project – Plaquemines Parish, LA The wetland area in Alexis Bay has been subject to erosion and rapid loss of marsh area. The project area was approximately (250) acres and consisted of constructing terraces in a checkered, grid pattern to reverse wetland loss, encourage vegetation growth, retain suspended sediments, and expand emergent marshes. Mr. Almassi's duties included preparation of plans and specifications, and construction inspection.</p> <p>Fifi Island Restoration Project – Fifi Island, LA Fifi Island has been eroding at an alarming rate. This island provides protection to Grand Isle as part of the Barrier Islands. A multi-task project was proposed for Fifi Island which included: breakwaters, beneficial use of dredged material, marsh creation, a containment levee, and access channels. Mr. Almassi conducted the hydrologic study, land loss and habitat surveying, and construction management for rock breakwaters and earthen levees on Fifi Island.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Jeff Meyers
Project Assignment:
Project Manager
Name of Firm with which associated:
Professional Engineering and Environmental Consultants, Inc.
Years' experience with this Firm:
19
Education: Degree(s)/Year/Specialization:
Associates in Drafting and Design, Southeastern Louisiana University, 1999
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Meyers has been the Project Manager for several environmental and civil engineering projects with PEEC, Inc. His responsibilities included managing the design team, coordination with the client, coordination and design of the project including data conversion, computer mapping, field investigation and the historical review of the site; supervision of construction phase, preparation of the specifications, cost analysis, and preparation of operation and maintenance manuals and regulatory negotiations for obtaining the required permits. Mr. Meyers will assume the role of Project Manager for any coastal engineering projects.</p> <p>Plaquemines Parish Coastal Restoration Project – Plaquemines Parish, LA Coastal Restoration of approximately (250) acres in Alexis Bay area by constructing terraces in a checkered, grid pattern to reverse wetland loss, encourage vegetation growth, retain suspended sediments, and expand emergent marshes. Mr. Meyers was responsible for the verification of the mapping and topographic layout of Phase II of this project. His background in surveying assisted the team in preparing the geometric design of the terraces.</p> <p>Starvation Gap Coastal Restoration and Marsh Creation Project – Galveston, TX An area of approximately (30) acres was considered for marsh creation. The proposed method include creation of (21) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. Mr. Meyers' responsibilities included managing the design team, coordination with the client and construction manager, and preparation of the specifications.</p> <p>Hoecker's Cut Marsh Creation Project – Galveston, TX An area of approximately (25) acres was considered for marsh creation. This area was hit very hard by Hurricane Ike and Gustav. The proposed method included creation of (30) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. Mr. Meyers' responsibilities included managing the design team, coordination with the client and construction manager, project management, preparation of the specifications, construction management, cost analysis, and regulatory negotiations for obtaining the required permits.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Stephen Blaskey, P.L.S.
Project Assignment:
Lead Surveyor
Name of Firm with which associated:
Professional Engineering and Environmental Consultants, Inc.
Years' experience with this Firm:
13
Education: Degree(s)/Year/Specialization:
B.S./ 2004 Texas A&M University – Corpus Christi/Geographic Information Science with a Specialization in Geomatics
Active registration: Year first registered/discipline:
Louisiana P.L.S. License No. 5107 – Land Surveyor
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Blaskey has over four years of experience as Surveyor for PEEC, Inc. His responsibilities include surveying operations, boundary calculations, and use of GIS software. Mr. Blaskey will assume the role of Lead Surveyor and oversee all necessary surveying for coastal engineering projects.</p> <p>Starvation Gap Coastal Restoration and Marsh Creation Project – Galveston, TX The Galveston Bay area is subject to high energy wave action. An area of approximately (30) acres was considered for marsh creation. The proposed method include creation of (21) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. The design criteria included the wave height, wave direction, storm surge, soil analysis, historical data review, tidal actuation, and construction management. Mr. Blaskey was responsible for the elevation surveys, boundary calculations, and identifying where any existing pipelines were located at the project site.</p> <p>Hoecker's Cut Marsh Creation Project – Galveston, TX An area of approximately (25) acres was considered for marsh creation. This area was hit very hard by Hurricane Ike and Gustav. The proposed method included creation of (30) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. Project responsibilities included elevation surveys, boundary calculations, and identifying existing pipelines located at the project site.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
James Blanchard
Project Assignment:
Project Administrator
Name of Firm with which associated:
Professional Engineering and Environmental Consultants, Inc.
Years' experience with this Firm:
13
Education: Degree(s)/Year/Specialization:
B.G.S./2001 University of New Orleans/Science
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>As Project Administrator, Mr. Blanchard is responsible for permits, project administration, site inspection, conformance to regulations, coordinating with the engineer(s) and clients, pre-bid and bid opening process, reconciling any issues with residents and parish officials, and historical data research. Mr. Blanchard will fulfill this role on coastal engineering projects.</p> <p>Starvation Gap Coastal Restoration and Marsh Creation Project – Galveston, TX The Galveston Bay area is subject to high energy wave action. An area of approximately (30) acres was considered for marsh creation. The proposed method include creation of (21) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. The design criteria included the wave height, wave direction, storm surge, soil analysis, historical data review, tidal actuation, and construction management. Mr. Blanchard was responsible for applying for permits, coordinating pre-bid conference, tallying bids, site inspection, historical data review, and project administration.</p> <p>Hoecker's Cut Marsh Creation Project – Galveston, TX An area of approximately (25) acres was considered for marsh creation. This area was hit very hard by Hurricane Ike and Gustav. The proposed method included creation of (30) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. Mr. Blanchard was responsible for construction administration which included approving contractor invoices, compiling the inspection reports, and assisting the project managers with the permits.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Derek Pinkley
Project Assignment:
Draftsman/AutoCADD Technician
Name of Firm with which associated:
Professional Engineering and Environmental Consultants, Inc.
Years' experience with this Firm:
14
Education: Degree(s)/Year/Specialization:
B.S. in Computer Science American International University
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>As a Draftsman, Mr. Pinkley is responsible for detail design of architectural, structural, mechanical, and electrical drawings using AutoCAD and Microsoft software programs. Mr. Pinkley will fulfill the role of Draftsman on coastal engineering projects.</p> <p>Starvation Gap Coastal Restoration and Marsh Creation Project – Galveston, TX An area of approximately (30) acres was considered for marsh creation. The proposed method include creation of (21) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. Mr. Pinkley's responsibilities have included reviewing plans and creating AutoCAD drawings of the specifications for the coastal restoration improvements.</p> <p>Hoecker's Cut Marsh Creation Project – Galveston, TX An area of approximately (25) acres was considered for marsh creation. This area was hit very hard by Hurricane Ike and Gustav. The proposed method included creation of (30) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. Mr. Pinkley's responsibilities included reviewing plans and creating AutoCAD drawings of the project area.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
John Domingue
Project Assignment:
Construction Inspector
Name of Firm with which associated:
Professional Engineering and Environmental Consultants, Inc.
Years' experience with this Firm:
12
Education: Degree(s)/Year/Specialization:
Southeastern Louisiana University Continuing Education
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>As a Construction Inspector, Mr. Domingue has been responsible for the construction management and inspection services for several projects for PEEC, Inc., which included principles and practices applicable to a full range of duties such as review of the construction work and its compliance with the project plans and specification. He has also been responsible for investigating the construction at all stages to identify problems, report potential problems and takes timely action to solve problems, approve contractor's progress of the work, and ensure completion of the project in a timely manner. Mr. Domingue will fulfill the role of Construction Inspector on any coastal engineering projects.</p> <p>Starvation Gap Marsh Creation Project – Galveston, TX An area of approximately (30) acres was considered for marsh creation. The proposed method include creation of (21) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. Mr. Domingue's responsibilities included inspecting all work in progress to ensure construction is at the acceptable level of workmanship and in compliance with plans and specifications.</p> <p>Hoecker's Cut Marsh Creation Project – Galveston, TX An area of approximately (25) acres was considered for marsh creation. This area was hit very hard by Hurricane Ike and Gustav. The proposed method included creation of (30) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. Mr. Domingue's responsibilities included observing and investigating construction at all stages to identify problems, report potential problems and takes timely action to solve problems; and inspecting all work in progress to ensure construction is in compliance with plans and specifications.</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:	
<p style="text-align: center;">Fifi Island Restoration Project Fifi Island, LA</p> <p>Grand Isle Independent Levee District P.O. Box 757 Grand Isle, LA 70358</p>	<p>Complete study, final design, and conducting pre-construction and post-construction surveying for vegetation, land loss and habitat change.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2004	\$2,000,000	\$200,000

