

JEFFERSON PARISH

SOQ 22-036 Resolution #139868 Supplemental Coastal Engineering and Consulting Services















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BURK-KLEINPETER, INC.

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3240 SOUTH I-10 SERVICE ROAD WEST, ROOM 300
METAIRIE, LA 70001
TELEPHONE (504) 483-6266
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August 12, 2022

PRESIDENT & CEO MICHAEL D. CHOPIN, PE

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RENE A. CHOPIN, III, PE
HENRY M. PICARD, III, PE, PLS

VICE PRESIDENT DAVID E. BOYD, PE

Jefferson Parish Purchasing Department Ms. Donna M. Evans General Government Building 200 Derbigny Street, Suite 4400 Gretna, LA 70053

RE: SOQ 22-036 Supplemental Coastal Engineering and Consulting Services

Ms. Evans:

In response to your request for qualifications, **Burk-Kleinpeter**, **Inc.**, **BFM Corporation**, **LLC**, **Gulf South Engineering and Testing**, **Inc.**, **and ELOS Environmental**, **LLC** is pleased to submit one electronic copy of our qualifications for the above-referenced project.

BKI is a certified small business firm providing full-service, professional engineering and planning consulting services to public and private clients for over 110 years in Louisiana. As presented in this submittal, BKI has completed a diverse range of projects related to planning, designing, evaluating, permitting, implementing Coastal Engineering and Consulting services.

Our Metairie office will serve as the main project office with David Boyd, PE, Vice-President of the Civil Engineering Division, as the project manager. He has extensive experience as project manager on projects with a hydrologic and hydraulic engineering focus as well as projects involving wetland and marsh restoration, hurricane mitigation, watershed studies master drainage planning, and drainage improvements. Our Metairie office will serve as the main project office for this assignment.

As an established firm committed to client satisfaction, we look forward to the opportunity to assisting the Parish in successful project implementation as outlined in the scope of services. We have a history of successfully completing similar scale projects on time for Jefferson Parish, and we hope to have the opportunity to continue that partnership.

We appreciate this opportunity to submit our qualifications and look forward to working for the Parish again in the future.

Sincerely.

Henry M. Picard, III, PE, PLS Serior Vice President





Burk-Kleinpeter, Inc. TEC Questionnaire





A. Project Name a	nd Advertisement	Resolution	Number:
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SOQ No. 22-036 Supplemental Coastal Engineering and Consulting Services - Resolution 139868

B. Firm Name & Address:

BKI BURK-KLEINPETER, INC.

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:

Michael D. Chopin, PE - Principal | President, (504) 343-6254, mchopin@bkiusa.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.

David E. Boyd, PE - Civil Engineer - (504) 483-6271, dboyd@bkiusa.com

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

- 13 Administrative
- O Architects (Licensed)
- O Chemical Engineers
- 7 Civil Engineers
- 2 Construction Inspectors
- 0 Ecologists
- <u>0</u> Electrical Engineers
- 3 Engineer Intern
- O Professional Land Surveyors

- 0 Estimators
- <u>0</u> Geologists
- 0 Geotechnical Engineers
- 0 Interior Designers
- 0 Landscape Architects
- <u>0</u> Land Surveyor
- <u>0</u> Mechanical Engineers
- 0 Environmental Engineers
- 6 CADD/GIS

- O Specification Writers
- **4** Structural Engineers
- 0 Graduate Engineers
- 1 Project Managers
- 0 Clerical
- O Grant/Funding Specialist
- <u>0</u> Sanitary Engineers
- 2 Planners
- 1 Designers
- **39 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.

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 the JOINT-VENTURE previous YES NO N/A	ously worked together? Please Che	ck
all subcontractors must submit a	ted for this Project. Please note th fully completed copy of this quest y the advertisement. See Jeffersor nal pages if necessary.	ionnaire, applicable licenses, and
Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. BFM Corporation, LLC 15 Veterans Memorial Blvd. Kenner, LA 70062	Survey	Yes
2. Gulf South Engineering and Testing, Inc. 15 Veterans Memorial Blvd. Kenner, LA 70062	Geotechnical Testing	DUISIANA Yes
3. ELOS Environmental, LLC 607 W. Morris Avenue Hammond, LA 70403	Environmental Engineering	Yes
J. Please specify the total number of support personnel that may assist in the completion of this Project: BKI:10 Team:32		

5

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:

Michael D. Chopin, PE (Minimum Personnel Requirement No. 1)

Principal / President

Project Assignment

Principal / QA/QC

Name of Firm with which associated



Years' experience with this Firm:

31

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1991 / Civil Engineering

Active registration: Year first registered/discipline

1996 / PE Civil, State of LA / No. 26797

Other experience and qualifications relevant to the proposed project:

Mr. Chopin is Principal/President at BKI in charge of personnel, including schedules, staff, budgets, technical review, and account management. He has over 26 years of professional engineering experience focused on a wide range of public works projects as a Principal, Project Manager, or Project Engineer. Projects have included hydrologic and hydraulic modeling, coastal-hurricane protection projects, master drainage planning, design, construction administration and related supplemental services. As a principal and project manager, Mr. Chopin has nativigated project funding constraints and has proven successful in producing deliverables which comprehensively benefit both the community and environment. Mr. Chopin is a member of the American Society of Civil Engineers and the Society of American Military Engineers.

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

Mr. Chopin has worked on the following applicable projects:

Plaquemines Parish Coastal Restoration Program - *Plaquemines Parish, LA* - Project oversight for the development of wetland vegetation ridges adjacent to the back levee system between Fort Jackson and Venice, Louisiana.

EJLD Shoreline Protection - *Jefferson Parish, LA* - Provided project oversight during the identification of alternative shoreline protection methods to provide erosion protection for the Linear Park along the south shore of Lake Pontchartrain in Jefferson Parish, from the St. Charles Parish line to the Orleans Parish line, approximately eight miles of protection.

RPC South Shore Wetlands Restoration - *New Orleans, LA* - Responsible for civil engineering final plans and specifications for the bidding and construction of a 275 to 300-foot long stone breakwater to protect the creation of an approximate two-acre wetland restoration area adjacent to Bucktown Harbor on the south shore of Lake Pontchartrain.

Bucktown Harbor Master Plan - *Metairie, LA* - Project Manager managed the preparation of plans and specs for the development of a new marina and recreation area on the south shore of Lake Pontchartrain.

Bayou St. John Adaptive Management Plan - *New Orleans, LA* - Provided project quality control and quality assurance and guidance for a water management study, the goal of which was to determine the best engineering and environmental methods to re-introduce native aquatic species into the Bayou St. John watershed.

NO S&WB Lincoln Beach - *New Orleans, LA* - As Project Manager oversaw the preparation of the plans, specifications, and construction administration for improvements to the Lincoln Beach site consisting of new site pavements, utilities, pavilion building and site amenities.

USDA NRCS Barataria Land Bridge - *Lafourche and Jefferson Parishes, LA* - Project Manager for the preparation of plans and specifications for the placement of offshore protection rock berms along the coast line to prevent erosion of the bank as part of the Barataria Basin Land Bridge Shoreline Protection Project (BA-27) to protect and enhance the marshland within the project area.

Lake Chapeau- LaDNR - *New Orleans, LA* -Designed construction of nine channel plugs in existing oil field canals and hydraulic dredge fill to restore the natural hydrologic patterns.

East Jefferson Flood Reduction Study & Master Drainage Plan Update - *Jefferson Parish*, LA - Project Manager for the hydraulic engineering study of Jefferson Parish's East Bank Flood Reduction Plan. Used UNET hydrologic & computer model to network system of 64 canal segments. Generated results by creating contours for flooding areas based on water surface evaluations for specific modes and generating this information on contour maps in CADD.

Louis Armstrong New Orleans International Airport Master Drainage Plan - *New Orleans, LA* - Peformed hydrologic and hydraulic analysis for existing airport site and proposed strategic growth plan improvements, using HYDRA, HEC-1, and UNETsoftware.

Belle Chasse Area Master Drainage Plan - *Belle Chasse, LA* - Provided project oversight for the preparation of a hydrologic and hydraulic study. The Master Drainage Plan will be the basis for infrastructure programming and guidance for residential and commercial developments.

Upper Barataria Risk Reduction Project (UBRR) / St. Charles Parish West Bank Hurricane Protection System - *St. Charles Parish, LA* - Providing engineering and general project oversight to ensure compliance on all project phases for the system enhancements including the Willowridge Subdivision, Ellington watershed, and Magnolia Ridge Road pump stations.

25th Street Canal - *Gretna, LA* - As Principal, provided oversight for the drainage improvements to the 25th Street Canal Neighborhood which included Hydraulic and Benefit Cost Analyses, construction documents for the green infrastructure elements, resident inspection and construction administration services. This project utilized a combination of LA Capital Outlay Funds, CDBG Funds, and FEMA Flood Mitigation Grant dollars.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Henry M. Picard, III, PE, PLS (Minimum Personnel Requirements No. 2)

Senior Vice President

Project Assignment

Regional Manager

Name of Firm with which associated



Years' experience with this Firm:

32

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1981 / Civil Engineering

Active registration: Year first registered/discipline

1986 / PE Civil, State of LA / No. 22289 1994 / PLS, State of LA / No. 4736 1996 / PE Civil, State of AL / No. 20937 2000 / PE Civil, State of FL / No. 56552

Other experience and qualifications relevant to the proposed project:

Mr. Picard, a Senior Vice President at BKI with 36 years of professional engineering experience, is in charge of project management. His extensive experience includes managing a variety of coastal and environmental restoration, hydrologic and hydraulic modeling, master drainage planning, drainage, drainage improvements, and pump stations projects. These projects have also included cost estimation as well as construction administration and resident inspection. Mr. Picard holds a Bachelor of Science in Civil Engineering; is a Registered Professional Engineer in Louisiana, Alabama, and Florida; and is a Registered Professional Land Surveyor in Louisiana. He is an active member of the American Society of Civil Engineers and the Society of American Military Engineers.

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

Mr. Picard has worked on the following applicable projects:

Upper Barataria Risk Reduction Project Phase 1 - 2019 Tasks - *Lafourche Parish, LA* - Principal providing oversight for earthen levees, a 270' steel barge swing gate floodgate in Bayou Des Allemands, a steel rollergate across LA 306, tidal interchange structures, concrete T-Wall floodwalls, and pump station frontal protection.

Belle Chasse Area Master Drainage Plan - *Belle Chasse, LA* - Provided project management and guidance for the preparation of a hydrologic and hydraulic study. The Master Drainage Plan will be the basis for infrastructure programming and guidance for residential and commercial developments.

25th Street Canal Drainage Improvements (Resiliency District) - *Gretna, LA* - Principal provided QA/QC oversight for the design of alternate stormwater runoff routing during high-intensity events. Including existing system analysis, recommended pipe sizes for alternate flow routes when the Heebe Canal stage exceeds water surface elevations, and designing improvements within 25th St. Canal to handle the additional flow to feed the proposed 25th St. drainage pump station. This project included the development of a closed, pump-controlled system for the 2 subdivision that will alleviate flooding during high-intensity rainfalls.

Marvin Braud Pump Station Watershed Dredging Evaluation - *Ascension Parish, LA* - Project Manager supervised the analysis of open channel drainage network in Ascension Parish, LA, using HEC-HMS and HEC-RAS unsteady flow model. The model was developed from and existing model prepared by the U.S. Army Corps of Engineers and calibrated to the Hurricane Rita rainfall event. After calibration of the model, the model was utilized to evaluate hydraulic effects of dredging drainage channels in the Marvin Braud Pump Station Basin and the effect on the existing pump station capacity.

St. Charles Parish West Bank Hurricane Protection System - *St. Charles Parish, LA* - Providing project QA/QC and oversight for all engineering and supplmental services including extensive hydrologic and hydraulic modeling, securing all necessary State of Louisiana and Federal permits, earthen levees, T-Walls, three (3) new drainage pumping stations and canals, and tidal exchange structures during this phased project to reduce damage caused by storm surge.

Bayou Liberty North of Interstate 12 Regional Detention Pond Study -*St. Tammany Parish, LA*- Provided guidance for the preparation of alternative detention pond sizes and locations to reduce stormwater flooding. Twelve alternatives were prepared that consisted of one large and one small detention pond located at different locations within the watershed to maximize the reduction of floodwaters. The alternatives were ranked based upon cost versus flood reduction.

Westshore Enhancements Hydraulics Project - *St. James Parish, LA* - Principal providing QA/QC for structural design of a floodgate and a 320 CFS pump station at the 310' Blind River Crossing as well as two additional floodgates in separate locations. Included at the Blind River pump station is the design of a 2050 square foot pile support electrical platform that supports auxiliary equipment such as the 1250 KW generator, transformer, generator dock, HVAC systems and scada tower. The platform also supports a 470 Square foot, single story, CMU block electrical and controls room with concrete roof.

Bayou Liberty Watershed Management Plan -*St. Tammany Parish, LA*- Project manager provided guidance for preparation of a watershed study, including topographic surveys stormwater drainage model, stormwater reduction alternatives, and environmental database. The stormwater drainage model consisted of a HEC-HMS and HEC-RAS steady flow models calibrated by linear regression flow parameters. The stormwater reduction alternatives consisted of twelve alternatives to reduce stormwater flooding with ranking by cost versus flood reduction. The environmental database included GIS mapping and associated data from the US Geological Survey soil maps, the National Wetland Index, the permitted Environmental Protection Agency Point Discharge locations, and other environmental data.

Bayou Conway / Panama Canal Master Drainage Plan -Ascension Parish, LA - Project Manager for the analysis of the open channel drainage network in Ascension Parish using HEC-HMS and HEC-RAS unsteady flow model to determine the existing flow capacities under gravity flow conditions. After development of the gravity flow model, the study analyzed the watershed under future land use conditions and determined proposed channel improvements. Also included in the study was the potential of a future levee project requiring pump station flow capacity to accommodate future channel improvements and future land use in the Parish.