Fifi Island has been eroding at an alarming rate. This island provides protection to Grand Isle as part of the Barrier Islands. A multi-task project was proposed for Fifi Island which included: breakwaters, beneficial use of dredged material, marsh creation, a containment levee, and access channels.

PEEC coordinated with other State and Federal agencies to construct the project in phases. The funding for this project included CIAP, and Local and State funds.



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;">Plaquemines Parish Coastal Restoration Project Plaquemines Parish, LA</p> <p>Plaquemines Parish Government 106 Avenue G Belle Chase, LA 70037</p>	<p>PEEC, Inc. was responsible for measurement of habitat and identification of all possible causes of erosion.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2006	\$750,000	\$75,000
<p>The wetland area in Alexis Bay has been subject to erosion and rapid loss of marsh area. The project area was approximately (250) acres and consisted of constructing terraces in a checkered, grid pattern to reverse wetland loss, encourage vegetation growth, retain suspended sediments, and expand emergent marshes.</p> <p>PEEC made design recommendations based on wave height, wave direction, tidal fluctuation, storm surge and sediment characteristics. Our firm also conducted all phases of engineering including land and vegetation surveying, soil analysis, and construction management.</p> <div style="text-align: center; margin-top: 20px;">  </div>		

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Coastal Restoration and Barrier Island Protection Cheniere, LA</p> <p>Grand Isle Independent Levee District P.O. Box 757 Grand Isle, LA 70358</p>	<p>Performed pre-construction and post-construction surveying for vegetation, land loss, and habitat change; geotechnical analysis and design of the project.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
1998	\$2,000,000	\$200,000
<p>Construction of this project included the placement of rock breakwater to prevent shoreline erosion of this barrier island and reduce the wave action force on the island during storm events. Breakwaters were constructed as segmented breakwaters with overlaps to provide tidal fluctuation. The system provided the accretion of sand and silt behind the breakwater and allowed submerged vegetation growth.</p> <p>PEEC, Inc. conducted numerical simulations of tidal flow models, a cross-shore sediment transport model, and a 2-D scour model. The result of the models indicated the location, size, angle of break, and opening sizes of the breakwaters.</p> <div style="text-align: center; margin-top: 20px;">  </div>		

TEC Professional Services Questionnaire

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Coastal Restoration and Barrier Island Protection – Breakwaters North of Grand Isle, LA</p> <p>Grand Isle Independent Levee District P.O. Box 757 Grand Isle, LA 70358</p>	<p>PEEC, Inc. was responsible for surveying, geotechnical analysis and design of the project.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
1997	\$800,000	\$80,000
<p>Construction of this project included the placement of rock breakwater to prevent shoreline erosion of barrier island and reduce the wave action force on the island during storm events. Breakwaters were constructed as segmented breakwaters with overlaps to provide tidal fluctuation.</p> <p>PEEC, Inc. was responsible for surveying, geotechnical analysis and design of the project. PEEC, Inc. conducted numerical simulations of tidal flow models, a cross-shore sediment transport model, and a 2-D scour model. The result of the models indicated the location, size, angle of break, and opening sizes of the breakwaters.</p> <div style="text-align: center; margin-top: 20px;">  </div>		

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Wetlands Restoration in Bessie Heights Complex Port Arthur, TX</p> <p>Texas Parks and Wildlife Department 4200 Smith School Road Austin, TX 78744-3291</p>	<p>Complete engineering services, geotechnical services, and pre-construction and post-construction surveying for vegetation, land loss, and habitat change.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2002	\$750,000	\$75,000
<p>The Bessie Heights project is located just south of Port Arthur, Texas. This is an area that was subject to heavy oil and gas activities, which was carved by several major pipeline canals. The natural marsh area had subsided, and a body of water was created. The proposed project was to restore (222) acres of intermediate to brackish coastal wetlands by constructing terraces through the beneficial use of dredged material.</p> <p>The design of this project included hydraulic study and proper layout of the terraces to reverse wetland loss, encourage vegetation growth, retain suspended sediments, and expand emergent marshes.</p> <div style="text-align: center; margin-top: 20px;">  </div>		

TEC Professional Services Questionnaire

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Beach Nourishment and Restoration Grand Isle, LA</p> <p>Town of Grand Isle 170 Ludwig Lane Grand Isle, LA 70358</p>	<p>Complete design and Beach Elevation Survey.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
1996	\$400,000	\$40,000

The beach on the south side of the Town of Grand Isle was eroded due to a tropical storm. The project required beach nourishment and restoration along with restoration of the earthen levee.

PEEC, Inc. conducted the Beach Elevation Survey of the damaged area and designed a new levee system that could provide better protection for the island. The design included the use of containment bags with fabric material as the core of the levee system. PEEC, Inc. was responsible for the construction management and layout of the project.



TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Sabine National Wildlife Refuge Terracing Project Sabine Parish, LA</p> <p>LA Department of Natural Resources 617 North Third Street, Lasalle Building Baton Rouge, LA 70802</p>	<p>Conducted hydraulic study, coordinated sub-soil investigation, and performed pre-construction and post-construction land loss and habitat change survey.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
1995	\$300,000	\$30,000

The project consisted of constructing terraces in a grid pattern form to reverse wetland loss, encourage vegetation growth, retain suspended sediments, and expand emergent marshes. PEEC, Inc. performed this project while employed by another consulting firm. Our responsibility was to completely oversee the project from start to finish by conducting hydraulic study, coordinating sub-soil investigation, and performing pre-construction and post-construction land loss and habitat change surveying.

This method has been used by the Louisiana Department of Natural Resources and the Texas Parks and Wildlife Department as the most economical way to enhance a protected water body which is created as a result of marsh subsidence and erosion.



TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Starvation Gap Coastal Restoration and Marsh Creation Project Galveston, TX</p> <p>Texas Parks and Wildlife Department 4200 Smith School Road Austin, TX 78744-3291</p>	<p>Complete design, cost analysis, and determining the variety and abundance of vegetation.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2012	\$800,000	\$80,000

The Galveston Bay area is subject to high energy wave action. An area of approximately (30) acres was considered for marsh creation. This area was hit very hard by Hurricane Ike and Gustav. The proposed method include creation of (21) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation.

The design criteria included the wave height, wave direction, storm surge, soil analysis, historical data review, tidal actuation, and construction management.



TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Hoecker's Cut Marsh Creation Project Galveston, TX</p> <p>Texas Parks and Wildlife Department 4200 Smith School Road Austin, TX 78744-3291</p>	<p>Design of the entire project, cost analysis, permitting, and construction inspection.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2012	\$800,000	\$80,000

An area of approximately (25) acres was considered for marsh creation. This area was hit very hard by Hurricane Ike and Gustav. The proposed method included creation of (30) half-acre mounds using dredged material and sheltering of tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation.