St. John the Baptist Master Drainage Plan (PLD) - *St. John the Baptist Parish, LA* - Managed the preparation of a Master Drainage Plan for a portion of the eastbank of St. John the Baptist Parish which consisted of an evaluation of the existing and proposed drainage network. The project included hydrologic and hydraulic analyses of an open channel drainage network.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

David E. Boyd, PE (Minimum Personnel Requirement No. 3)

Vice President

Project Assignment

Supervisor

Name of Firm with which associated



Years' experience with this Firm:

16

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 2004 / Civil Engineering

Active registration: Year first registered/discipline

2010 / PE Civil, State of LA / No. 35510

Other experience and qualifications relevant to the proposed project:

Mr. Boyd, Vice President of the Civil Engineering Division, has provided BKI's public and private clients with professional consulting engineering services for hydrology and flood control projects for more than 12 years. Mr. Boyd is proficient in Hydrologic and Hydraulic modeling using HEC-HMS and HEC-RAS as well as SWMM software. His experience includes wetland and marsh restoration, hurricane mitigation, watershed studies, master drainage plan, and extensive drainage improvement projects. Projects of note include: master drainage plans for Bayou Liberty in St. Tammany Parish, Marvin Braud Watershed and Bayou Conway Master Drainage Plans for Ascension Parish, Louis Armstrong Master Drainage Plan for Jefferson Parish, Bayou St. John Master Drainage Plan for the Orleans Levee District, the St. James East Bank Master Drainage Plan, and the Belle Chasse Master Drainage Plan. These master drainage plans involved analyzing existing conditions and future conditions as well as drainage improvement alternatives to alleviate flooding.

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

Mr. Boyd has worked on the following applicable projects:

Bayou St. John Adaptive Management Plan - *New Orleans, LA* - Project Manager for a water management study in Bayou St. John. The study determined the best engineering and environmental methods to re-introduce native aquatic species into the Bayou St. John watershed.

Gretna Downtown Drainage Improvements - *Gretna, LA* - Project Manager provided oversight, quality control, client coordination, and civil design oversight for the design and engineering of a layered green and grey stormwater infrastructure project within the downtown area. To alleviate localized stormwater flooding issues, the project used green infrastructure improvements along the public right-of-way to meet multiple demands: stormwater management, continued revitalization in the downtown area, and improved public right-of-way safety and accessibility.

Oak Park Flood Mitigation Project - *New Orleans, LA* - Provided civil engineering for the preparation of a hydrologic and hydraulic study. The hydraulic analysis included traditional storm drain culvert size improvements and green infrastructure stormwater techniques including water garden detentions. The New Orleans Redevelopment Authority (NORA) had obtained multiple lots within the Oak Park Subdivision that were abandoned after the Hurricane Katrina flooding event. NORA had placed the lots back into commerce or had developed them into greenspace or water gardens.

Louis Armstrong New Orleans International Airport Master Drainage Plan - *Kenner, LA* - Civil Engineer performed hydrologic and hydraulic analysis of open-closed channel drainage network of the Louis Armstrong New Orleans International Airport, using HEC HMS and HEC RAS unsteady state model, recommended drainage infrastructure improvements with cost estimates and created a master drainage manual for Airport facility managers to meet all Federal Aviation Administration and Jefferson Parish requirements.

Belle Chasse Area Master Drainage Plan - *Plaquemines Parish, LA* - Hydraulic Engineer for the hydrologic and hydraulic analysis of the open channel drainage network in Belle Chasse, LA using HEC-HMS and HEC-RAS unsteady state model. The Master Drainage Plan will be the basis for infrastructure programming and guidance for residential and commercial developments.

Bayou Liberty Watershed Studies -St. Tammany Parish, LA- Hydraulic Engineer for the hydrologic and hydraulic analysis of open channel drainage network in St. Tammany Parish, LA, using HEC HMS and HEC RAS steady state model for siting two regional detention ponds in the Bayou Liberty basin above I-12.

Bayou Conway / Panama Canal Master Drainage Plan - *Ascension Parish, LA* - Provided more than 1,200 hours of services in the analysis of the open channel drainage network in Ascension Parish, LA, using HEC-HMS and HEC-RAS unsteady flow model to determine the existing flow capacities under gravity flow conditions. After development of the gravity flow model, the study analyzed the watershed under future land use conditions and determined proposed channel improvements. Also included in the study was the potential of a future levee project requiring pump station flow capacity to accommodate future channel improvements and future land use in the Parish.

St. James - Ascension Master Drainage Plan / Flood Protection Project - *St. James and Ascension Parishes, LA*- Civil and Hydraulic Engineer / Hydrologist: Provided civil/hydraulic engineering services for the preparation of the Master Drainage Plan. The study was performed using the HEC-HMS and HEC-RAS modeling software to determine the potential of improving the existing canals or the need for a new outfall.

Marvin Braud Pump Station Watershed Study - Ascension Parish, LA - Performed hydrologic and hydraulic analysis of open channel drainage network in Ascension Parish, LA, using HEC HMS and HEC RAS unsteady state model to evaluate hydraulic effects of dredging drainage channels in the Marvin Braud Pump Station Basin. The study resulted in the addition of 2-1000 cfs pumps to the existing pump station including the super structure for housing the additional pumps and motors.

Marvin Braud Drainage Pump Station - *Ascension Parish, LA* - Performed hydrologic and hydraulic analysis of open channel drainage network in Ascension Parish, LA using HEC-HMS and HEC-RAS unsteady state model to evaluate future runoff based upon projected land usages and pump station expansion requirements to drain Ascension Parish in the future.

The Trotessional Services Questionnance	
KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Nicholas Matherne	
Project Manager, CFM	
Project Assignment	
Coastal Manager	
Name of Firm with which associated	
BKI BURK-KLEINPETER, INC. ENGINEERING PLANNING ENVIRONMENTAL	
Years' experience with this Firm:	
2	
Education: Degree(s)/Year/Specialization:	
Bachelor of Arts / General Studies	
Active registration: Year first registered/discipline	
N/A	
Other experience and qualifications relevant to the proposed project:	
Mr. Matherne, domiciled in Raceland, LA, has over 14 years of experience in Government Regulatory Administration and Project Management, including Coastal Restoration, Freshwater Enhancement, Levees & Floodgates, Resiliency, and Municipal Waterline projects. He is a member of the Association of State Floodplain Managers (ASFPM) as well as the Louisiana Floodplain Managers Association (LFMA). Mr. Matherne is a highly effective communicator and coordinator, with extensive experience in tailoring technical information and presentations to each specific audience. In his work on a variety of project types, such as roadway and drainage, bridge, green infrastructure and resident inspection, he has gained an awareness of typical funding constraints and has proven successful in creating deliverables which comprehensively take into consideration and benefit the community and	

the environment. He has Bachelor of Arts degree from Nicholls State University and is a Certified Floodplain Manager(CFM). He's previously worked in a similar capacity with the Lafourche Parish Government, Terrebonne Parish Consolidated Government and most recently with Aptim Environmental & Infrastructure, LLC.

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

Mr. Matherne has worked on the following applicable project:

UBRR Project USACE Assignments - *Lafourche and St. Charles Parishes, LA* – Provided coordination between the Lafourche Basin Levee District and the U.S. Army Corps of Engineers New Orleans District on the USACE Feasibility Report with Integrated Environmental Impact Statement on the Upper Barataria Risk Reduction project. Worked with USACE engineering team to incorporate most up-to-date data on project features and protected assets, ultimately resulting in a positive Benefit-Cost Ratio for the project in the Integrated FS-EIS draft, for which a Chief's Signature is anticipated in October 2021.

Upper Barataria Risk Reduction Project - *Lafourche and St. Charles Parishes, LA* - As Project Manager, provided project management over engineering and design of levees and flood structures. Coordinated design reviews with and submitted monitoring reports to Louisiana CPRA in accordance with cost-sharing intergovernmental agreements. Advocated on behalf of LBLD for project funding to CPRA, Louisiana Watershed Initiative, and State Legislative and Congressional delegations.

St. Charles Westbank Levee - *St. Charles Parish, LA* – Provided overall program management for the design and construction management of 9 miles of earthen levee improvements, pump stations, gas pipeline crossings, water control structures, and pump station frontal protection features. Coordinated state cost-share agreement requirements for St. Charles Parish with CPRA, including design reviews and comment integration.

Causeway (LA3046) / **Earhart Blvd (LA 3139) Interchange (H.002861)** - *Jefferson Parish, LA* - Provided overall project management for repair and replacement of sections of roadway and complete reconstruction of portions of 5 streets in the City of New Orleans. Coordinated subcontractors and oversaw state invoicing and documentation requirements.

LA 23 NOGC Railway Relocation PE / NEPA Project - *Jefferson and Plaquemines Parishes, LA* - Provided engineering management in the preparation of rail/roadway intersection alternative concept analysis.

Rural Bridge Replacement Initiative, Phases I & II - *Various Parishes, LA* - Provided management of overall program, including subconsultant coordination for redesign, removal, and reconstruction of 34 bridges on the State Highway system over 9 concurrent contracts, including NEPA Compliance, surveys, geotechnical investigations, real estate, hydraulic analysis (including bridge scour), and design of bridges and roadways.

Peters Road Bridge and Extension (H.008068, H.008069, 008244) - *Plaquemines and Jefferson Parishes, LA* - Provided overall project management for design services of a fixed, high level bridge across the Intercoastal Waterway connecting Peters Road in Jefferson Parish with LA Hwy 23 in Plaquemines Parish.

FEMA Lower Ninth Ward Northwest Group B (FRC) Reynes Street Improvements - *New Orleans, LA* - Provided Project Management for the preparation of plans, specifications, and detailed quality estimates for a full roadway reconstruction project including new roadway pavement, sidewalk, ADA ramps, driveways, drainage infrastructure, gravity sewer, and water utilities.

West End Group F RR198 (FRC) - *New Orleans, LA* - Provided overall project management for repair and replacement of sections of roadway and complete reconstruction of portions of 7 streets in the City of New Orleans. Coordinated subcontractors and oversaw state invoicing and documentation requirements.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

René A. Chopin, III, PE (Minimum Personnel Requirement No. 3)

Senior Vice President / Chief Engineer

Project Assignment

Structural Engineer

Name of Firm with which associated



Years' experience with this Firm:

34

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1988 / Civil Engineering

Active registration: Year first registered/discipline

1993 / PE Civil, State of LA / No.25174

2001 / PE Civil, State of TX / No.87547

2001 / PE Civil, State of FL / No.56402

2001 / PE Civil, State of MS / No.15600

2018 / PE Civil, State of AL / No.37326

Other experience and qualifications relevant to the proposed project:

Mr. Chopin, Senior Vice President/Chief Engineer with 29 years of professional engineering experience, is in charge of project production, project management, and staff supervision. He has provided professional consulting services focused on the strucutral elements of design. He has served as Project Manager or Project Engineer on numerous infrastructure, storm protection, program management, environmental assessment, bridge, roadway, dock, and wharf projects. Mr. Chopin's projects have garnered awards and commendations from the American Concrete Institute Louisiana Chapter and the National Partnership for Highway Quality. Mr. Chopin holds a Bachelor of Science in Civil Engineering, and is a Registered Professional Engineer in Louisiana, Mississippi, Florida, Alabama, and Texas. He is also a member of the American Society of Civil Engineers and the American Concrete Institute of which he is Past President of the Louisiana Chapter.

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

Mr. Chopin has worked on the following applicable projects:

Ascension Storm Surge Protection Project - *Ascension Parish*, *LA* - Chief Engineer provided QA/QC on levee design alignments, cross sections, floodgates, pump station modifications and cost estimates for the project.

Fourth Street Extension Environmental Assessment and Design SPN 700-26-0247 - *Gretna, LA* - Provided project oversight for an Environmental Assessment for an extension of Fourth Street to provide a more direct connection to the Westbank Expressway. The LA 18 (4th Street Extension) project involved the design and construction of a two-lane, minor arterial roadway within the former Union Pacific Railroad right-of-way.

Clearview Pkwy Improvements, Mounes to Airline – *Jefferson Parish, LA* - Supervised planning and environmental engineering study to upgrade traffic capacity for future widening of Huey P. Long Bridge.

Earhart Expy - Causeway Blvd Interchange - SPN H.002861 - *Jefferson Parish, LA* - Project Manager providing design oversight and mentoring of younger engineers for a new interchange between Earhart Expressway (LA3139) and Causeway Boulevard (LA 3046). The existing bridges widened for the interchange were inspected and rated per the Load Resistance Factor Rating and recommendations for correcting deficiencies for LADOTD's consideration.

I-10 Causeway Interchange - *Jefferson Parish*, LA - Project manager for converting a cloverleaf interchange into a direct and semi-direct connection. Performed the geometric design and layout for the entire interchange. Developed the TS&L for the five elevated ramps. Quality Controlled the bridge design and details. Attended the monthly partnering meetings, supervised shop drawing review and answered RFIs during construction.

I-10 Widening Veterans Blvd. – Clearview Pkwy - *Metairie*, *LA* - Project Manager for roadway and bridge design for widening approximately 1.5 miles of urban interstate highway. Provided Quality Control of roadway and bridge plans during preliminary and final plans. Attended the monthly partnering meetings and supervised the shop drawing reviews and answered RFIs during construction.

Causeway Boulevard Widening - *Metairie*, *LA* - Project Manager is providing traffic engineering and drainage design for the widening of Causeway Boulevard from Airline Drive to West Napoleon Avenue. The project includes widening an existing four-lane divided roadway to a six-lane divided roadway, traffic signal upgrades, and drainage improvements along a one mile urban arterial. Drainage design and drainage plan sheets will be developed by BKI. Drainage improvements are subsurface with tie-ins at the existing West Napoleon Avenue box culverts.

Intersection Improvements at Williams & Airline - *Kenner, LA* - Provided QA/QC for the project, which aimed to improve pedestrian access to an intersection. The project followed LADOTD'S standard plan format and met all LADOTD requirements.

Jefferson Parish Westbank Street Repair Program Management - *Jefferson Parish*, *LA* - Project Manager for the development of scopes, budgets, schedules, design oversight, periodic site visits during construction, preparing pay estimates, document change orders, and coordination with FEMA.

Upper Barataria Risk Reduction Project (UBRR) / St. Charles Parish West Bank Hurricane Protection System - *St. Charles Parish, LA* - Provided structural engineering design services for the new 300 cfs Williowridge Drainage Pump Station including bar screens, pump station structure, thre (3) cfs vertival pumps with electric motors, backup generator, and discharge pipes. Also provided structural oversight drainage design all three (3) stations that are part of the UBRR / St. Charles Parish Hurricane Protection System.

Preliminary Engineering for Southern Trace Lift Station Improvements - *Shreveport, LA* - Responsible for the Quality Control, constructibility, and bid-ability during the creation of 12 pre-design tehcinical memoranda and recommendations for the final design requirements. BKI provided design plans for the rehabilitation of an existing lift station in the Southern Trace subdivision that had aging equipment and appurtenances.