TEC Professional Services Questionnaire

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Jumbile Cove Restoration Project Phase I & II Galveston, TX</p> <p>Texas Parks and Wildlife Department 4200 Smith School Road Austin, TX 78744-3291</p>	<p>Complete design, providing cost analysis, and conducting pre-construction and post-construction surveying for vegetation, land loss, and habitat change.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2003	\$735,000	\$73,500

The Galveston Bay area is subject to high energy wave action. An area of approximately (230) acres was considered for marsh creation. The proposed method included creation of (47) half-acre mounds using dredged material and sheltering tidal embankment using geo-tubes, building shell bird islands, and planting native vegetation. The purpose of this design was to reverse wetland loss, encourage vegetation growth, retain suspended sediments, and expand emergent marshes. The design criteria included the wave height, wave direction, storm surge, soil analysis, historical data review, tidal actuation, and construction management.



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. N/A	N/A	N/A
2.		
3.		
4.		

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

PEEC specializes in Civil, Coastal and Hydraulic Engineering. Our firm consists of professionals possessing senior-level experience and is intimately familiar with coastal Louisiana. Innovative solution concepts, advanced analysis and modeling technology, and the vast experience of our engineers in study, planning, design, and construction management of projects are the hallmarks of PEEC.

PEEC offers a strong background for coastal engineering design projects which include:

- **Shoreline Protection**
- **Beneficial Use of Dredged Material**
- **Wave Barrier and Breakwater**
- **Marsh Creation and Habitat Restoration**
- **Marsh Restoration and Habitat Protection**
- **Beach Nourishment and Beach Restoration**
- **Sediment Studies, Diversion and Transportation**

PEEC's experience in coastal restoration and wetland creation technology has provided its clients with the most economic solutions and creative design ideas for long lasting environmental concepts. Our clients enjoy our extremely successful teamwork for completion of engineering projects from start to finish.

1. Minimum Personnel Requirement: PEEC, Inc. has been providing the most advanced technological solutions for coastal engineering to its clients through its well qualified engineers and has performed the projects very efficiently and within budget. As the attached project list attests, PEEC has designed and managed numerous projects of similar size and type. PEEC has been involved as part of several design teams providing its expertise in the design of solid waste management programs.

TEC Professional Services Questionnaire

2. **Minimum Equipment Requirement:** PEEC, Inc.'s equipment inventory includes latest state-of-the-art equipment. The firm also possesses all the necessary computing, surveying, and computer software to process field data to conduct computer modeling and prepare design reports. PEEC has adequately trained personnel with extensive experience in the operation and field maintenance of all equipment.
3. **Professional Qualifications:** PEEC, Inc. is staffed with the right mix of engineers, technicians, administrators, and field personnel to successfully complete all types engineering projects. All the engineers listed are Louisiana certified registered engineers with extensive experience in their respective fields. The academic credentials of personnel range from B.S. to Ph.D. in civil, mechanical, electrical, structural, environmental engineering, land surveying, and in biological and geological sciences. Selected personnel also possess certification for underground storage tank (UST) closure, hazardous waste supervision, and as hazardous material technician. The CAD design department of PEEC, Inc. is well staffed with personnel with extensive experience in complex projects.
4. **Capacity for Timely Completion of Projects:** The current work load of PEEC, Inc. is at the average level it has been for the past 3 years. Accordingly, with our track record of timely completion of projects, we feel that any proposed project will not pose any undue burden on the firm's resources. PEEC has completed all of its previous projects in a timely manner as directed by contract agreements.
5. **Knowledge of Project Area:** The firm has been involved in many projects in the Greater New Orleans Area in the past and is intimately familiar with the project area. All of PEEC, Inc.'s staff also lives in the immediate vicinity of the office location and are as such familiar with the project area. Past engineering projects in the area have helped PEEC in building up an extensive inventory of background technical information on relevant characteristics of the area, which will be invaluable in preparation for the project design tasks.
6. **Past Performance:** PEEC, Inc. has successfully completed engineering design, construction management, and surveying services for clients such as Jefferson Parish, Town of Grand Isle, St. Tammany Parish, City of Westwego, Grand Isle Independent Levee District, West Jefferson Levee District, Louisiana Department of Natural Resources, City of Morgan City, Texas Parks and Wildlife, Plaquemines Parish, St. Bernard Parish, St. Charles Parish, the Town of Zwolle and numerous private clients in the past. The firm has performed all assigned tasks on or before time and within the allotted budget. PEEC, Inc. will provide further information and references upon request. PEEC has not been involved in any litigation with Jefferson Parish or any present or past clients.
7. **Quality Control Plan:** Mo Saleh, P.E. is the Quality Control Manager for all Coastal Engineering projects. His responsibilities in this position include manpower scheduling, budgeting and technical oversight. Background research and engineering design performed by project engineers are periodically checked by the QC Manager. Quality control also includes verification of sample analysis results with expected value. All drafting output is checked by the QC Manager before submittal. Similarly, all surveying reports are checked, sealed and signed by the registered land surveyor prior to submittal. The detailed Quality Control Plan will be furnished upon request.
8. **STATEMENT OF MAXIMUM FEE:** PEEC's rates are established upon contract is awarded or per project but typically do not exceed 15% of the project's construction cost. PEEC will negotiate specific fees on a project-by-project basis with its clients.

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

Signature: Mo Saleh **Print Name:** Mo R. Saleh, M.S., P.E.

Title: Principal; Senior Project Engineer **Date:** July 16, 2024



Division of Small and Emerging Business Development
SEBD CERTIFICATION

Professional Engineering and Environmental Consultants, Inc.

is hereby certified as a Small and Emerging Business Enterprise.

This certification is valid beginning 7/26/2021 and supersedes any registration or listing previously issued. At any time there is a change in ownership or control of the firm, notification must be made immediately to the Division of Small and Emerging Business Development.

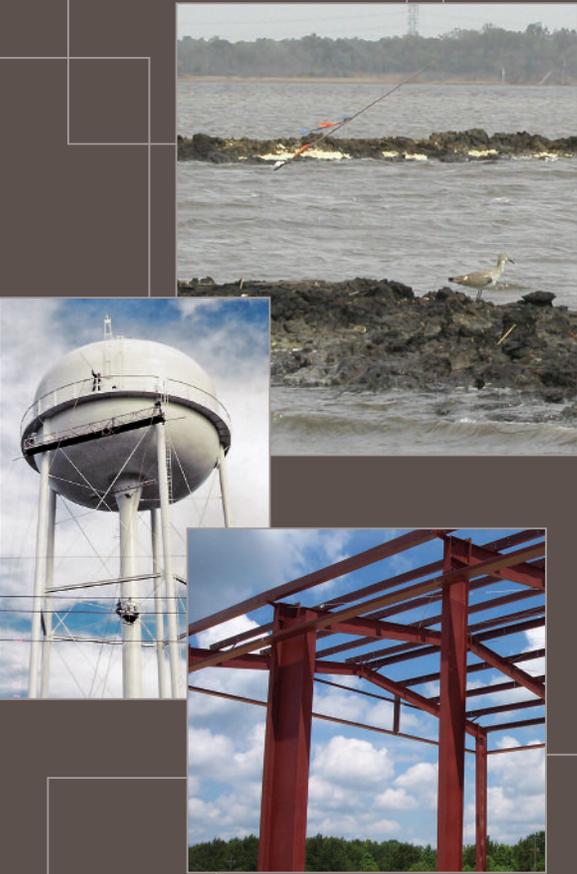
Issued at Baton Rouge, Louisiana 7/26/2021