Wolf Bay Bridge Final Design - *Orange Beach, AL* - Provided oversight for the bridge design for a project connecting SR-161 across Wolf Bay to CR-95. Responsible for Quality Control of design calculations and bridge plans. Assisted with obtaining environmental clearance and U.S. Coast Guard permits for the bridge. The bridges cross the Intracoastal Waterway Navigation Channel in Wolf Bay.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

René A. Chopin, IV, PE (Minimum Personnel Requirement No. 3)

Civil Engineer

Project Assignment

Civil and Hydraulic Engineering

Name of Firm with which associated



Years' experience with this Firm:

9

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 2013 / Civil Engineering

Active registration: Year first registered/discipline

2018 / PE Civil, State of LA / No. 42349

Other experience and qualifications relevant to the proposed project:

Mr. Chopin is a Registered Professional Civil Engineer in Louisiana with a focus on Hydraulic and Hydrologic Engineering. His experience includes the use of the Department of Transportation and Development HYDR 2009 and HEC-RAS programs to calculate drainage flows and pipe capacities. He has worked on various projects such as levee and storm water prevention projects, harbor improvements - including dredging, master drainage plan, drainage improvement, lift station design and rehabilitation, and roadway improvement projects. His responsibilities have included performing engineering calculations, site layout, plan and specification preparation, estimating project costs, and construction administration. He is a Member of the American Society of Civil Engineers and the Society of Military Engineers as well as holding a TWIC card.

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

Mr. Chopin has worked on the following applicable projects:

Ascension Storm Surge Protection - *Ascension Parish, LA* - Providing hydraulic design and analyses as well as assembled plans, specifications, and cost estimates for the project. Will perform construction administration and closeout duties for this project.

Upper Barataria Risk Reduction Project Phase 1-2019 Tasks - *Lafourche and St. Charles Parishes, LA* - Created an AutoCAD Civil 3D model of the proposed levee system using LiDAR data for preliminary design and included the creation of the levee baseline as well as a corridor based on slope stability information provided by the geotechnical engineer. Responsible for the hydraulic design of the closure structure on the Godchaux Canal ensure that proper tidal flow is maintained in the area. Also assisted the structural engineering team in the design of the access road bridge that will span Godchaux Canal with responsibilities including setting the bridge low chord elevation based on available water elevation information as well as laying out the General Bridge Plan and Elevation drawings. He also served as the point-of-contact for coordination with the pipeline companies in the area that will be affected by the new levee system.

Belle Chasse Area Master Drainage Plan - *Belle Chasse, LA* - Designed an intake canal for the proposed Belle Chasse pump station at Walker Road. This included modeling the channel and adjacent roadway in AutoCAD Civil3D which was then used to generate construction documents and quantities.

- **St. James Ascension Master Drainage Plan / Flood Protection Project** *St. James and Ascension Parishes, LA* Surveyed existing culverts in St. James Parish, analyzed data, and reassessed deficiencies to provide a suitable solution. Assisted in creating plan sheets of analyzed culverts to provide the Parish with a Master List. Created existing and proposed surface models in AutoCAD Civil 3D.
- **St. James Interior Drainage (Matherne, David, Woods Canal)** *St. James Parish, LA* Reviewed and prepared final plans for the improvement of lateral ditches and culverts along LA 3125. Responsibilities included performing Rational Method calculations for sizing culverts and calculating quantities for ditch improvements and outfall armoring. Carried out Construction Administration responsibilities including preparing bid documents, tabulating bids, performing periodic site visits, and generating closeout documents.

West Shore Levees and Floodwalls -St. Charles, St. John the Baptist, and St. James Parishes, LA - Calculated quantities for access roads as well as creating levee cross-sections for a new multiparish hurricane protection levee project extending from St. Charles to Ascension Parish.

Oak Park Flood Mitigation Project - *New Orleans, LA* - Provided civil engineering services for the preparation of a hydrologic and hydraulic study. The hydrologic analysis evaluated the quantity of rainfall runoff for 10-year and 100-year storm events.

Maplewood Area Drainage Improvements - *Harvey, LA* - Performed construction administration duties including verifying quantities, reviewing as-built plans, and reviewing field inspection reports for drainage improvements in the Maplewood subdivision area, which had historically flooded during intense rainfall events.

East Bank Floodgate Painting and Repairs EB1 - EB74 - *New Orleans, LA* – As Civil Engineer calculated quantities for sandblasting, painting, replacing seals, and repairing sills. Served as Resident Inspector for the removal and replacement of the floodgates during construction.

Bayou Paul Lane Ditch and Culvert Improvements Project - *City of St. Gabriel, LA* - Performing Hydraulic Analyses using LaDOTD's Hydraulic Software, HydrWIN2009 as well as generating a cost estimate based on proposed improvements. Will create construction documents and assist inthe bidding-advertising of the project as well as provide construction administration services and oversee the resident inspector.

Sharp Road Detention Pond - *Mandeville, LA* - Provided civil engineering services for the development of a detention pond and drainage improvements near Asbury Drive, Century Oaks Lane, Sharp Road, Marquette Street, and Cypress Lake. Existing storm drainage channels and pipe culverts were upgraded from a 10-Year Storm Event capacity to a 25- Year Storm Event capacity. The project included a 15.5 acre-foot detention pond with an overflow weir structure, 342 linear feet of concrete pipe or pipe arch, and 3,000 linear feet of channel widening.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT: Name & Title:

Timothy Koenig, PE (Minimum Personnel Requirement No. 3)

Associate - Civil Engineer

Project Assignment

Civil Engineer

Name of Firm with which associated



Years' experience with this Firm:

19

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1998 / Microbiology Bachelor of Science / 2004 / Civil Engineering

Active registration: Year first registered/discipline

2009 / PE Civil, State of LA / No. 35079

Other experience and qualifications relevant to the proposed project:

Mr. Koenig is an Associate Civil Engineer having joined BKI in 2004 after receiving his Bachelor of Science degree in Civil Engineering. He has provided professional consulting services to public and private clients throughout the Gulf South regionwith of expertise including engineering assessments and project design. He has provided services on water, rail, structural, and industrial design projects. Most notably, Mr. Koenig has been an integral part of Hurricane Katrina recovery at the Port of New Orleans.

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

Mr. Koenig has worked on the following Civil Engineering projects:

SLFPA-E Floodgate Repairs GIWW, MRGO, OFC & Lakefront - *New Orleans, LA* - Responsible for the design work on this project including drawings and specifications using the same format and procedure for the previous two (2) floodgate design sets completed.

Floodgate Repairs - Orleans Levee Board - *New Orleans, LA* - Prepared construction documents and performed construction administration for a floodgate sandblast, repair and paint project.

Lake Borgne Basin Levee District Pump Station No. 6 Erosion Control Design - *New Orleans, LA* - Civil Engineer provided plans, specifications, bidding assistance, and construction management for the repairs to Lake Borgne Levee District Pump Station No. 6 Erosion Control.

- **St. James Ascension Master Drainage Plan / Flood Protection Project** *St. James and Ascension Parishes, LA* Provided civil engineering services for the development of levee alignments, conceptual pump station, floodgate / pipeline crossing designs, and cost estimates.
- **St. James Parish East Bank Master Drainage Plan, Culvert Analysis, and Design Program** *St. James Parish, LA* Provided civil engineering services for the preparation of the Master Drainage Plan to alleviate flooding in the existing subdivisions and agricultural lands through development of better outfalls. The study was performed utilizing LADOTD Hydraulic Software (HydrWin 2009) software to determine the potential of improving the existing culverts or the need for new outfalls. The Master Drainage Plan resulted in BKI's participation in an Eastbank-wide culvert analysis and design program partly funded by the LADOTD Statewide Flood Control Program and GOHSEP grants.
- **St. James Parish Interior Drainage Improvements** *St. James Parish, LA* Civil Engineer is providing review of design documents for an inventory of existing driveway drainage culverts including their size, type, and condition.

Marvin Braud Drainage Pump Station-Ascension Parish, LA-Civil Engineer: Developed preliminary and final plans, specifications, and cost estimates to retrofit stop logs to the intake bays of the existing Marvin Braud Drainage Pump Station near Gonzales, LA. The stop logs will allow for each bay to be individually dewatered to perform maintenance.

West Shore Levees and Floodwalls - *St. Charles, St. John the Baptist, and St. James Parishes, LA* - Civil Engineer provided preliminary design services for a new multiparish hurricane protection levee project extending from St. Charles to Ascension Parish. A feasibility study evaluated several alternate alignments and pump station locations for the proposed levee system.

West Shore Enhancements Project - *St. Charles, St. John the Baptist, and St. James Parishes, LA* - Provided civil design and preliminary plan and specifications preparation for a 320 CFS pump station at Blind River as well as two floodgate closure structures. The work included design of sheet pile wall and combi-walls for grade separations, rip rap sizing and placement for erosion control, site grading and drainage, and access road layout and design to accommodate a WB-62 design vehicle.

Upper Barataria Risk Reduction (UBRR) Project Phase 1 - 2019 Tasks - *Lafourche and St. Charles Parishes, LA* - Designed earthen levee for 100% preliminary plans as well as creating and modifying levee alignments, calculating earthwork quantities, and creating cost estimates.

The Trotessional Services Questionnante	
KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Daniel S. Caluda, Jr. Associate, Mechanical Designer	
Project Assignment	
Mechanical Design	
Name of Firm with which associated	
BKI BURK-KLEINPETER, INC. ENGINEERING PLANNING ENVIRONMENTAL	
Years' experience with this Firm:	
40	
Education: Degree(s)/Year/Specialization:	
Bachelor of Science / 1981 / Petroleum Engineering	
Active registration: Year first registered/discipline	
N/A	
Other experience and qualifications relevant to the proposed project:	
Mr. Caluda is an Associate with major technical responsibility in the Mechanical Engineering Division of BKI. His extensive portfolio of professional experience includes water and wastewater systems, lift station design and rehabilitation, sewer systems, drainage, HVAC, plumbing, sprinklers, and mechanical/industrial systems. Mr. Caluda's experience with the design of drainage pump stations and wastewater treatment plant pump stations dates to 1987. He has designed new pump stations and pump	

station improvements with capacities ranging from 150 CFS to 2,000 CFS, provided mechanical design services for dozens of pump stations in the Greater New Orleans region, and has overseen design and construction of two of the largest pump stations in the world.

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

Mr. Caluda has worked on the following applicable projects:

Upper Barataria Risk Reduction Project (UBRR)/St. Charles Parish West Bank Hurricane Protection System - *St. Charles Parish, LA* - Responsible for the mechanical design for the Willowridge DPS, a new 300 cfs station including a pump station structure, three (3) 100 cfs vertical pumps with electric motors, backup generator and mechanical bar screen cleaners. For Ellington and Magnolia Ridge DPS, Mr. Caluda provided technical guidance and review for the development of the drainage pumping station pump suction and discharge models and pump model.

25th Street Canal Drainage Improvements Project - *Gretna, LA* - 25th Street Canal Drainage Improvements Project (Resiliency District) - Gretna, LA – Completed the mechanical design for the alternate routing of stormwater runoff during high-intensity rain events and mitigate flooding from the Heebe Canal. Using a combination of state funding, CDBG funds & FEMA Flood Mitigation Grant Dollars Gretna was able to not only lessen runoff and required pumping capacity but also to provide recreational aesthetic amenities for the neighborhood residents.

Westshore Enhancements Project - *St. James Parish, LA* - Provided mechanical design services for a 320 CFS pump station and three canal closure structures including plans, specifications, and cost estimate for the gate closure mechanisms, electric motors, right angle gears, siphon recovery system and station automation.

Marvin Braud Drainage Pump Station - *Ascension Parish*, *LA* - Mechanical Designer for pump station improvements and additions included a new station with 2,000 CFS of pumping capacity. The new pumping station had a pile-supported intake basin and concrete discharge tubes, a steel-framed superstructure, and two 1,000 CFS pumps with diesel drives and gear reducers.

PCCP Extension of Staff Services - *New Orleans, LA* - Operations Manager / Mechanical Designer: Provided all technical oversight on behalf of the CPRA to review all phases of construction adherence to contract documents for over 70 features of design and construction associated with each of the three pump stations: the 17th Street Canal (12,500 CFS), the Orleans Avenue Canal (2,700 CFS) and the London Avenue Canal (9,000 CFS).

St. Charles Parish - Willowridge Pump Station - *St. Charles Parish, LA* - Mechanical design for a new 300 CFS drainage pump station including bar screens, pump station structure, three 100 CFS vertical pumps with electric motors, backup generator and discharge pipes located in the Willowridge Subdivision on the west bank of St. Charles Parish.

Willowridge, Ellington, and Magnolia Ridge Drainage Pumping Stations - *St. Charles Parish, LA* - Mechanical design for the Willowridge DPS, a new 300 CFS station including a pump station structure, three 100 CFS vertical pumps with electric motors, backup generator and mechanical bar screen cleaners. For Ellington and Magnolia Ridge DPS, Mr. Caluda provided technical guidance and review for the development of the drainage pumping station pump suction and discharge models and pump model.

Cousins Pump Station Complex Floodwalls and P.S. Expansion *-Jefferson Parish, LA-* Responsible for the mechanical design of the 2,000 CFS capacity station with a pile-supported intake basin and concrete discharge tubes, a steel-framed superstructure, and two (2) 1000 cfs horizontal pumps with diesel engine drives.

S & WB No Water Supply Alternatives - *New Orleans, LA* - Prepare portions of technical studies & lab analysis to evaluate water quality & alt. treatment methods for upgrading the water treatment process to meet EPA criteria.

Kenner Water Study - *Kenner, LA* - Developed alternative modeling methodology where outside agencies can run the model and predict the changes in water pressure availability based on the placement of additional water towers and increased plant production.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Daniel D. Marsalone, PE, PTOE (Minimum Personnel Requirement No. 3)

Senior Structural Engineer, PE, PTOE

Project Assignment

Structural Engineer

Name of Firm with which associated



Years' experience with this Firm:

2

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1999 / Civil Engineering

Active registration: Year first registered/discipline

1999/ PE Civil, State of LA / No. 28554

Other experience and qualifications relevant to the proposed project:

Mr. Marsalone is a Senior Structural Engineer with Burk-Kleinpeter, Inc. He received his Bachelor of Science in Civil Engineering and is a Registered Professional Engineer in Louisiana, Mississippi, Texas, Arizona, and New Mexico. He has 26 years of experience in project management on structural concrete design projects, with project types including bridges (design and rating), water and wastewater, flood protection, street and highway, site drainage design, and traffic engineering. His software capabilities include AASHTOWare Bridge Rating (Virtis), ConSpan, ConBox, RC-Pier, L-Pile, STAAD.Pro, PCA Column, MicroStation/InRoads, AutoCad, Merlin-Dash, HEC-RAS, WSPRO, and EPANET.