This certification expires on: 7/26/2031

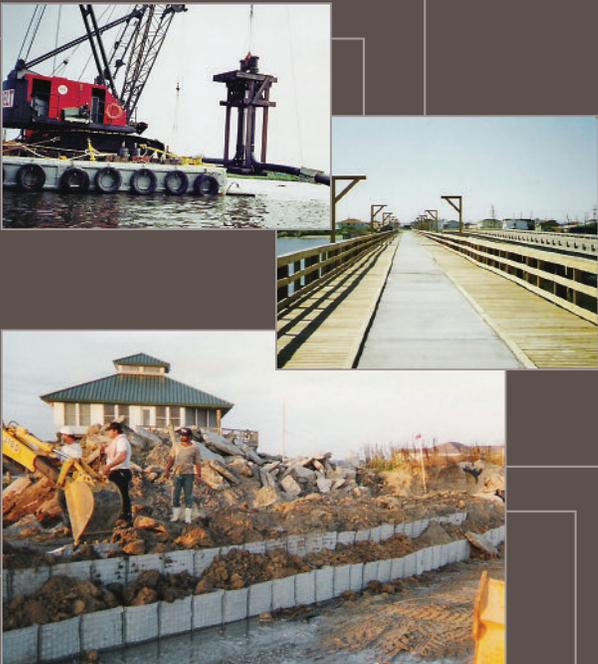
Certification No. 20386

A handwritten signature in black ink, appearing to read "Stephanie Hartman", is written over a horizontal line.

Stephanie Hartman,
Director, Entrepreneurial Services



Engineers | Planners | Environmental Consultants



SERVICES

Since 1993, PEEC has provided a full range of professional engineering services to clients throughout the Gulf Coast region. Our technical team provides solutions to diverse engineering challenges, from civil and environmental engineering, to coastal restoration initiatives, to construction management. Our approach allows our clients to benefit from the latest technology, innovative solutions, and cost effective ideas. PEEC integrates the appropriate resources and technologies for each client, every time.

CUSTOMIZING PROJECTS TO FIT THE CLIENT'S NEEDS

Our team of experts performs in-depth feasibility studies that consider all aspects of the project. During this fact-finding phase, our team of experts analyze how the project will affect the environment and community stakeholders. This comprehensive review allows us to present options that truly match our clients' needs.

FINDING THE FUNDS TO MAKE PROJECTS HAPPEN

When necessary, our staff identifies state and federal funding sources and helps the client secure all needed grants and loans. This service has enabled many of our clients' projects to move from concept to reality.

MANAGING CONSTRUCTION TO ENSURE SUCCESS

Once our design has been completed and funding has been obtained, we monitor the construction process to make sure that the contractor implements the project in accordance with all approved plans. A pre-bid conference and monthly construction meetings with the contractor are all standard features of PEEC's construction management service. In this way, our staff keeps project construction on schedule and within budget.

MAXIMIZING RESOURCES THROUGH PROGRAM MANAGEMENT

In addition to construction of one-time projects, PEEC's team also takes a comprehensive look at client infrastructure and offers long-term strategies for making these systems work more efficiently. Our staff makes recommendations about revenue streams, links with economic development, options for improvement in energy efficiency, land use planning, and system operation and maintenance. For example, our assessment of the City of Westwego's sewerage system involved examination of fees, insurance rates, licensing needs, and employee management structure as well as technical recommendations for improving the system's effectiveness.

Civil Engineering

PEEC has a proven track record of providing the infrastructure that Gulf Coast communities need. Our diverse and experienced staff is skilled in civil, electrical, mechanical, and construction management, enabling us to direct projects from inception to completion.

Clients

- ▣ St. Tammany Parish
- ▣ Grand Isle Levee Board
- ▣ Grand Isle Port Commission
- ▣ Plaquemines Parish
- ▣ West Jefferson Levee Board
- ▣ City of Westwego
- ▣ Town of Grand Isle
- ▣ Town of Zwolle
- ▣ Jefferson Parish
- ▣ St. Charles Parish

Structural

Building strong, building smart — these are watchwords for new construction in the hurricane-prone Gulf Coast. PEEC's approach to structural projects ensures that the finished product exceeds the client's expectations — not just at the ribbon cutting but for many storm seasons to come.

Clients

- ▣ City of Westwego
- ▣ Jefferson Parish
- ▣ Jefferson Parish School Board
- ▣ St. Tammany Parish
- ▣ Town of Zwolle
- ▣ Town of Grand Isle
- ▣ Plaquemines Parish



Drainage Pump Station – Belle Chasse, Louisiana

LONG-TERM PLANNING YIELDS RESULTS

In Belle Chasse, PEEC developed a master drainage plan using hydraulic modeling and aerial photography to analyze the community's needs. Our plan presented solutions for reducing flooding and preventing property damage. Once the plan was approved, PEEC designed and constructed several projects, including improvements to a major canal that drained the majority of the lower Belle Chasse drainage basin. Our design for slope paving stopped recurring flooding and protected nearby homes from subsidence caused by changes in the water table.

PROBLEM SOLVING IMPROVES PARISH PUMPING STATION

PEEC's upgrade of the drainage pumps in Plaquemines Parish required a fraction of the budget that other firms proposed. By constructing a steel frame inside the pumping station, among other methods, we were able not only to preserve the original building but keep the pumps in operation while a new diesel engine was installed. The frame was left in place so that the parish can use the same cost effective system whenever the station's engines need to be replaced.

Civil Engineering Services

- ▣ Drainage System
- ▣ Drainage System Design
- ▣ Stormwater Analysis
- ▣ Hydraulic Modeling
- ▣ Pump Station Design
- ▣ Roadway Design
- ▣ Levee System Design
- ▣ Site Development
- ▣ Local, State, and Federal Funding Assistance
- ▣ Construction Management



Parish Government Facility – St. Tammany Parish, Louisiana

PRIZE-WINNING DESIGN GIVES MAXIMUM FLEXIBILITY TO CLIENT

Our design and construction of the St. Tammany Parish Government facility won the 1999 Award for Excellence from Associated Builders and Contractors, Inc. Our steel frame design provided an attractive, versatile space that allows the parish to simultaneously use the building as a satellite center for a regional university, a library, and a medical facility.

HISTORICAL PROPERTY RETURNED TO COMMERCE

Our restoration of a former corner store into the Westwego Historical Museum converted a blighted property into the centerpiece of a new tourist district. PEEC completely restored the turn-of-the-century general store, furnished a period upstairs living quarters, and created a main exhibit area. Since opening its doors in 2000, the museum has welcomed thousands of visitors from around the world.

Structural Services

- ▣ Bridges—Wooden, Concrete, Steel, and Precast—Design and Construction Management
- ▣ Commercial Facility Design and Construction Management
- ▣ Industrial Facility Design and Construction Management
- ▣ Governmental Facilities and Complex Design and Construction Management and Repair

Environmental

We bring our expertise to bear on all of the Gulf Coast's most difficult environmental remediation and permitting challenges. Long-standing relationships with regulators allow us to expedite paperwork and pinpoint optimal grant sources, allowing our clients to focus less on red tape and more on improving quality of life for their customers and constituents.