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

Mr. Marsalone has worked on the following applicaple projects:

West Shore Levee Improvements - *St. Charles, St. John the Baptist, & St. James Parishes, LA* - Responsible for the review of design reports, structural plans, specifications and design calculations for the hurricane and storm damage risk reduction project. The project included drainage pump stations, drainage structures and floodwalls.

Earhart Expy - Causeway Blvd Interchange SPN H.002861 - Metairie and Jefferson Parish, LA - Responsible for the design of two elevated ramp superstructures in the interchange and responsible for supervision of substructure and foundation design. Superstructure types included AASHTO prestressed concrete girder spans and curved steel girder spans. Also responsible for LRFR bridge rating calculations.

Harmony Annex Sub Structural Repairs - *New Orleans, LA* - Provided structural review of damaged wharf components and prepared design recommendations for necessary repairs.

Pointe a la Hache Ferry Landing Ramp Repairs - *New Orleans, LA* - Structural designer for emergency repairs of the EPALH Ferry Landing. Including redesign of existing timber abutment and ramp bent, modifications of corroded steel-flanges, specs, cost estimate, and plan preparation.

Rosethorne Sewage Treatment Plant - *Jefferson Parish*, *LA* - Responsible for construction engineering services and modifications of structural items of the project including the wastewater clarifier catwalk support structure, and review of modifications required to the scrapper arm assembly due to wastewater clarifier geometry.

Rural Bridge Replacement Initiative, Phase I - *Various Parishes, LA* - Responsible for the design of replacement bridges for 33 on-system and off-system bridges in in Districts 03, 07, 61, and 62. Design responsibilities included structural design of the bridges, as well as hydraulic and scour analysis for the bridge sites and supervision of roadway design.

Rural Bridge Replacement Initiative, Phase II - *Various Parishes, LA* - During the project's second phase, provided structural engineering design services for the complete reconstruction of multiple deficient bridges maintained by LA DOTD.

St. Charles Westbank Levee - *St. Charles Parish, LA* - Responsible for the design of floodwalls and flood gates as well as the preparation of plans and specifications and construction administration.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Galen Light

Lead GIS Analyst, MGIS, GISP, PMP

Project Assignment

GIS Analyst / Water Gems Modeler

Name of Firm with which associated



Years' experience with this Firm:

16

Education: Degree(s)/Year/Specialization:

Associate of Science / 1995 / Computer-Aided Drafting and Design Bachelor of Science / 2015 / General Studies / Concentration Applied Sciences Master of Science / 2018 / Geographic Information Systems

Active registration: Year first registered/discipline

2020 / Geographic Informations Systems, State of LA / No. 160730 2019 / Project Management Professional, State of La / No. 2635767

Other experience and qualifications relevant to the proposed project:

Mr. Light is a GIS Analyst in our Shreveport office with over 26 years of experience in GIS and CAD drafting. Prior to obtaining his training in GIS and CAD, he served in the military for 6 years. He holds a Master of Geographic Information Systems (GIS) as well as certification as a Project Management Professional and is currently pursuing a Masters degree in Industrial Engineering. Mr. Light is proficient in the use of WaterGEMS, Excel, Access, ESRI GIS, and AutoCAD software. Prior to joining BKI, he was employed as a Designer Draftsman for Gordon Inc. in Bossier City, LA. He also served the Lead Design Drafter for Kellogg, Brown & Root in Baghdad, Iraq where he provided support for ongoing military construction projects. Prior to that he was the Lead Mechanical Designer Draftsman for Bethlehem Steel in Sparrows point Maryland. Mr. Light is also an ESRI Certified GIS Desktop Associate, is a certified NASSCO PACP/LACP & MACP user, and is a certified Six Sigma Green Belt.

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

Mr. Light has worked on the following projects:

City of Shreveport Master Drainage Plan and GIS Updates - *Shreveport, LA* - Lead GIS Analyst charged with reviewing and updating GIS based on the city's master drainage plan as-builts and engineering plans. Georeferencing and geolocating assets and updating attribute information according to existing database schema. Tasks consist of project management for time and accuracy such that all assets are updated and verified within the project budget and consulting with team, client, and subcontractor to update database and communicate changes.

Backflow Prevention/Water Distribution Study - *Shreveport, LA* - Water Modeler: Built, calibrated, and regularly update the City-wide WaterGEMS water distribution model. Trained City staff and wrote technical documentation including drawings, maps, demand analysis and determination, geocoding billing meters, existing conditions model, cost analysis, and recommendations and implementation.

Shreveport Sanitary Sewer Evaluation Survey - *Shreveport, LA* - GIS Analyst/Database Administrator - Received and managed data for City-wide Sanitary Sewer Evaluation. Assessed the condition of sanitary sewer pipelines using CCTV, made rehabilitation recommendations, and provided associated cost estimates while managing associated tabular, geospatial, and as-built data. Worked with teammates to ensure high quality and accurate GIS and technical deliverables. Redesigned and updated City-wide Geodatabase sanitary sewer based on field verified data and as-built records.

Caddo-Bossier Port Engineering and Planning Services - *Shreveport, LA* - GIS Analyst scanned and organized drawing repository, designed and populated Geodatabase with hyperlinks to plans for facility and asset management for the Port of Caddo-Bossier. Provided ongoing maintenance and support.

Gretna Blvd Water Tower Replacement - Gretna, LA- CAD Drafter for plans and specifications for the construction of a water tower for the City of Gretna.

Water Model Maintenance Program - *Shreveport, LA* - Water Modeler/GIS Analyst - Built, calibrated, maintained, and regularly updated City-wide water distribution model using Water Gems, ArcGIS, and field data since its inception in 2007. Provided training to City staff and wrote technical documentation for project which included drawings, maps associated with data collection, demand analysis and determination, geocoding billing meters, existing conditions model, assessment of improvements, performed population projections, and gave recommendations for implementation. The model holds the distinction of being the first - and currently the only - model to be accepted by the Property Insurance Association of Louisiana.

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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 Nature of Firm's Responsibility: Owner's contact information: BKI was tasked by the East Jefferson Levee District to provide a preliminary engineering analysis report in order to research and identify alternative shoreline protection methods to provide erosion protection for the Linear Park along the south shore of Lake Pontchartrain, from the St. Charles parish line to the Orleans parish line (approximately eight miles of protection, excluding areas of marinas and recreational facilities). **Lakefront Linear Park Shoreline Protection** Jefferson Parish, LA Ryan Foster, PE BKI was responsible for coordinating all necessary surveys and geotechnical investigations to aid in the preparation of the report. BKI researched viable alternative solutions for shoreline protection which were used to evaluate the feasibility on a cost-benefit basis in order to propose possible revisions to the FEMA Project Worksheet #13866. Final Southeast Lousiana Flood Protection Authority-East 6920 Franklin Ave. construction plans, specifications and construction cost estimates were prepared for the shoreline protection revetment designed by BKI. Construction administration and resident inspection services during the construction phase were also provided by BKI staff. New Orleans, LA 70122 (504) 286-3000 x1057 **Estimated Cost: Completion Date (Actual or Work for which Firm was** estimated): **Responsible: Entire Project:** 05/2013 (Actual) \$1,112,833.23 \$1,431,405.82

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Bucktown Harbor Marina Complex Jefferson Parish, LA Mark Drewes, PE Jefferson Parish Department of Public Works 1221 Elmwood Park Boulevard, Ste 802 Harahan, LA 70123 (504) 736-6821	BKI was retained by Jefferson Parish to prepare a Master Plan and complete engineering design for the Bucktown Harbor Marina Complex on Lake Pontchartrain. The plan included a 3.5-acre wetland mitigation marsh to improve environmental conditions on the lakeshore which was required by the National Marine Fisheries. BKI was responsible for the permit plan and application process on behalf of the parish. The habitat value of the new marsh offset the lake-bottom loss of the 17- acre land reclamation activities that were implemented to create the marina, and 6 acres of harbor dredging requested in the permit. At the completion of the land reclamation, BKI prepared plans and specifications for the bidding of the wetland plantings for the Spartina alterniflora marsh and did construction administration and monitoring of the plantings. The complex design included a calm-water harbor for a small-craft marina along the south shoreline of Lake Pontchartrain, concrete rip-rap jetties, and steel sheetpile bulkheads. Phase I construction included the following: site clearing, site grading, grassing, aggregate roadways and 85 car parking areas, walkways, all site utilities, 70-slip floating marina facilities, and recreation facilities. Utility services for water, sewer, pump station, force main work, electrical service, and lighting are provided and also included routing the force main to the existing pumping systems. A pumping station was also designed and installed at the marina to allow for future growth at the facility An additional 165 linear feet of 8" gravity line was also included in the project from various locations to the new pumping station. BKI assisted Jefferson Parish in preparing a Community Development Block Grant under the Fisheries Infrastructure Program. Under this federal grant, Jefferson Parish received \$2.1 million towards the construction of the project. In addition, BKI prepared and coordinated application for all State and Federal permits, including a U.S. Army	
	Estimated Cost:	
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:
03/2012 (Actual)	\$3,300,000	\$980,936.12

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Bayou St. John Adaptive Management Plan, Dredging Design, and Control Structure Demolition New Orleans, LA Gerry Gillen, PE Director of Operations Southeast Louisiana Flood Protection Authority -East 6920 Franklin Ave. New Orleans, LA 70122 (504) 286-3000 x1007	Southeast Louisiana Flood Protection Auth District(OLD) chose BKI to produce a study system with the goal determining the bes to re-introduce native aquatic species into HEC-HMS and HEC-RAS, models were create I Study: develop a hydrologic and hydraul and the timings to attract marine species. A study the amount of flow that would be ge Soil Conservation Storm Event. These flows the amount of flooding that would occu while the Sector Gates were closed. Using schedule was created based on the flows the gate opening. In conjunction with the regards to the optimization of water flow the were based upon environmental factors the species recruitment into Bayou St. John. seasonal variations to attract either larval of Based on the data collected it was detern to re-introduce native aquatic species was BKI prepared the selective demolition plasections since the new sector gate structing lans were prepared for the removal of the as well as the plans for the installation of structure. BKI also assisted SLFPA-E in the project In addition to the above services, pengineering services during construction requests for information, and final inspections.	or of the Bayou St. John water management to engineering and environmental methods the watershed. Using LIDAR data, ArcMap, and to complete the two (2) goals of the Phase ic model to determine optimal conditions. HEC-HMS hydrologic model was created to nerated from a 2, 5, 10, 25, 50, and 100 year were imported into HEC-RAS to determine in the model data, sector gate opening time and water surface elevations generated by modeling effort, BKI provided oversight in roughout the gate. These optimum periods nat would increase the likelihood of marine The periods included daily variations and in adult forms of the marine species. Inined the highest priority project in order to remove the old flood control structure inside the highest priority project in order to remove the old flood control structure was constructed. Preliminary and final first to stabilize the remaining existing advertisement, bidding and award of the performed construction administration and including shop drawings, pay applications, on.
	In addition to the above assignments, another high priority item identified in the ecological study was the removal of a man-made sandbar placed during the construction of the Lakeshore Drive Bridge over Bayou St. John. BKI was tasked with developing preliminary and final plans for a removal method that would accommodate the native aquatic species in the water column and water bottom. Preliminary and final plans were developed and warning signage for swimmer safety were installed. Advertisement, bidding and project award assistance was provided as well as construction administration and engineering during construction services that included shop drawings, pay applications, requests for information, and final inspections.	
	Estimated Cost:	
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:
01/2018 (Actual)	\$861,565.66	\$861,565.66

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Lincoln Beach Coastal Restoration, Master Plan, and Redevelopment New Orleans, LA Gerry Gillen, PE Director of Operations Southeast Louisiana Flood Protection Authority -East / Sewerage & Water Board of New Orleans 6920 Franklin Ave. New Orleans, LA 70122 (504) 286-3000 x1007	Orleans, functioned as an amusement paduring the period of segregation until it close the period of segregation until it close and the period of segregation until it close and the period of commissioners approved develop a Master Plan with cost estimates uses. BKI conducted an Environmental Aphysical, structural, and environmental conducted and the physical, structural, and environmental conducted and the properties of the structural plan to make then created a Master Plan for passive regincorporating the site's history. Key parts on the restoration of the sand beach as where the beach as whether the part of the site sitting vacant since close extensive loss of wetland areas and aquate Environmental Protection Agency entered water Board of New Orleans to improve the BKI was contracted to create the Lincoln B the goal of aquatic and wetland vegetation addition to the vegetation plantings, use wetland and upland hardwood buffer zone included in the plan. As part of the project growth, changes in water quality, and the possibility of unanticipated planting administration and designed platforms to improvements. During the evaluation of the pier it was of fishing pier required demolition. Age and he pier structure unsuitable for further use and the pier structure unsuitable for f	rhood civic associations, the Orleans Levee a full evaluation of the site's potential and to determine the property's potential future ssessment and evaluation of the existing onditions of the beach; recommended an the site and lake waters safe for public access creational use of the waterfront area while of the five-phase plan called for emphasis ell as with a new concessions building and not fishing pier. Desing, the considerable deterioration caused tic vegetation along the shoreline. The US into an agreement with the Sewerage and
	Estimated Cost:	
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:
2006	\$1,211,515.46	\$1,211,515.46

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The Professional Services Questionnaire		
PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
USDA Natural Resources Conservation Service (NRCS) Indefinite Delivery Construction: Barataria Basin Land Bridge	Burk-Kleinpeter, Inc. was selected by the USDA to design plans and specifications for the wetland protection and enhancement project that encompasses marshes along the east bank of Bayou Rigolettes, the west bank of Bayou Perot, the east and west banks of Harvey Cutoff and the north and northeast shoreline of Little Lake in Lafourche and Jefferson Parishes.	
Shoreline Protection Project Jefferson Parish, LA Ralph Broome US Department of Agriculture (USDA) 3737 Government Street Alexandria, LA 71302	The Barataria Basin Land Bridge Shoreline Protection Project Phase 4 is located in Jefferson Parish, Louisiana, central to a point approximately 3 miles south of Lafitte, along the east bank of Bayou Rigolettes. The entire project area encompasses approximately 706 acres of intermediate marsh, upland shrub, and open water habitat. This project area was identified by the CWPPRA Environmental Work Group and represents the acreage that, without the project over 20 years, would be lost directly to shoreline erosion, as well as additional acreage that would be affected by increased tidal exchange, coalescence of interior ponds, and deepening of interior ponds throughout the project life.	
(318) 473-7781	The objective of this Phase of the Barataria Basin Land Bridge Shoreline Protection Project is to reduce or eliminate shoreline/bank-line erosion for a portion of Bayou Rigolettes in Jefferson Parish. BKI designed plans and specs in accordance with a USDA NRCS requirements for a proposed levee system, proposed placement of forshore rock berms, and preformed slope stability analysis. The project includes 29,500 linear feet of shoreline protection along the East Bank of Bayou Rigolettes.	
	Estimated Cost:	
Completion Date (Actual or estimated):	Entire Project: Work for which Firm was Responsible:	
09/2007 (Actual)	\$8,500,000	\$973,738.93

PROJECT NO. 6

Project Name, Location and Owner's contact information:

Nature of Firm's Responsibility:

Plaquemines Parish Coastal Restoration Program

Plaquemines Parish, LA

Ken Dugas Plaquemines Parish Government 333 F. Edward Hebert, Building 500 Belle Chasse, LA 70037 (504) 946-6115 BKI was contracted by Plaquemines Parish to quantitatively assess the sustainability of coastal restoration projects in the Parish that have the potential to provide protection from hurricane surge and waves using DELFT3D, SWAN, and FLOW3D models with the consideration of environmental factors such as storm intensity and track variations. Projects assessed were included in the 2012 Comprehensive Master Plan and in the Parish's Strategic Implantation Plan and cost estimations for the selected vegetation options.

The Parish determined the best corse of action was to develop wetland vegetation ridges immediately adjacent to the back levee system between Fort Jackson and Venice, Louisiana as part of the Plaquemines Parish Coastal Restoration Project. The project's goal was the development of coastal restoration in tandem with flood protection projects to maximize the protection to both the environment and resident of Plaquemines Parish.

The project provided stabilization to the existing area through the in-filling of three open water areas that currently penetrate the brackish marsh, adds freshwater nutrients and sediment to assist the improvement of the quality of the existing marsh, and establishes transitional wetland vegetation on the west side of the ridges. While this project converted over 394 acres of brackish marsh into Roseau Cane and Cypress ridges, the impact was offset by the creation of 582 acres of new brackish marsh through the in-filling of open water and the enrichment of an additional 158 acres of existing brackish marsh.

Materials for the construction of the ridges, creation of new brackish marshes, and the enrichment of existing brackish marshes were hydraulically pumped from the Mississippi River, over the main line river levee, under LA Highway 23, and across the Reach B-2 back levee through a 30" pipeline. Permits for dredging in the river, crossing the levees and highway, and placement of dredge materials in wetlands were pursued through the various Federal and State agencies by BKI. BKI also prepared plans and specifications for the hydraulic placement of these materials including preliminary engineering, final design, right-of-way surveys and bidding services.

Completion Date (Actual or estimated):

08/2012 (Actual)

Estimated Cost:

Estillated Cost.	
Entire Project:	Work for which Firm was Responsible:
\$36,270	\$35,000

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
	provide Program Management and Design Risk Reduction (UBRR) project. The UBRR storm damage risk reduction benefits for t Ascension, Assumption, Lafourche, St. Cl Parishes. This region is vulnerable not only	by the Lafourche Basin Levee District to n for implementation of the Upper Barataria project provides continuous hurricane and the six parishes in the project area, including harles, St. James, and St. John the Baptist to storm surge from the Gulf of Mexico, but arge concentration of petrochemical plants, bls, businesses, and historic sites.
UBRR - Project Design & Project Management St. Charles, St. James, St. John the Baptist, Ascension, Assumption, & Lafourche Parishes, LA	The UBRR project received funding from the Bipartisan Budget Act of 2018 (BBA-18), to complete the USACE Federal Study which evaluated several scenarios such as consideration of rainfall events, smaller tidal events, multiple alignments, and incremental levels of protection to determine Federal interest in the project through their standard benefit-cost analysis. As part of the Program Management scope, BKI lead the design team in coordinating all stakeholders to provide all required information necessary to guide the project scope development and selection of alternative alignments for the study. BKI also lead its team and stakeholders in the collection of data, providing presentations for applicable governing authorities, attended meetings as well as provided logistical and technical support while coordinating closely with the State Watershed Council in order to keep the UBRR project at the forefront of the CDBG mitigation project funding list.	
Donald Ray Henry Lafourche Basin Levee District 21380 Highway 20 Vacherie, LA 70090 (225) 265-7545	In addition to the program management responsibilities, BKI was responsible for the engineering design necessary for the construction and enlargement of approximately 33 miles of hurricane risk reduction between LA Hwy 308 on the western end and the Davis Pond Diversion West Guide Levee on the eastern end. The project includes earthen levees, a 270' steel barge swing gate floodgate in Bayou Des Allemands, a steel roller-gate across LA Hwy 306, tidal interchange structures, concrete T-Wall floodwalls, and pump station frontal protection. The project is divided into five (5) segments, as follows: Segment 1: Davis Pond Diversion to Paradis Canal Segment 2: Sunset Levee District Improvements (Paradis Canal to Bayou Des Allemands) Segment 3: Bayou Des Allemands Floodgate Segment 4: US Hwy 90 Tie-in along Midway Canal Segment 5: Midway Canal to LA Hwy 308	
	The design and data collection for this project conforms to the criteria of the Louisiana Coastal Protection and Restoration Authority (CPRA) and the U.S. Army Corps of Engineers' Hurricane and Storm Damage Risk Reduction System (HSDRRS). Upon completion, the project will provide continuous risk reduction throughout the region between the Morganza to the Gulf and West Bank and Vicinity Hurricane Protection Projects.	
	Estimated Cost:	
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:
12/2023 (Est.)	\$361,623,355	\$361,623,355

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PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Louis Armstrong New Orleans International Airport (LANOIA) Master Drainage Plan Update Kenner, LA Ray Kliebert New Orleans Aviation Board Highway 44, 2nd Floor Convent, LA 70723 (225) 562-2293	Burk-Kleinpeter, Inc. was tasked with updating the Louis Armstrong New Orleans International Airport's 1992 Master Drainage Plan, as the airport has since seen many changes to its facility. Expansive paving operations increased rainfall runoff, impacting the airport drainage system. In addition, Jefferson Parish has also expanded further increased its own rainfall runoff. To evaluate the increase in airport rainfall runoff, BKI updated the U.S. Army Corps of Engineers' (USACE) HEC-HMS (Hydrologic Modeling Software) Model of Jefferson Parish East Bank. BKI completed an inventory of the airport's existing drainage system then incorporated the data into the USACE's HEC-RAS (River Analysis Software) Unsteady State Model of Jefferson Parish East Bank. This demonstrated the drainage system's existing conditions and current flooding from which drainage improvements could be modeled and recommended to alleviate this flooding. Once the LANOIA existing conditions and improvement models were created and calibrated, future condition models were created based on the airport's Strategic Growth Plan. Future drainage improvements were modeled and recommendations, including cost estimates, were created to alleviate any potential flooding. Finally, BKI created a Comprehensive Drainage Manual per FAA regulations and standard practices. The manual enabled airport facility engineers to evaluate localized drainage conditions or problems, then offer techniques to properly mitigate these issues.	
Commission Date (Astual or	Estimat	ed Cost:
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:
06/2012 (Actual)	\$623,000	\$577,675
	PROJECT NO. 9	
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
25th Street Canal Drainage Improvements Project (Resiliency District) Gretna, LA	The 25th Street Canal Neighborhood in Gretnaexperiences the worst repetitive flood claims in the state. The neighborhood flooding occurs when the Heebe Canal backflows into the 25th Street Drainage Canal and overtops its banks. Using a combination of La. State Capital Outlay funds, CDBG funds and FEMA Flood Mitigation Grant Dollars, the City of Gretna awarded BKI the Design, Construction Administration and Resident Inspection Services on the project. The estimated construction costs is \$13,970,000.	
Amanda Pellegrin City of Gretna Department of Utilities 740 2nd Street Gretna, LA 70053 (504) 363-1556	The project components consist of both Green and Grey Infrastructure. The neighborhood originally utilized Gravity Drainage System using both the 25th Street Canal and several outfall pipes into the Heebe Canal. After performing Hydraulic Modeling using the United States Army Corps of Engineers Software (HEC-RAS), it was determined that a 350 cubuc feet per second pump station would be built at the confluence of the 25th Street and Heebe Canals. In addition, the gravity drainage system would be manifolded to route all the runoff to the Pump Station by placing flap gates on the existing outfall drainage pipes, reversing drainage pipe grades and installing Green Infrastructure elements to reduce runoff. Because the Eastern Bank of the Heebe Canal was failing, over 2000 feet of sheet pile wall was installed to secure the bank and allow for flap gate installation. To accomplish the manifold of the existing drainage system and force the runoff to the pump station, over 5400 feet of new drainage pipe was installed. Green Infrastructure techniques such as Gabion retaining walls, bioswales and riparian plantings were used along the upstream portions of the 25th Street Canal to not only lessen runoff and required pumping capacity but also to provide recreational aesthetic amenities for the neighborhood residents.	
Completion Date (Actual or	Estimat	ed Cost:
estimated):	Entire Project:	Work for which Firm was Responsible:
12/2024 (Est.)	\$13,970,000 (Est.) \$921,786 (Est.)	

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PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Belle Chasse Area Master Drainage Plan Belle Chasse, LA Ken Dugas Plaquemines Parish Government 333 F. Edward Hebert Blvd., Building 500 Belle Chasse, LA 70037 (504) 934-6115	Burk-Kleinpeter, Inc. was selected by Plaquemines Parish Government to prepare a Master Drainage Plan for the area bounded by the Mississippi River, Orleans Parish, the Gulf Intercoastal Waterway, and the Walker Road Canal. The study was conducted to provide options to alleviate flooding in the existing subdivisions and agricultural lands through development of better canal networks and a new pumping station. BKI reviewed the existing land use and projected land use to develop HEC-HMS and HEC-RAS models to simulate the existing drainage conditions and future drainage conditions based upon the existing drainage infrastructure. Future condition models were also developed to recommend drainage infrastructure improvements. The study was funded with HMGP dollars and performed utilizing the latest HEC-HMS and HEC-RAS modeling software in conjunction with the latest ArcGIS software and the latest available LIDAR imagery to develop the HEC-HMS and HEC-RAS models of the existing drainage system. From the existing conditions models created, BKI modified the models for future land use and drainage conditions. As part of the Master Drainage Plan, the potential of improving the existing canals or the need for a new outfall pump station will be evaluated, construction cost estimated, and individual projects prioritized. This plan will be the basis for infrastructure programming and guidance for residential and commercial developments.	
Completion Date (Actual or	Estimated Cost:	
estimated):	Entire Project:	Work for which Firm was Responsible:
12/2013 (Actual)	\$611,000	\$734,396

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:	Status/Result of Case.
1. N/A		
2. N/A		
3. N/A		
4. N/A	Jeffe	rson
N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.		
BURK-KLEINPETER, INC., (BKI) is pleased to submit our Statement of Qualifications to Jefferson Parish in response to your public notice for SOQ 22-036 Supplemental Coastal Engineering and Consulting firms in the southeast region providing professional engineering (civil, mechanical, and structural), planning, and environmental services to public and private clients throughout the southeastern US. The firm's engineering practice has consistently ranked among the top 20 firms in the southern states and is included regularly in the Top 500 Design Firms in the nation by Engineering News Record. This is a major accomplishment for a privately owned, New Orleans based firm. We were recently recognized as part as part of the 2022 UNO25 class which recognizes 25 businesses that are making an impact on the community. Our stability and depth of experience has provided numerous state and local public works authorities with consulting services for the successful completion of a wide range of projects. BKI has decades of experience in providing professional engineering and consulting coastal restoration and protection services including planning, permitting, design, bidding/construction administration and supplemental services to a multitude of public and private clients. With a multidisciplinary platform of experience and abilities, BKI integrates the proven best practices from all disciplines to meet our clients' big-picture needs in an ever-changing environment. Headquartered in New Orleans with a branch office in Metairie, BKI has provided engineering services to Jefferson Parish for more than 40 years. BKI, independently and in coordination with sub-consultants, has worked on a variety of water pipeline infrastructure projects and has over 40 years of experience performing civil and structural engineering services for projects across southeastern Louisiana, on the Mississippi Gulf Coast, and in central and coastal Alabama.		
O. To the best of my knowledge, the foregoing is an accurate statement of facts.		
Signature: Print Name: Henry M. Picard, III PE, PLS		
Title: Senior Vice President	Date: <u>August 1</u>	<u>2, 2022</u>

MINIMUM REQUIREMENTS FOR SELECTION

- 1. One principal who is a licensed, registered professional engineer in the State of Louisiana:
- Michael D. Chopin, PE, BKI's President & CEO, is a principal in the firm and a licensed, registered professional engineer in the State of Louisiana.
- 2. A professional in charge of the project who is a licensed, registered professional engineer in the State of Louisiana with a minimum of five (5) years experience:
- **Henry M. Picard, III, PE, PLS**, a Senior Vice President and Civil Engineer, is a Professional in Charge of Project and a licensed, registered professional civil engineer in Louisiana with over 40 years of experience.
- 3. One employee who is a professional engineer registered as such in Louisiana in the field or fields of expertise required for the project (A sub-consultant may meet the requirement only if the advertised project involves more than one discipline.)
- David E. Boyd, PE, a BKI Vice President, is a licensed, registered professional civil engineer in Louisiana with 16 years' experience the disciplines involved.
- René A. Chopin, III, PE, a BKI Senior Vice President / Chief Engineer and Civil Engineer, is a licensed, registered professional Civil Engineer in Louisiana with over 30 years' experience in disciplines involved.
- René A. Chopin, IV, PE, a BKI Civil Engineer, is a licensed, registered professional civil engineer in Louisiana with 4 years'
 experience in disciplines involved.
- Timothy J. Koenig, PE, a BKI Civil Engineer, is a licensed, registered professional civil engineer in Louisiana with 13 years'
 experience in disciplines involved.
- Daniel Marsalone, PE, PTOE, a BKI Civil Engineer, is a licensed, registered professional civil engineer in Louisiana with 26 years' experience in disciplines involved.
- Ralph P. Fontcuberta, Jr, PLS, BFM Corp. Founding Principal and Land Surveyor, is a licensed, registered professional land surveyor in Louisana with 55 years' experience in the disciplines involved.
- Chad M. Poché PE, a Gulf South Vice President / Co-founder / Principal and Geotechnical Engineer, is a licensed, registered professional in Louisana with nearly 30 years' experience in the disciplines involved.
- *Lucas Watkins*, President / Principal, and Senior Environmental Scientis, thas 21 years' experience as a professional consultant in environmental regulatory compliance on multi-faceted projects.