Sludge Volume Reduction – City of Westwego

Environmental Services

- ▣ 404 Permit Acquisition
- ▣ Wetland Delineation Determination
- ▣ Environmental Impact Statement
- ▣ Environmental Impact Analysis
- ▣ Air Quality Permit
- ▣ MWPP
- ▣ MS4 Permit Acquisition
- ▣ NPDES/LPDES Acquisition
- ▣ Needs and Alternative Analysis
- ▣ Phase I and II Environmental Site Assessment
- ▣ Brownfield Assessment and Remediation

Clients

- ▣ Citrus Land Company
- ▣ City of Westwego
- ▣ City of Gretna
- ▣ CLL Limited Partnership, Ltd.
- ▣ Daybrook Fisheries
- ▣ Dixie Machine Welding and Metal Works, Inc.
- ▣ Grand Isle Port Commission
- ▣ St. Tammany Parish

BROWNFIELDS REDEVELOPMENT EXPANDS LOCAL ECONOMIES

PEEC secured \$1.5 million in total EPA Brownfields Funds for the Cities of Gretna and Westwego, Louisiana. Our staff followed up this fundraising success with action on the ground, converting formerly contaminated and abandoned properties into productive sites that are now used for a variety of industrial, recreational, and government uses. The former Malter Chemical site is now slated to be the site of an expanded McCormick Foods facility.

ASBESTOS REMOVAL ALLOWS EXTENSION OF VITAL ROADWAY

PEEC directed the removal of asbestos along a key traffic corridor in Gretna, Louisiana. Until our remediation was complete, a state financed extension of this corridor could not be completed.

ENVIRONMENTAL ASSESSMENT AND CLEANUP CONVERT EYESORE INTO VIABLE PROPERTY

PEEC worked with the City of Westwego and citizens to clean up a long-standing hazardous waste site. Now that underground storage tanks, illegal dumping spills, and other contaminated materials have been removed, the city is planning to use the property for the site of the new City Hall.



Wetland Creation Project – Galveston, Texas

Coastal

With wetlands being lost every day and hurricanes arriving in force, the Gulf Coast is ground zero for coastal restoration. PEEC has been at the forefront of the movement to preserve the region's wetlands, and we have successfully implemented unique solutions in a variety of storm-prone habitats.

BENEFICIAL USE OF DREDGED MATERIAL PROTECTS SENSITIVE TIDAL ECOSYSTEM

PEEC designed and constructed a 230-acre marsh creation project in Galveston Bay. Our team of experts created 47 half-acre mounds of dredged material planted with vegetation and protected the mounds with breakwaters made of geotubes. Galveston Bay experiences high wave action every day, and in 2008 Hurricane Gustav sent a tidal surge through the area. Our project remained intact despite the storm, while adjacent, unprotected marsh areas were destroyed.

TERRACING PROJECT CREATES NEW MARSH

An open water area just south of Port Arthur, Texas, Bessie Heights was once the site of healthy wetlands. PEEC restored 100 acres of marsh in Bessie Heights using dredged material arranged in terraces. The project was built in 2002 and remains structurally sound, despite the wave action created by Hurricanes Katrina, Rita, Gustav, and Ike. We expect that the project will eventually build more than 200 acres of wetlands.

BREAKWATER SYSTEM PROTECTS COAST WHILE ALLOWING NATURAL ECOSYSTEM FUNCTION

PEEC designed a four mile long breakwater system for Grand Isle with a special overlapping design that allows tidal fluctuations to pass through. At the same time, the breakwaters protect the island from storm surge and help reduce erosion. The project was built in 1998 and is functioning as designed despite numerous hits from severe hurricanes.

Coastal Services

- ▣ Marsh Creation
- ▣ Marsh Enhancement
- ▣ Marsh Protection
- ▣ Barrier Island Protection
- ▣ Levee System Design and Construction
- ▣ Levee System Upgrade and Repair
- ▣ Breakwater System Design and Construction
- ▣ Marsh Management

Clients

- ▣ Grand Isle Levee District
- ▣ Louisiana Department of Natural Resources
- ▣ Plaquemines Parish Government
- ▣ Texas Parks and Wildlife Department
- ▣ Town of Grand Isle



Breakwater System – Town of Grand Isle, Louisiana

Water

Sending water where it needs to go—PEEC has pioneered several techniques, now in use throughout the region, to make sure our clients have the water resources when and where they need them.



New Water Line – Town of Grand Isle, Louisiana

Water Services

- ▣ Hydrogeology/Groundwater Modeling
- ▣ Water Well Design
- ▣ Water Intake Structure Design, Construction, and Repair
- ▣ Water Treatment Services
- ▣ Water Distribution Systems
- ▣ Lake and Reservoir Water Quality Management
- ▣ Storm Water Permitting and Compliance
- ▣ Water Resources Management/Water Rights Strategies
- ▣ Water Supply Planning
- ▣ Watershed Management/Source Protection

Clients

- ▣ City of Westwego
- ▣ Jefferson Parish
- ▣ Town of Grand Isle
- ▣ Town of Zwolle
- ▣ St. Charles Parish
- ▣ Plaquemines Parish



New Water Line – Town of Grand Isle, Louisiana

NEW WATER LINE BRINGS CLEAN WATER, ECONOMIC GROWTH TO TOWN

Grand Isle, Louisiana's only inhabited island, is a community of 1500 people that had no direct source of potable water. Residents were forced to purchase water, at high rates. A lack of potable water also made it difficult to accommodate the many tourists who visited the island. In 1999, PEEC installed a 32-mile water line that piped in Mississippi River water to Grand Isle, using an innovative design that maximized the line's durability. Now the town's residents receive up to two million gallons of water a day at a fraction of the rate charged by previous sources. Since the line was installed, eco-tourism in Grand Isle has doubled.

STREAMLINED SOLUTION PROVIDES MODEL FOR REGION

Grand Isle's water distribution system was at the breaking point when PEEC was hired to bring the system back up to full strength. Along with other measures, we repaired the system's main pipe, whose diameter had shrunk to only six inches due to build up in the line. We used a specialized cleaning device normally used for pipelines to clean out the pipe. Our method effectively doubled the pipe's capacity and is now used by municipalities throughout the area to keep water systems functioning at optimal levels.



Wastewater Treatment Plant – Zwolle, Louisiana

Wastewater

Wastewater challenges have provided PEEC with opportunities to use innovative and green technologies that not only produce clean effluent, they improve the surrounding environment — all while achieving significant cost savings for our clients.

MICROBIAL ROCK PLANT FILTER PROVIDES CLEAN WATER AT LOW COST TO PARISH

A wastewater treatment plant in St. Tammany Parish was not meeting EPA effluent limits. Rather than constructing a costly new plant, PEEC used a design that employed crushed stone and rock already available within the parish. The four-acre treatment facility was designed to handle 1.5 million gallons of wastewater per day and provided an effluent quality in full compliance with all state and federal regulations.

SUSTAINABLE MEASURES REDUCE POLLUTANTS AND REDUCE PROJECT BUDGET

The town of Zwolle needed to improve the water quality of a 14.5-acre oxidation pond. PEEC designed a system using plants, which removed nitrogen and added oxygen to the wastewater, thereby cleaning the pond at low cost, with minimal disruption to the neighboring environment.

MICROBIAL APPLICATION PRODUCES WIN-WIN SOLUTION

The city of Westwego had a wastewater facility that was under functioning due to high sludge volume. PEEC reduced this volume by 50% using an application of specialized microorganisms. In a second phase, we used the microbial detritus this process created and used it as beneficial material for nearby earthen levee tops. The microbial sludge acted as fertilizer, spurring massive vegetation growth, which in turn reduced erosion on the levee and improved the city's storm protection system.

Sewer Services

- ▣ Combined Sewer Overflow
- ▣ Design and Rehabilitation of Collection Systems
- ▣ Design and Rehabilitation of Treatment Systems
- ▣ Operability Design Reviews
- ▣ Operations Services
- ▣ Start-up Assistance
- ▣ Inflow/Infiltration Study

Clients

- | | |
|----------------------|----------------------|
| ▣ City of Westwego | ▣ Town of Sarepta |
| ▣ St. Tammany Parish | ▣ Jefferson Parish |
| ▣ Town of Zwolle | ▣ Plaquemines Parish |
| ▣ U.S. Steel | |



Wastewater Treatment Plant – City of Westwego, Louisiana

PEEC, INC.

CIVIL

- Drainage System
- Drainage System Design
- Stormwater Analysis
- Hydraulic Modeling
- Pump Station Design
- Roadway Design
- Levee System Design
- Site Development
- Local, State, and Federal Funding Assistance
- Construction Management

STRUCTURAL

- Bridges—Wooden, Concrete, Steel, and Precast—Design and Construction Management
- Commercial Facility Design and Construction Management
- Industrial Facility Design and Construction Management
- Governmental Facilities and Complex Design and Construction Management

ENVIRONMENTAL

- 404 Permit Acquisition
- Wetland Delineation Determination
- Environmental Impact Statement
- Environmental Impact Analysis
- Air Quality Permit
- MWPP
- MS4 Permit Acquisition
- NPDES/LPDES Acquisition
- Needs and Alternative Analysis
- Phase I and II Environmental Site Assessment
- Brownfield Assessment and Remediation

COASTAL

- Marsh Creation
- Marsh Enhancement
- Marsh Protection
- Barrier Island Protection
- Levee System Design and Construction
- Levee System Upgrade and Repair
- Breakwater System Design and Construction
- Marsh Management

WATER

- Hydrogeology/ Groundwater Modeling
- Water Well Design
- Water Intake Structure Design, Construction, and Repair
- Water Treatment Services
- Water Distribution Systems
- Lake and Reservoir Water Quality Management
- Storm Water Permitting and Compliance
- Water Resources Management/Water Rights Strategies
- Water Supply Planning
- Watershed Management/ Source Protection

WASTEWATER

- Combined Sewer Overflow
- Design and Rehabilitation of Collection Systems
- Design and Rehabilitation of Treatment Systems
- Operability Design Reviews
- Operations Services
- Start-up Assistance
- Inflow/Infiltration Study



46148 Hwy 445
Robert, LA 70455

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F | 504-341-5600
E | inquiry@pecinc.com

**Jefferson Parish TEC
Professional Services Questionnaire**

For

BFM, LLC

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>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: <u>26</u> (all personnel will be available for assignment to the project)		

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:	
<p>Chad M. Poché, P.E. Executive Vice President / Registered Professional Geotechnical Engineer</p>	
Project Assignment:	
Engineering Liaison	
Name of Firm with which associated:	
	
Years' experience with this Firm:	
7 years (became partial owner of BFM in 2017); 31 years total (1993)	<i>BFM Corporation, LLC 2017 to present</i> <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. 2001 to 2007</i> <i>Eustis Engineering 1996 to 2001</i> <i>Soil Testing Engineers, Inc. 1993 to 1996</i>
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:	
<p>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.</p> <p>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.</p>	

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:	
<p>Gary J. Lambert, Jr., PLS Vice President / Registered Professional Land Surveyor</p>	
Project Assignment:	
Project Manager/Drafting Supervisor	
Name of Firm with which associated:	
	
Years' experience with this Firm:	
6 years (joined BFM in 2018); 13 years total (2011)	<i>BFM Corporation, LLC 2018 to present</i> <i>Riverlands Surveying 2016 to 2018</i> <i>Bertucci Contracting 2011 to 2016</i>
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:	
<p>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.</p> <p>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.</p> <p>Mr. Lambert has completed Basic OSHA Training and holds license with the Gulf Coast Safety Council (08SSV, ID429523).</p>	

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:
B F M CORPORATION, LLC Professional Land & Hydrographic Surveying
Years' experience with this Firm:
10 years (joined BFM in 2014); 18 years total (2006)
<i>BFM Corporation, LLC 2014 to present</i> <i>G.E.C., Inc. 2010 to 2014</i> <i>Krebs, LaSalle, LeMieux Consultants, Inc. 2006 to 2010</i>
Education: Degree(s)/Year/Specialization:
<i>High School Diploma</i>
Active Registration: Year first registered/discipline:
<i>American Traffic Safety Service Assn. – Traffic Flagger</i> <i>Louisiana Boater Education - Boating Safety Certificate</i> <i>Norfolk Southern Roadway Worker Protection Contractor Safety Certificate</i>
Other experience and qualifications relevant to the proposed Project:
<p>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).</p> <p>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)</p> <p>Lower Lafitte Waterline, Jefferson Parish, LA. BFM provided surveying services associated with the location of a 16 inch plastic waterline in the Baratavia Waterway as part of the Lower Lafitte Shoreline Stabilization project. BFM provided stakeout surveying for the project, staking the water</p>

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:	
<p>John Philip Thayer Procurement Director (Proposals & Project Management Support)</p>	
Project Assignment:	
Project Management Support	
Name of Firm with which associated:	
 <p>BFM CORPORATION, LLC Professional Land & Hydrographic Surveying</p>	
Years' experience with this Firm:	
<p>16 years (joined BFM in 2008); 17 years total (2007)</p>	<p><i>BFM Corporation, LLC 2008 to present</i> <i>Delle Land Surveying 2007 to 2008</i></p>
Education: Degree(s)/Year/Specialization:	
<p>Certificate, 2015, Land Surveying Services B.S., 2007, Physical Education, Trevecca Nazarene University</p>	
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:
 Professional Land & Hydrographic Surveying
Years' experience with this Firm:
15 years (joined BFM in 2009); <i>BFM Corporation, LLC 2009 to present</i> 27 years total (1997) <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); <i>BFM Corporation, LLC 2011 to present</i> 33 years total (1991) <i>Krebs LaSalle Lemieux / GEC 2008 to 2011</i> <i>Doug Connally and Associates Land Surveying (Dallas, TX) 1995-2008</i> <i>Electrician 1991 to 1995</i> <i>City of Plano TX (Part-Time Drafting Services) 1991</i>
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:
<p>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.</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>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</p>

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 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>Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, Louisiana</p> <p>APTIM 2424 Edenborn Avenue Suite 450 Metairie LA 70001</p> <p>Gene S. Gillen, P.E., 504-832-4881 info@aptim.com</p>	<p>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.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2018	N/A	\$150,000 (fee)