EVALUATION CRITERIA

1. Professional Training and Experience

BKI has provided civil, mechanical, structural, and environmental engineering services on a wide range of projects in Jefferson Parish including Coastal Engineering and Consulting Services. BKI has completed over 80 projects for Jefferson Parish and has nurtured a working relationship with the Jefferson Parish Engineering as well as the various heads of the Public Works Department to provide detailed project scopes of work and to develop an engineered solution. If we are selected to provide supplemental engineering and consulting for coastal restoration, we will use our previous experience and working relationships with the parish and our sub-consultant partners to provide a successful product from conceptual design through construction of the assigned projects.

Coastal Protection, Flood Control, and Restoration Experience

BKI's coastal engineering experience includes numerous coastal protection, flood control, and restoration projects. We've developed hurricane protection levee alignments and designs, designed drainage pumping stations, designed hydraulic control structures, designed forested ridges, as well as provided construction oversight for coastal protection and flood control projects. Our levee and drainage pumping station experience, together with our design abilities, make us an excellent choice when levee and drainage pumping station design services are needed. At BKI our overall coastal engineering experience is dominated by levee and drainage pumping station projects. Experience fosters expertise, and our experience is extensive; therefore, we consider ourselves experts in the field and hope you'll agree. BKI has a history of working with most of, and is currently working with, the following commissions and levee boards:

- Coastal Protection and Restoration Authority
- Amite River Basin Commission
- Pontchartrain Levee District
- Lafourche Basin Levee District
- East Jefferson Levee District

- •Orleans Levee District
- •South Louisiana Flood Protection Authority (SLFPA) East and West
- Lake Borgne Basin Levee District
- Plaquemines Parish Government
- US Army Corps fo Engineers

Hydraulics and Hydrology Engineering

BKI has provided a full spectrum engineering service on flood and drainage control as well as hurricane protection design beginning with hydrologic and hydraulic studies utilizing HEC-HMS and HEC-RAS software through design and construction administration/resident inspection services. Our firm's work with numerous federal, state, and local ntities to design storm surge and hurricane protection structures, floodgate, floodwalls, and levees throughout Southeast Louisiana has kept us on the leading edge of flood control and hurricane protection design for over 30 years.

Most notably, BKI incorporated the sweeping hurricane protection design criteria established by the U.S. Army Corps of Engineers (USACE) as a result of the Federal Response to the hurricanes of 2005. The USACE's Hurricane and Storm Risk Reduction System (HSDRRS) criteria have been utilized by the firm as the standard of care and integral design elements in the hurricane protection

projects assigned. Our projects have included inverted T-wall design, earthen levee stability analyses and design, pump station frontal protection design, and floodgate design and inspection. BKI utilizes the latest design guidance and criteria to provide storm surge reduction and flood control solutions for clients whose jurisdictions require the protection of citizens living in basins protected by both federal and non-federal flood protection systems. From the study phase, through design and construction, BKI implements its design experience in levee, floodwall, and floodgate engineering as a vital compliment to its drainage pump station engineering knowledge.

Civil Engineering

BKI has planned, designed, and inspected numerous large scale civil engineering projects including hurricane projection levees, coastal restoration projects utilizing forested ridges, shoreline protection, erosion control and wetland restoration. Our clients have included the U.S. Army Corps of Engineers, the USDA Natural Resources Conservation Service, the Louisiana Department of Natural Resources and many local levee boards throughout coastal Louisiana. We routinely meet and exceed our clients expectations by delivering high quality and efficient design, construction and maintenance for all of our projects. We'll guide Jefferson Parish's projects through planning and zoning, preliminary design, mapping/plotting, and final design using our extensive experience. Extensive field analysis, along with the latest advancement in design, as well as scheduling and cost estimating technologies are utilized by our engineers to ensure each project is designed and managed effectively.

Structural Engineering

BKI has provided a wide variety of structural engineering design and construction management services for a broad spectrum of storm mitigation, rehabilitation, and reconstruction projects including flood control structures, sector gates, drainage pumping stations, tidal exchange stations, floodwalls, wharves, docks, berths, ports, warehouse structures, commercial buildings, shipyard facilities, and so forth with clients for these in both private public agency sectors. The designs of the projects have consisted of various types of materials and construction methods including steel, concrete (cast-in-place, pre-cast and pre-stressed), timber, aluminum, and masonry members and components. BKI has utilized the multiple designs previously listed throughout our various design projects to ensure the client is provided with the required structure with a long lasting product and a minimal maintenance cost.

Project/Construction Management and Resident Inspection

In addition to engineering design, BKI project managers are able to assist clients in ensuring accuracy through the entire project cycle from the concept/analysis/feasibility stage to design then through bidding, permitting, construction administration/management, and project closeout. BKI has also been contracted to provide construction management and resident inspection services to multiple clients on projects that were designed by other engineers or public agencies. During this construction management period, BKI is solely the representative of the Owner and provides a review of all components of the design. This project design review allows BKI to find potential errors or omissions in the design, as well as, provide design recommendations to increase the longevity of the structure and minimize the annual preventative maintenance cost for the Owner. Our staff has provided these services for local, state and federal agencies, as well as private industry clients, and fully understands the role and responsibility as the construction management team.

The BKI Team

BKI has teamed with geotechnical, surveying, and coastal modeling firms to create a team with the ability to provide comprehensive engineering services for coastal protection, flood control, and restoration projects. The following information identifies these teaming firms and describes their responsibilities; for details on each firm, please refer to their respective TEC-Questionnaire forms presented later in this proposal. We are proud to present, what we feel is, the Team with the best ability to fulfill the requirements for Jefferson Parish's Coastal Engineering and Consulting services. In addition, our collective project experience, vast clientele, and diverse team composition demonstrate an ability to interact and work with the parish and its other contracted firms.

Surveying Services

BFM Corporation, LLC, a majority Woman-Owned Business Enterprise (WBE) and Hudson Initiative certified firm, will provide complete land and hydrographic surveying services. Land surveying services provided by this firm include have covered all facets of engineering, construction, and forensics; topographic; hydrographic; and drone-based surveying and high definition laser scanning. Their work routinely involves extensive records and related research as well as coordination with the client/agency/or departmentin order to ensure accurate and expeditios survey reports. BFM's capabilities include, but are not limited to, topographic surveying; drone surveying/phogrammic and LiDAR; bathymetric and hydrographic surveys; property, boundry and right-of-way surveys; maps, cross-sections, and data sets; 3D laser scanning; benchmarks; construction-related surveying; builder's package surveys; as well as American Land Title Association (ALTA) surveys. Project and personnel bios provide an overview and relevant examples of excuted project work.

Geotechnical Engineering

Gulf South Engineering and Testing, Inc., a Woman-Owned Business Enterprise (WBE), Hudson Intitiative certified, and RTA recognized small business firm, will provide geotechnical engineering services. Gulf South's laboratory is AASHTO and CCRL certified as well as USACE validated.

They provide a broad range of geotechnical related services, completing more than 100 geotechnical engineering projects and 300 construction materials and inspection projects each year. As evidenced in the provided projects and personnel résumés, key personnel experience includes the completion of projects in the region 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.

Key Staff Experience

Michael D. Chopin, PE - Principal / QA/QC; LA Registered Professional Engineer (MPR No. 1)

- 31 years of experience in civil engineering planning, design, and construction of Jefferson Parish projects
- Wide range of project management experience includes numerous coastal-hurricane protection, hydrologic and hydraulic modeling, master drainage plan, design, construction administration, and supplemental services projects.

Henry M. Picard, III, PE, PLS - Regional Manager; LA Registered Professional Engineer (MPR No. 2)

- 36 years of experience includes project management and project engineering services.
- Wide range of project management experience includes coastal and environmental restoration, hydrologic and hydraulic modeling, master drainage planning, drainage, drainage improvement, and pump station projects.
- Wide range of experience as Principal, Project Manager, or Project Engineer includes many projects in Jefferson Parish.

David E. Boyd - Project Manager; LA Registered Professional Engineer (MPR No. 3)

- 16 years of experience in civil engineering and project management of Jefferson Parish and Gretna projects.
- Wide range of civil and hydraulic engineering and project management experience on wetland and marsh restoration, hurricane mitigation, watershed study, master drainage planning, and extensive drainage improvement projects.
- Proficient in hydrologic and hydraulic modeling using HEC-HMS and HEC-RAS as well as SWMM software.

Nicholas Matherne - Coastal Manager; (MPR No. 3)

- 14 years of experience in Government Regulatory Administration and Project Management including Coastal Restoration, Freshwater Enhancement, Leeves & Floodgates, Resiliency, and Municipal Waterline projects.
- Has worked on many project types and sizes in Jefferson Parish.

René A. Chopin III, PE - Chief Engineer/Structural Engineer; LA Registered Professional Engineer (MPR No. 3)

33 years of engineering experience in structural including Jefferson Parish Projects.

• Has served as Project Manager or Project Engineer for structural elements on numerous infrastructure, storm protection, program management, environmental assessment projects as well as other structural and infrastructure projects.

René A. Chopin, IV, PE - *Civil Engineer; LA Registered Professional Engineer (MPR No. 3)*

- 4 years experience in civil/hydraulic engineering
- Experience includes performing engineering calculations, site layout, plan and specification preparation, estimating project costs, and construction administration for various project types (levee and storm water prevention, harbor improvements-including dredging, master drainage plan, water, roadway and drainage improvement, and projects).
- Experience using DOTD HYDR 2009 and HEC-RAS programs to calculate drainage flows and pipe capacities.

Timothy J. Koenig, PE - Civil Engineer; LA Registered Professional Engineer (MPR No. 3)

- 17 years of experience in civil engineering and utility design.
- Typical responsibilities include managing plan production on large scale public works projects, preparing construction documents, leading CAD technicians and engineers, utility coordination, and construction administration.
- Has worked on many project types and sizes in Jefferson Parish.

Daniel Marsalone, PE, PTOE - Structural Engineer; LA Registered Professional Engineer (MPR No. 3)

- 26 years experience in civil/structural engineering
- Has experience in project management on structural concrete design projects, with project types including bridges (design and rating), flood protection, water and wastewater, street and highway, site drainage design, and traffic engineering.

EDUCATION AND EXPERTISE OF PROPOSED STAFF

NAME	YEARS EXPERIENCE	EDUCATION	EXPERTISE	JEFFERSON PARISH EXPERIENCE
Michael D. Chopin, PE	31	BS, Civil Engineering	QA/QC, Civil Engineering	Yes
Henry M. Picard, III, PE, PLS	41	BS, Civil Engineering	QA/QC; Program Management	Yes
Rene A. Chopin, III, PE	33	BS, Civil Engineering	Chief/ Structural Engineer	Yes
David E. Boyd, PE	19	BS, Civil Engineering	Project Manager/ Civil Engineer	Yes
Nicholas Matherne, CFM	14	BS, General Studies	Project Management	Yes
Rene A. Chopin, IV, PE	9	BS, Civil Engineering	Engineering Civil and Hydraulic Engineer	
Timothy J. Koenig, PE	20	BS, Civil Engineering	Civil Engineer	Yes
Daniel S. Caluda, Jr.	40	BS, Petroleum Engineering		
Daniel Marsalone, PE	26	BS, Civil Engineering	Structural Engineer	Yes
Galen A. Light, MGIS, GISP, PMP	26	MS, Geographic Information Systems BS, General Studies/ Concentration Applied Sciences		a na No

2. Size of Firm

BKI's entire company staff (including branch offices) consists of 38 full-time employees. Thirty-six (35) of these employees work out of our New Orleans headquarters and **Metairie** branch office. These 35 employees are categorized as follows:

ENGINEER	PLANNER	DESIGNER/ DRAFTER	ENGINEERING INTERN	CONSTRUCTION INSPECTOR	ADMINISTRATIVE
Civil: 7; Structural: 4	2	5	3	2	13

Of these employees, we have identified **10** individuals who will make up the core staff to provide services for this project. *See Section K for their resumes*. In addition, we are able to marshal resources from other experienced staff members in the company.

3. Capacity for Timely Completion

BKI's past performance attests to its capacity to handle a reasonably large number of projects concurrently without any reduction in quality of design. Our present workload is such that we are able to commit the appropriate resources, including technical and support personnel. Based on BKI's well-established record of providing high quality services within set time frames, we are confident that BKI possesses the necessary manpower to complete any assigned tasks without compromising our standards.

Because BKI has a team of experienced program managers, construction inspectors and field engineers, BKI can accommodate any field decisions or plan changes quickly and efficiently. Our key staff members are dedicated, seasoned professionals who are equipped to simultaneously handle the needs of multiple projects.

4. BKI's Past Performance on Jefferson Parish Contracts

BKI has performed successfully on numerous Jefferson Parish and public contracts of various types/sizes without time delays, cost overruns, or design inadequacies in prior work completed for the parish or any other public entity.

5. Location of Principal Office Where Work will be Performed

BKI's Metairie branch will be the main project office. This office is located at 3240 South I-10 Service Road, West, Room 300. Our business hours are 7:30 a.m. to 5:30 p.m., Monday through Thursday, and 7:30 a.m. to 11:30 a.m., on Friday.

6. Adversarial Legal Proceedings with Jefferson Parish

BKI has no previous nor ongoing litigation with Jefferson Parish or any segment of the Parish government.

7. Prior Successful Projects of the Type and Nature of Engineering Services

BKI has worked with Jefferson Parish on dozens of past projects covering a wide range of services and fees and offers a comprehensive package of services for planning, design, and construction of all types of coastal protection projects.