PROJECT NO. 2

Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, Louisiana</p> <p>Greenup Industries, LLC 2200 Veterans Memorial Blvd Ste 114 Kenner LA 70062</p> <p>Rodney Greenup, Jr., 225-283-4843 rodney@greenupind.com</p>	<p>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.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
July 2019	N/A	\$118,873 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, Louisiana</p> <p>Burk-Kleinpeter, Inc. 4176 Canal Street New Orleans LA 70119</p> <p>David Boyd, P.E., 504-483-6271 dboyd@bkusa.com</p>	<p>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.</p>	
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:	
<p>Abita River Regional Detention Pond Expansion, St. Tammany Parish, Louisiana</p> <p>CSRS Inc. 6767 Perkins Road, Suite 200 Baton Rouge LA 70808</p> <p>Scott Hoffeld, 225-769-0546 scott.hoffeld@csrsinc.com</p>	<p>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.</p>	
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:	
<p>Tchefuncte Marsh Shoreline Protection Project (Magnetometer & Hydrographic Survey), St. Tammany Parish, Louisiana</p> <p>Volkert, Inc. 7967 Office Park Blvd 2nd Floor Baton Rouge LA 70809</p> <p>Matt Salmon, P.E., 214-478-4754 matt.salmon@volkert.com</p>	<p>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.</p>	
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:	
<p>Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, Louisiana</p> <p>BCG Engineering & Consulting, Inc. 9619 Interline Avenue, Suite A Baton Rouge LA 70809</p> <p>David T. Dodgen, 225-924-3116</p>	<p>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/l-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.</p>	
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:	
<p>Fisher Basin Alignment Extension (Fisher/Lafitte Tidal Protection Alignment), Jefferson Parish, Louisiana</p> <p>Brown Cunningham Gannuch 3012 26th Street Metairie LA 70002</p> <p>Ann L. Springston, P.E., 504-454-3866 aspringston@ardurragroup.com</p>	<p>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.</p>	
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:	
<p>Marsh Island (Lafreniere Park), Metairie, Jefferson Parish, Louisiana</p> <p>Mathes Brierre Architects 201 St. Charles Avenue, Suite 4100 New Orleans LA 70170-4100</p> <p>Scott Evans, AIA, 504-586-9303 talfortish@mathesbrierre.com</p>	<p>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.</p>	
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:	
<p>Alexis Bay Marsh Creation Project, Venice, Plaquemines Parish, Louisiana</p> <p>Manchac Consulting Group, Inc. 2137-A Quail Run Drive, Suite A Baton Rouge LA 70808</p> <p>Daniel Duhon, 225-448-3972</p>	<p>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.</p>	
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:	
<p>Lower Lafitte Waterline Stakeout, Jefferson Parish, Louisiana</p> <p>CB&I 2424 Edenborn Avenue Suite 450 Metairie LA 70001</p> <p>Gene S. Gillen, P.E., 504-832-4881 gene.gillen@cbi.com</p>	<p>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.</p>	
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.	<i>BFM Corporation is not currently, nor has it previously been involved, in litigation with Jefferson Parish.</i>	
2.		
3.		
4.		

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



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)

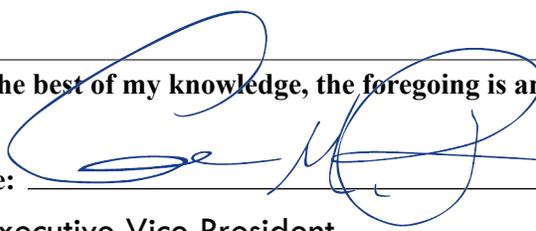
Angela DeSoto, P.E., Director of Engineering, Jefferson Parish
(504-736-6511 | ADeSoto@jeffparish.net)

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

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name: Public Address:

15 Veterans Memorial Boulevard
Kenner, Louisiana 70062
BFM Corporation, LLC

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
VF.0000008	Active	09/11/1984	09/30/2025	Mr. Ralph P. Fontcuberta Jr. # PLS.0004329



LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Ralph P. Fontcuberta Jr.

License/Certificate Type - Number Expiration Date
PLS.0004329 **09/30/2024**

Status: **Active**



LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Chad Mitchell Poche

License/Certificate Type - Number Expiration Date
PE.0027667 **09/30/2024**

Status: **Active**



LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Gary James Lambert Jr.

License/Certificate Type - Number Expiration Date
PLS.0005259 **03/31/2026**

Status: **Active**



LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. William Mead Farber

License/Certificate Type - Number Expiration Date
EI.0033903 **03/31/2025**

Status: **Active**



Division of Small and Emerging Business Development
SEBD CERTIFICATION

BFM CORPORATION, LLC

is hereby certified as a Small and Emerging Business Enterprise.

This certification is valid beginning 7/19/2019 and supersedes any registration or listing previously issued. At any time there is a change in ownership or control of the firm, notification must be made immediately to the Division of Small and Emerging Business Development.

Issued at Baton Rouge, Louisiana 7/19/2019

This certification expires on: 7/19/2029

Certification No. 9551

John W. Matthews, Jr.,
Executive Director, Entrepreneurial Services



DIVISION OF SMALL BUSINESS SERVICES

This certification acknowledges that

BFM CORPORATION, LLC

is Certified-Active as a Small Entrepreneurship with
Louisiana Economic Development's Hudson Initiative.

This certification is valid from 9/13/2023 to 9/13/2024 .

Certification No. 9551

Stephanie Hartman,
Director, Entrepreneurial Services



City of Kenner

1926 18th Street
Kenner, LA 70062

BFM CORPORATION
15 VETERANS BLVD
KENNER, LA 70062

**** NOTICE ****

This license becomes null & void if ownership, business name or address is changed. Licensee must apply within 10 days of such change for transfer. Fee will apply. All applicable building & zoning regulations pertaining to business location must be followed.

BFM CORPORATION, LLC
15 VETERANS MEMORIAL BLVD
KENNER, LA 70062

2024

Business License ID
407

Type
LIMITED LIABILITY COMPANY
SURVEYING SERVICES

Business License

Number
1595

Issued
01/09/2024

Valid thru
12/31/2024

***** POST THIS LICENSE IN A CONSPICUOUS PLACE *****

**Jefferson Parish TEC
Professional Services Questionnaire**

For

GSET, Inc.

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>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:



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:

Years' experience with this Firm:

2 years (joined Gulf South in 2022); *Gulf South Engineering and Testing, Inc. | 2022 to present*
3 years total (2021) *TetraTech, Inc. | 2021 to 2022*

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:

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.

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.

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)

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, 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:

Years' experience with this Firm:

13 years (joined Gulf South in 2011);
13 years total (2011)

Gulf South Engineering and Testing, Inc. | 2011 to present
Ardaman and Associates, Inc. | 2007 to 2011
Soil Testing Engineers, Inc. | 2006 to 2007

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:

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.

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)

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:	
 GULF SOUTH 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:	
<i>High School Diploma</i>	
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:	
 GULF SOUTH ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants	
Years' experience with this Firm:	
7 years (joined Gulf South in 2017); 7 years total (2017)	<i>Gulf South Engineering and Testing, Inc. 2017 to present</i>
Education: Degree(s)/Year/Specialization:	
<i>High School Diploma</i>	
Active Registration: Year first registered/discipline:	
<i>ACI Concrete Field Testing Technician - Grade 1 (exp 2028 03)</i> <i>ACI Aggregate Testing Technician - Level 1 (exp 2029 02 27)</i>	
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:


GULF SOUTH

ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

Years' experience with this Firm:

5 years (2012-2016; 2023 to present);
14 years total (2010)

Gulf South Engineering and Testing, Inc. | 2023 to present
Ascension Parish Sheriff's Office | 2016 to 2023
Gulf South Engineering and Testing, Inc. | 2012 to 2016
Ardaman and Associates, Inc. | 2010 to 2012

Education: Degree(s)/Year/Specialization:

High School Diploma

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:

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.

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)

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)

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:	
<p>Tchefuncte Marsh Shoreline Protection Project: New Borrow Fill Area, Lake Pontchartrain, St. Tammany Parish, Louisiana</p> <p>Volkert, Inc. 9448 Brookline Ave Baton Rouge LA 70809</p> <p>Matt Salmon, 225-218-9440 matt.salmon@volkert.com</p>	<p>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.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
December 2021	N/A	\$90,000 (fee)

PROJECT NO. 2

Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Proposed Estuary Mitigation Bank (EMB) GIWW - Deadend Canal, Vendome Canal, Hockey Stick Canal, Crown Point, Jefferson Parish, Louisiana</p> <p>The Natural Resources Investment Group, LLC 3801 Woodland Heights Rd Ste 110 Little Rock AR 72217</p> <p>Robert Stainton III, PE, 501-716-2884 robert@tnrig.com</p>	<p>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.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
October 2016	N/A	\$26,500 (fee)

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:	
<p>Tchefuncte Marsh Shoreline Protection - New Rock Dikes, Lake Pontchartrain, St. Tammany Parish, Louisiana</p> <p>Principal Engineering, Inc. 1011 North Causeway Blvd, Suite 19 Mandeville LA 70471</p> <p>Andre Monnot, P.E., 985-624-5001 andre@pi-aec.com</p>	<p>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.</p>	
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:	
<p>Highway 90 Tie-In Levee, Upper Barataria Risk Reduction Program (UBRR) Segment 4, St. Charles Parish, Louisiana</p> <p>Lafourche Basin Levee District 21380 Highway 20 Vacherie LA 70090</p> <p>Donald Ray Henry, 225-265-7545 drhenry@lbld.us.com</p>	<p>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.</p>	
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:	
<p>Marsh Island Restoration Project, Lafreniere Park, Metairie, Jefferson Parish, Louisiana</p> <p>Mathes Brierre Architect 201 St. Charles Street, Suite 4100 New Orleans LA 70170-4100</p> <p>Scott Evans, AIA, 504-586-9303 sevans@mathiesbrierre.com</p>	<p>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.</p>	
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:	
<p>Bayou Des Allemands Gate, Upper Barataria Risk Reduction (UBRR) Program Segment 3, St. Charles Parish, Louisiana</p> <p>Lafourche Basin Levee District 21380 Highway 20 Vacherie LA 70090</p> <p>Donald Ray Henry, 225-265-7545 drhenry@lbld.us.com</p>	<p>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.</p>	
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:	
<p>Engineering Analysis Review (EAR) - Lafitte Tidal Protection Project (Phase I), Lafitte, Jefferson Parish, Louisiana</p> <p>G&S Engineering, LLC Post Office Box 71 Mandeville LA 70470</p> <p>Scott Gros, 504-744-0630 scottgros@gmail.com</p>	<p>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.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	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:	
<p>Laketown Boat Launch Improvements - New Rock Jetty, South Shore Lake Pontchartrain, City of Kenner, Jefferson Parish, Louisiana</p> <p>Jefferson Parish 1221 Elmwood Park Blvd Ste 310 Jefferson LA 70123</p> <p>Michelle M. Gonzales, CFM, 504-736-6653 mgonzales@jeffparish.net</p>	<p>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.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	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.	<i>Gulf South Engineering and Testing, Inc. is not currently, nor has it previously been involved, in litigation with Jefferson Parish.</i>	
2.		
3.		
4.		

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



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

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name:

Gulf South Engineering and Testing, Inc.

Public Address:

Mr. Chad Poche, PE15 Veterans Memorial Boulevard
Kenner, Louisiana 70062

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0004626	Active	07/27/2010	03/31/2025	Mr. Chad Mitchell Poche# PE.0027667



LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Chad Mitchell Poche

License/Certificate Type - Number

PE.0027667

Expiration Date

09/30/2024

Status: **Active**



LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Ralph P. Fontcuberta Jr.

License/Certificate Type - Number

PLS.0004329

Expiration Date

09/30/2024

Status: **Active**



DIVISION OF SMALL BUSINESS SERVICES

This certification acknowledges that

Gulf South Engineering and Testing, Inc.

is Certified-Active as a Small Entrepreneurship with
Louisiana Economic Development's Hudson Initiative.

This certification is valid from 12/27/2023 to 12/27/2024 .

Certification No. 11011

Stephanie Hartman,
Director, Entrepreneurial Services



**USACE CERTIFICATE
OF
LABORATORY VALIDATION**



Gulf South Engineering and Testing

15 Veterans Memorial Blvd
Kenner, LA, United States
Trey Binder
(504) 305-4401

has demonstrated, by abbreviated audit of its AASHTO accreditation, or by inspection of required records, equipment, procedures, facilities, and/or final reports, its proficiency to perform testing of construction materials, as established by the quality standards of AASHTO R 18 guidance and the requirements of the applicable ASTM standards.

THIS USACE CERTIFICATE OF LABORATORY VALIDATION IS ACCURATE AS OF ITS DATE AND TIME OF GENERATION:

06 MAY 2024 AT 14:40 HOURS

ALL METHODS LISTED ON THIS CERTIFICATE OF VALIDATION WILL EXPIRE ON 05/03/2026

PLEASE CONFIRM THE CURRENT VALIDATION STATUS OF THIS LABORATORY USING THE SEARCH FEATURE ON OUR PUBLIC WEBSITE: <https://mtc.erdcdren.mil>

Chad A. Gartrell, PE, Director
USACE Materials Testing Center
Vicksburg, Mississippi, USA

AGGREGATE

- Aggregate - C 128 - Specific Gravity & Absorption in Fine Aggregate
- Aggregate - C 566 - Total Moisture Content
- Aggregate - C 702 - Reducing Samples to Testing Size

CONCRETE

- Concrete - C 31 - Making and Curing Test Specimens in the Field
- Concrete - C 39 - Compressive Strength of Cylindrical Specimens
- Concrete - C 138 - Unit Weight and Air Content by Gravimetric
- Concrete - C 143 - Slump
- Concrete - C 172 - Sampling
- Concrete - C 231 - Air Content by Pressure ***required if C173 not performed***
- Concrete - C 511 - Moist Cabinets, Moist Rooms, Water Storage Tanks
- Concrete - C 1064 - Temperature of Concrete
- Concrete - C 1077 - Concrete and Concrete Aggregate Testing Standards (Quality Standards)
- Concrete - C 1231 - Unbonded Caps

SOILS

- Soils - E 329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection
- Soils - D 421 - Dry Preparation for Particle Size Distribution & Soil Constants
- Soils - D 422 - Particle Size Analysis (Sieve and Hydrometer)
- Soils - D 698 - Compaction Characteristics by Standard Effort
- Soils - D 1140 - Material Finer than 75 μ m (No. 200) Sieve
- Soils - D 1556 - Density & Unit Weight by Sand Cone
- Soils - D 1557 - Compaction Characteristics by Modified Effort
- Soils - D 2166 - Unconfined Compressive Strength
- Soils - D 2216 - Water Content
- Soils - D 2487 - Classification of Soils
- Soils - D 2488 - Description & Identification of Soils (Visual-Manual Procedure)
- Soils - D 2974 - Moisture, Ash, & Organic Matter of Peat & Other Organic Soils
- Soils - D 4318 - Liquid & Plastic Limits & Plasticity Index
- Soils - D 4643 - Determination of Water Content of Soil by Microwave Oven
- Soils - D 6938 - Density and Water Content by Shallow Depth Nuclear Method



CERTIFICATE OF ACCREDITATION



Gulf South Engineering and Testing, Inc.

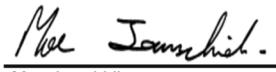
in

Kenner, Louisiana, USA

has demonstrated proficiency for the testing of construction materials and has conformed to the requirements established in AASHTO R 18 and the AASHTO Accreditation policies established by the AASHTO Committee on Materials and Pavements.

The scope of accreditation can be viewed on the Directory of AASHTO Accredited Laboratories (aashtoresource.org).


Jim Tymon,
AASHTO Executive Director


Moe Jamshidi,
AASHTO COMP Chair

This certificate was generated on 04/11/2024 at 12:54 PM Eastern Time. Please confirm the current accreditation status of this laboratory at aashtoresource.org/aap/accreditation-directory

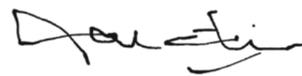


THIS CERTIFICATE IS PROUDLY PRESENTED TO

Gulf South Engineering and Testing, Inc.

8/15/2023

DATE



SIGNATURE