Coastal Protection Experience

Our engineers and construction administrators utilize the USACE's HSDRRS criteria to create robust and cost effective project plan for tasks ranging from investigating flooding problems to building or expanding large drainage pumping stations, to drainage channel and detention pond improvements. We have worked on numerous coastal protection projects, including flood control, hurricane protection, levees, floodgate systems, enhancing natural landscape elements, and pump stations. BKI has planned, engineered and helped construct some of the most significant infrastructure protection projects in Louisiana.

Levees

BKI has years of experience in permitting and designing new levees, existing levee lifts, existing levee repairs and rehabilitation measures. We have provided these services to numerous coastal parishes, many of the State's Levee Boards, and the United States Army Corps of Engineers. In addition to the design and construction services, BKI has participated in a number of levee feasibility studies as a part of the local sponsors' design team. BKI is fully versed in the latest guidelines and criteria for the design of levees. BKI offers a complete range of consulting services in the planning, design, construction management, consultation, and evaluation of levees, including initial and continuing inspections; damage assessments and emergency repair designs; hydraulic and hydrologic evaluations, including flow through structures, peak flow, runoff volume, and flood levels; and protective measures against scour, erosion, and seepage.

Drainage Pumping Stations

BKI is one of the foremost authorities in drainage pumping station design in the Gulf South Region. Over the past 30 years, we have led the design on more than 35 stations ranging in pumping capacities from 150 – 4,000 cubic feet of water per second (cfs), with additions to pump stations up to 12,500 cfs. Designs can incorporate well proven pumping station hydraulics standards, newer USACE requirements and USACE-developed modern-formed suction intakes, as well as the application of hydraulic, physical and computer models to help fine tune final engineering designs. BKI has successfully applied numerous types of drainage pumps (12 feet, horizontal and flowpot; 8 feet, vertical; etc.), drivers (diesel engine and electric motor), intake screen cleaning systems, and backflow prevention designs, and is familiar with the various auxiliaries required for the construction of reliable and effective drainage stations. BKI has also provided FEMA Certifications for pumping stations (St. Charles Parish and

Orleans Parish). This experience coupled with our drainage system design abilities make BKI an excellent choice when drainage and flood protection design services are needed.

Forested Ridges

BKI has develop wetland vegetation ridges immediately adjacent to levee systems in southeast Louisiana to provide stabilization to the existing area through infilling open water areas that are penetrating brackish marsh, adding freshwater nutrients and sediment to assist the improvement of the quality of the existing marsh, and establishing transitional wetland vegetation on the Gulf side of the ridges.

Coastal Restoration Experience

Hydraulic and Hydrologic Restoration: BKI has re-established a hydraulic separation of watersheds to restore natural hydrology and reduce erosional effects by reestablishing hydrologic control points in areas plagued by subsidence, shoreline erosion, and strong tidal exchange scouring. To separate watersheds, BKI has beneficially used dredge materials. To restore natural hydrology, BKI has designed rock-and riprap channel plugs, the cutting of gaps in spoil banks, and dredging requirements.

Shoreline Protection

BKI has designed numerous shoreline protection measures in coastal Louisiana environments. These measures have included levee systems and foreshore rock berms, to provide wetland protection and enhancement for marshlands that had significant losses due to subsidence, shoreline erosion and the scouring out caused by strong tidal exchanges. These efforts have resulted in minimizing tidal exchange, reducing coalescence of interior ponds, and preventing deepening of interior ponds.

Marsh Creation

BKI's vegetated ridge projects will convert over 394 acres of brackish marsh into Roseau cane and cypress ridges, the impact of which will be offset by the creation of 582 acres of new brackish marsh through the infilling of open water areas and the enrichment of an additional 158 acres of existing brackish marsh. Materials for the creation of new brackish marsh and enrichment of existing brackish marsh will be hydraulically pumped from the Mississippi River. Permits for dredging in the river and placement of dredge materials in wetlands were pursued through the various Federal and State agencies by BKI.

BKI will provide a complete list of Jefffferson Parish work upon request. The following list highlights our experience with verififiable references:

Below lists clients and reference information for a variety of projects in Jefferson Parish:

PROJECT NAME	FIRM ROLE	PROJECT DESCRIPTION	CLIENT REFERENCE
St. Charles Parish Westbank Hurricane Protection Levee	Prime Consultant	H&H Modeling Permitting Engineering Design Plans & Specifications Construction Administration Resident Inspection	Mr. Sam Scholle St. Charles Parish – Department of Public Works 1000 River Oaks Drive Destrehan, LA 70047 P: (985) 783-5102 Email: sscholle@stcharlesgov.net
Marvin Braud Watershed and Drainage Pumping Station	Prime Consultant	H&H Modeling Improvement Recommendations Engineering Design Plans & Specifications Construction Administration Resident Inspection	Mr. William Daniel East Ascension Consolidated Gravity Drainage District No. 1 42077 Churchpoint Road Gonzales, LA 70737 P: (225) 621-5730 Email: wdaniel@apgov.us
Westshore Hurricane Protection Project	Prime Consultant	Feasibility Report Review Environmental Impact Statement Technical Report Engineering Design Plans & Specifications Cost Estimates Project Coordination	Mr. Ricky Bosco Pontchartrain Levee District 2204 Albert Street Lutcher, LA 70071 P: (504) 559-6691 Email: ricky@boscobro.nocoxmail.com

Permanent
Canal Closures
and Pump
Stations (PCCP)
Extension of Staff
Services

Prime Consultant Technical Review
Project Management
Staffing Support
Operations & Maintance
Manual Review/Checklists
Operational Training

Mr. Ignacio Harrough, PE
Louisiana Coastal Protection and
Restoration Authority
2045 Lakeshore Drive.
New Orleans, LA 70122
P: (225) 342-4501
Email:ignacio.harrouch@la.gov

Conclusion

In the body of this Jefferson Parish Professional Services Questionnaire, BKI has provided the information requested in your Request for Qualifications. We feel we have the manpower, expertise, and equipment to exceed your expectations for **SOQ 22-036 Supplemental Coastal Engineering and Consulting Services.**





BFM Corporation, LLC TEC Questionnaire





Project Name and Advertisement Resolution Number:

Supplemental Coastal Engineering and Consulting Services

SOQ **22-036** | Resolution No. **139866**

B. Firm Name & Address:



BFM Corporation, LLC

15 Veterans Memorial Boulevard

Name, title, & 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

504-468-8800 • 504-460-5239 cell • cpoche@bfmcorporation.com Registered Professional Civil Engineer, Louisiana No. 27667 (since 1998)

Name, title, & 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., Executive Vice President • LA License No. 4329 (1974) 504-468-8800 • 504-451-7500 cell • ralph@bfmcorporation.com Registered Professional Land Surveyor, Louisiana No. 4329 (since 1974)

- Please provide the number of employees whose primary function corresponds with each category: E.
 - 4 Administrative
 - Architects (Licensed)
 - Chemical Engineers
 - Civil Engineers
 - Construction Inspectors
 - **Ecologists**
 - Electrical Engineers
 - Engineer Intern
 - Professional Land Surveyors 2

- Estimators
- Geologists
- Geotechnical Engineers 1
- Interior Designers
- Landscape Architects
- Land Surveyor (see PLS)
- Mechanical Engineers
- **Environmental Engineers**

- **Specification Writers**
- Structural Engineers
- **Graduate Engineers**
- **Project Managers**
- Clerical (see Administrative)
- Grant/Funding Specialist
- Sanitary Engineers
- **Principals** 1
- Researcher/Archivist
- 3 Drafting/AutoCADD
- Survey Crew Chiefs 5
- 6 Instrument Men
- 24 **TOTAL**

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

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

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^{*} Project Manager also noted in Professional Land Surveyor, but overall employee count is correct.

G.	If submittal is by a JOINT-VENTURE, responsibility (including administrative, additional pages if necessary.	1 1	
1.	N/A		
2.			
Н.	Has this JOINT-VENTURE previously VYES NO N/A	worked together? Please check:	
I.	List all subcontractors anticipated for this fully completed copy of this questionnaire the advertisement. See Jefferson Parish C pages if necessary.	e, applicable licenses, and any other	er information required by
	Name & Address:	Specialty:	Worked with Prime Before (Yes or No):
2.	N/A B St St St St St St St St St	arish ate of Louisia	na
3.			
J.	Please specify the total number of support Project: 24 (all personnel, primary and support, wi		

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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 of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Ralph P. Fontcuberta, Jr., PLS

Executive Vice President

Project Assignment:

Registered Professional Land Surveyor

Name of Firm with which associated:



Years experience with this Firm:

40 years (Founding Principal of BFM in 1982); 55 years total (1967)

Education: Degree(s)/Year/Specialization:

Coursework, Building, Delgado College, New Orleans Coursework, Math, University of New Orleans

Active registration: Year first registered/discipline:

1974, Professional Land Surveyor (Louisiana Lic. No. 4329)

1974, Professional Land Surveyor (Mississippi Lic. No. 1633)

Other experience and qualifications relevant to the proposed Project:

Ralph P. Fontcuberta, Jr., PLS has better than half a century of experience in the field of surveying and has been a registered Professional Land Surveyor (PLS) since 1974. He is thoroughly knowledgeable in all aspects of surveying: topographic, hydrographic, boundary, right-of-way surveying, and all facets thereof. He has provided surveying services for residential, plant, and industrial layout projects, ranging from small private lots & buildings to multi-million dollar programs, including the New Orleans FEMA Streets/Recovery Roads Program.

Since the beginning of his career, his work has entailed computations, drafting, and field work for various industrial, commercial, municipal, and private clients. Project work has included topographic surveying needed for a wide variety of engineering, architectural, and related endeavors.

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Other experience and qualifications relevant to the proposed Project:

Ralph P. Fontcuberta, Jr., PLS (continued)

Mr. Fontcuberta's **surveying experience with Jefferson Parish can be traced back to BFM's inception in 1982**, and before 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:

- Pailet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, LA
- Orange Lane Drainage Pump Station Project (Drainage Mapping), Grand Isle, Jefferson Parish, LA
- Locate 16-inch Water Line between Valve Stations 18 & 24, Grand Isle, Jefferson Parish, LA
- Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, LA
- Lafitte Area Levee Repair (BA-82) (CPRA 4400007082, Task 8), Jefferson Parish, LA
- Bayou Segnette Topographic Survey, Westwego, Jefferson Parish, LA
- Bayou Segnette State Park Settlement Reference Marker Checks, Westwego, Jefferson Parish, LA
- Marsh Island (Lafreniere Park), Metairie, Jefferson Parish, LA
- Fisher Basin Alignment Extension (Fisher/Lafitte Tidal Protection Alignment), Jefferson Parish, LA
- Bayou Segnette Fronting Protection/New Pump Station, Westwego, Jefferson Parish, LA
- Waterline Location, Lower Lafitte Shoreline Stabilization, Jefferson Parish, LA
- Fifi Island Restoration Extension, Jefferson Parish, LA
- Lower Lafitte Shoreline Stabilization at Bayou Rigolets, Segments AU1 and AU5, Jefferson Parish, LA
- Grand Isle Jetty Project, Grand Isle, 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
- Elmer's Island Surveying Services, Grand Isle, Jefferson Parish, LA
- Hydrographic Survey of the Mississippi River Range Line 1-9, Westwego, Jefferson Parish, LA
- Rosethorne Basin, Lafitte Independent Levee District, Lafitte, Jefferson Parish, LA
- Mazoue Ditch Sheet Piles, Jefferson Parish, LA
- Harahan Pump-to-the-River Outfall Legals, Jefferson Parish, LA
- Evans Road Waterline Repair Mississippi River Levee Cross Section, Jefferson Parish, LA
- Rosethorne Levee Staking, Lafitte Independent Levee District, Jefferson Parish, LA
- Mississippi River Levee 7.1 (Emergency Temporary Levee), West Bank Vicinity
- Lafitte Hurricane Protection Levee Fisher Basin, Jefferson Parish, LA
- USACE W912HY-09-C-0015, WBV-24, Segnette State Park Floodwall, Jefferson Parish, LA
- Update Survey Plats for the Lafitte Area Hurricane Protection Levee, Lafitte, Jefferson Parish, LA
- Hurricane Protection Systems, Parishes of St. Charles and Jefferson, Louisiana
- 25th Street & Adjacent Canal, Gretna, Jefferson Parish, LA
- JP 2017-003-DR, West Metairie Canal Bank Stabilization, Jefferson Parish, LA
- The Pen Levee, Lafitte, Jefferson Parish, LA
- Floodwall Location, Marvis Grove Subdivision, Town of Jean Lafitte, Jefferson Parish, LA

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Chad M. Poché, P.E.

Executive Vice President

Project Assignment:

Engineering Liaison

Name of Firm with which associated:



Years experience with this Firm:

5 years (became partial owner of BFM in 2017); 29 years total (1993)

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:

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

Other experience and qualifications relevant to the proposed Project:

Mr. Poché 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 more than 20 years in South Louisiana, working on traditional and unique geotechnical engineering projects (shallow and deep foundation design, slope stability, pavement design, etc.). Mr. Poché has also provided construction oversight for waste facilities and virtually every type of earthwork related project. He has been the geotechnical engineer of record for thousands of projects throughout his career.

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

BFM Corporation projects overseen by Mr. Poché would include:

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Other experience and qualifications relevant to the proposed Project:

Chad M. Poché, P.E. (continued)

Pailet 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)

Lapalco Boulevard Bridge at Harvey Canal, (PW 2017-046-RBP; DOTD H.004396), Jefferson Parish, LA. BFM Corporation provided extensive surveying services for a topographic survey and right-of-way (R/W) determination for the project. Project elements included setting GPS Static Control (5 permanent control points), traversing a proposed survey line, and land topography surveying. Additional phases include hydrographic topography/bathymetric surveying of the project area, the right-of-way determination, and subsurface utility engineering (SUE). Drone Surveying was utilized throughout the project. A Route Topographic Survey was also included as part of the scope, as was Subsurface Utility Engineering (SUE). (\$478,744 (fee); 2020)

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 taken into account. (\$118,873 (fee); 2019)

Orange Lane Pump Station Project, Grand Isle, Jefferson Parish, LA. The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area. (\$32,280 (fee); 2020)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

John Philip Thayer

Field Operations Supervisor

Project Assignment:

Field Operations Supervisor

Name of Firm with which associated:



Years experience with this Firm:

14 years (joined BFM in 2008); 15 years total (2007)

Education: Degree(s)/Year/Specialization:

B.S., 2007, Physical Education, Trevecca Nazarene University

Active registration: Year first registered/discipline:

Professional Land Surveyor Registration in process, State of Louisiana

Other experience and qualifications relevant to the proposed Project:

Mr. Thayer is a Field Operations Supervisor with considerable experience in field surveying services, including ALTA/as-built surveying, construction layout, boundary, topographic, cross-sections, GPS use, and numerous other surveying types.

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)

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)

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Other experience and qualifications relevant to the proposed Project:

John Philip Thayer (continued)

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 inbetween 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)

Segnette Park Settlement Reference Marker Checks, Westwego, Jefferson Parish, LA. BFM Corporation provided multiple surveying services for the project at the Bayou Segnette State Park in Jefferson Parish. The scope of services included performing an elevation survey of the settlement monuments at the Bayou Segnette Flood Wall. BFM tied into the controlling monuments for the project and executed a first order level loop through the settlement markers. (\$4,080 (fee); 2016)

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 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)

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)

CPRA BA-75-1, SP H.009252, 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)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Gary J. Lambert, Jr., PLS

Registered Professional Land Surveyor

Project Assignment:

Registered Professional Land Surveyor; Project Manager/Drafting Supervisor

Name of Firm with which associated:



Years experience with this Firm:

4 years (joined BFM in 2018); 11 years total

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 Lic. No. 5929)

Other experience and qualifications relevant to the proposed Project:

Mr. Lambert provides Project Management and Drafting Oversight for the firm. He has also provided Survey Crew Chief Services since joining BFM and offers a well-rounded experience overview for any project. Mr. Lambert has completed Basic OSHA Training and holds license with the Gulf Coast Safety Council (08SSV, ID429523).

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 taken into account. (\$118,873 (fee); 2019)

2700 Destrehan Sewer Lift Station Servitude Survey, Harvey, Jefferson Parish, LA. BFM prepared a Servitude Survey for the 2700 Destrehan Sewer Lift Station; the survey built upon and served to revise BFM's previous work on the project site in 2019 which involved a full boundary survey update. The scope of services involved establishing both a temporary construction servitude (105 ft. x 70 ft.) and a permanent servitude (45 ft. x 40 ft.). (\$4,200 (fee); 2022)

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Other experience and qualifications relevant to the proposed Project:

Gary J. Lambert, Jr., PLS (continued)

Three Sewer Lift Station Sites (G8-1, G8-3, & H8-4B) & Sewer Force Main Construction Survey, Jefferson Parish, LA. BFM Corporation provided Topographic & Route Topographic Surveying services (along a proposed force main route) for three lift station sites in Jefferson Parish. The lift stations included LS G8-1, G8-3, and H8-4B. The Scope of Services for the project involved establishing a baseline, Temporary Benchmarks (TBM), and spot elevations. Existing improvements (natural and man-made) were located, as were visible above-ground & underground utilities. The survey also located property corners to assist in verifying the apparent rights-of-way, per project scope. (\$28,950 (fee); 2021)

Sewer Lift Station D4-5 (S. Laurel Street & Mistletoe Street), Metairie, Jefferson Parish, LA. BFM Corporation was selected by the Jefferson Parish Sewerage Department to provide comprehensive topographic & right-of-way surveying services for the Sewer Lift Station D4-5 upgrade project located at S. Laurel Street & Mistletoe Street in Metairie, LA. With this upgrade project, the equipment must be confirmed to be elevated above the 100 year flood elevation. Project plans included relocation of the existing control panel. Other utilities in the area were identified so that there would be no conflicts. BFM provided all surveying services requested (defining/locating elevations, right of ways, servitudes, utilities, etc.) to ensure the successful completion of the project. (\$5,930 (fee); 2022)

Lapalco Boulevard Bridge at Harvey Canal, (PW 2017-046-RBP; DOTD H.004396), Jefferson Parish, LA. BFM Corporation provided extensive surveying services for a topographic survey and right-of-way (R/W) determination for the project. Project elements included setting GPS Static Control (5 permanent control points), traversing a proposed survey line, and land topography surveying. Additional phases include hydrographic topography/bathymetric surveying of the project area, the right-of-way determination, and subsurface utility engineering (SUE). Drone Surveying was utilized throughout the project. A Route Topographic Survey was also included as part of the scope, as was Subsurface Utility Engineering (SUE). (\$478,744 (fee); 2020)

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)

Cypress Lakes Country Club, Destrehan, St. Charles Parish, LA. BFM provided topographic and hydrographic surveying services for the project site at Cypress Lakes Country Club in Destrehan. The pre-dredge scope involved providing the X, Y, and Z file for all points collected. Both pre-dredge and post-dredge surveying involved cross sections (taken within the Limits of Survey on a grid not exceeding 10 feet) and Top-of-Water shots (which were collected at each pond location). (\$87,750 (fee); 2019)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Christopher Lemley

Quality Control Supervisor

Project Assignment:

Quality Control Supervisor

Name of Firm with which associated:



Years experience with this Firm:

8 years (joined BFM in 2014); 16 years total (2006)

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Mr. Lemley serves as BFM's Quality Control Supervisor, overseeing all work and activity by the firm's personnel to be sure all is kept up to our exacting standards. 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.

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)

Pailet 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

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Other experience and qualifications relevant to the proposed Project:

Christopher Lemley (continued)

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)

CPRA BA-75-1, SP H.009252, 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)

Orange Lane Pump Station Project, Grand Isle, Jefferson Parish, LA. The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area. (\$32,280 (fee); 2020)

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)

Pailet 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)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Thomas O. Wright

Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:



Years experience with this Firm:

14 years (joined BFM in 2008); 45 years total (1977)

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

American Traffic Safety Service Assn. – Traffic Flagger/Control Technician/Control Supervisor Basic OSHA Training - Completed Transportation Work Identification Card (TWIC)

Other experience and qualifications relevant to the proposed Project:

Mr. Wright has over 40 years of experience in surveying services, including a multitude of project types (water, wastewater, stormwater, drainage, roadway, etc.) throughout the region.

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)

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)

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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:



Years experience with this Firm:

32 years (joined BFM in 1990); 32 years total (1990)

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

American Traffic Safety Service Assn. – Traffic Flagger Transportation Work Identification Card (TWIC)

Other experience and qualifications relevant to the proposed Project:

Mr. Barrios' surveying experience includes boundary, hydrographic, and topographic. He has worked on location and performed topographic surveys for a number of major projects.

CPRA BA-75-1, SP H.009252, Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, LA. BFM's surveying services included establishing horizontal & vertical control (referenced to established benchmark and LA State Plane Coordinate System), 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. (\$23,220 (fee); 2017)

Elmer's Island Surveying Services, Grand Isle, Jefferson Parish, LA. BFM provided cross sections of Elmer's Island at 100 ft. intervals for approximately 8,000 feet, extending approx. 1500 feet east of breach across Elmer's Island and to the west past the breach. Notably, the cross sections were extended to wading depth from the shoreline. Equipment used included Leica System 1200 GPS, Odom Hydrotrac Echo Sounder, Hi Pack Hydrographic software, and a 23 ft Sea Ark boat. (\$19,763 (fee); 2006)

Waterline Location, Lower Lafitte Shoreline Stabilization, Jefferson Parish, LA. BFM provided surveying services associated with the location of a 16 in plastic waterline in the Barataria Waterway as part of the Lower Lafitte Shoreline Stabilization project. (\$27,825 (fee); 2011)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Eric Gladney

Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:



Years experience with this Firm:

8 years (joined BFM in 2014); 21 years total (2001)

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

American Traffic Safety Service Assn. – Traffic Flagger Norfolk Southern Roadway Worker Protection Contractor Safety Cert. Transportation Work Identification Card (TWIC)

Other experience and qualifications relevant to the proposed Project:

Segnette Park Settlement Reference Marker Checks, Westwego, Jefferson Parish, LA. BFM Corporation provided multiple surveying services for the project at the Bayou Segnette State Park in Jefferson Parish. The scope of services included performing an elevation survey of the settlement monuments at the Bayou Segnette Flood Wall. BFM tied into the controlling monuments for the project and executed a first order level loop through the settlement markers. (\$4,080 (fee); 2016)

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)

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)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Jeff Patin

Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:



Years experience with this Firm:

3 years (joined BFM in 2019); 23 years total (1999)

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

Transportation Work Identification Card (TWIC)

Other experience and qualifications relevant to the proposed Project:

Mr. Patin has worked as a Survey Crew Chief & Instrumentman for over 20 years for a number of southeastern Louisiana surveying firms on projects throughout the region. His work history includes supervision of field crew personnel, operation of various survey equipment (Topcon GPT, Leica GPS, Total Station, etc.), calculations, information collection, and any & all work required to execute the survey and obtain the information needed. Mr. Patin has worked on projects for various public & private clients, and has performed field work under the direction of the Corps of Engineers.

Three Sewer Lift Station Sites (G8-1, G8-3, & H8-4B) & Sewer Force Main Construction Survey, Jefferson Parish, LA. BFM Corporation provided Topographic & Route Topographic Surveying services (along a proposed force main route) for three lift station sites in Jefferson Parish. The lift stations included LS G8-1, G8-3, and H8-4B. Scope involved establishing a baseline, Temporary Benchmarks (TBM), and spot elevations. Existing improvements (natural and man-made) were located, as were visible above-ground & underground utilities. The survey also located property corners to assist in verifying the apparent rights-of-way, per project scope. (\$28,950 (fee); 2021)

Sewer Lift Station D4-5 (S. Laurel Street & Mistletoe Street), Metairie, Jefferson Parish, LA. BFM provided topographic & right-of-way surveying services for the upgrade project; the upgrade stated that the equipment must be confirmed to be elevated above the 100 year flood elevation. Project included relocation of the existing control panel. Other utilities in the area were identified so that there would be no conflicts. BFM provided all surveying services requested (defining/locating elevations, right of ways, servitudes, utilities, etc.) to ensure the successful completion. (\$5,930 (fee); 2022)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Anthony Watson

CADD Technician

Project Assignment:

CADD Technician

Name of Firm with which associated:



Years experience with this Firm:

11 years (joined BFM in 2011); 31 years total (1992)

Education: Degree(s)/Year/Specialization:

Coursework - CAD, Avatech Solutions, Los Colinas, TX

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Mr. Watson has experience as a draftsman/CADD technician, having started his career as an intern with the Surveying Department of the City of Plano, TX. 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.

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)

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)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Shaun Clements

CADD Technician

Project Assignment:

CADD Technician

Name of Firm with which associated:



Years experience with this Firm:

4 years (joined BFM in 2018); 7 years total (2015)

Education: Degree(s)/Year/Specialization:

Associates of Applied Sciences, 2015, Computer Drafting and Design (ITT)

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

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)

Orange Lane Pump Station Project, Grand Isle, Jefferson Parish, LA. The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area. (\$32,280 (fee); 2020)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Kevin A. Roberts

CADD Technician

Project Assignment:

CADD Technician

Name of Firm with which associated:



Years experience with this Firm:

4 years (joined BFM in 2018); 37 years total (1985)

Education: Degree(s)/Year/Specialization:

A.D., 1999, Drafting & Design, Louisiana Technical College Coursework, 1994-1997, Nunez Community College Coursework, 1984-1988, Delgado Community College Coursework, 1982-1983, University of New Orleans

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Mr. Roberts has experience with civil engineering, offshore engineering, water purification systems, and general architectural and construction design & terminology. He obtained his A.D. in Drafting in 1999, and has taken additional coursework throughout his career.

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 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 taken into account. (\$118,873 (fee); 2019)

The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, LA. BFM Corporation is providing Route Topographic and Hydrographic Surveying for the project in Ascension Parish, LA; as established, the project will be executed in two phases as noted below. The project engineer is providing proposed alignment for the Flood Protection Structures to enable BFM to accurately cover the Limits of Survey as requested. BFM is executing 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 (est fee); ongoing)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Dawn Hoffman

Researcher/Archivist

Project Assignment:

Researcher/Archivist

Name of Firm with which associated:



Years experience with this Firm:

13 years (joined BFM in 2009); 25 years total (1997)

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:

NA

Other experience and qualifications relevant to the proposed Project:

Ms. Hoffman serves as BFM's primary researcher and has more than 25 years of experience in this field. She is extremely knowledgeable with regards with researching in various parishes and cities.

The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, LA. BFM Corporation is providing Route Topographic and Hydrographic Surveying for the project in Ascension Parish, LA; as established, the project will be executed in two phases as noted below. The project engineer is providing proposed alignment for the Flood Protection Structures to enable BFM to accurately cover the Limits of Survey as requested. BFM is executing 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 (est fee); ongoing)

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. Hydrographic surveying included the mouths of the Vacherie Canal and Oil Well Canal, noting any significant features. Geotechnical borings were located (for plan identification). BFM further 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)

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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.

additional pages if necessary.			
P	PROJECT NO. 1		
Project Name, Location, and Owner's Contact Information:	Nature of I	Firm's Responsibility:	
The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, Louisiana	BFM Corporation is providing Route Topographic and Hydrographic Surveying for the project in Ascension Parish, LA; as established, the project will be executed in two phases as noted below. The project engineer is		
Burk-Kleinpeter, Inc.	· ·	gnment for the Flood Protection	
4176 Canal Street	Structures to enable BFM to accurately cover the Limits		
New Orleans LA 70119	of Survey as requested. BFM is executing a Route		
David Boyd, P.E., 504-483-6271 dboyd@bkiusa.com	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.		
	Es	timated Cost:	
Completion Date (Actual or estimated):	Entire Project: Work for which Firm was Responsible:		
ongoing	N/A	\$477,340 (est fee)	

PROJECT NO. 2				
Project Name, Location, and Owner's Contact Information:	Nature of 1	Firm's Responsibility:		
Pailet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, Louisiana APTIM 2424 Edenborn Avenue Suite 450 Metairie LA 70001 Gene S. Gillen, P.E., 504-832-4881 info@aptim.com	included establishing the points at major turns or is constrained to State Restablished a baseline at earthen levee. BFM set referenced to horizontal section depicting the gof earthen levee, and leabove-ground utilities at visible surface evidence pumps, and discharge p	aphic surveying services; scope nree static GPS observation in the levee to ensure baseline Plane Coordinates; BFM also along the centerline of the existing vertical control TBMs which were all control points. Plotted a cross round, edge of water, top and toe execute centerline. Located visible as well as underground utilities with e, as well as existing wall, center of pipes at the existing pump station. and trees were included in general		
	Estimated Cost:			
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:		
2018 June	N/A	\$150,000 (fee)		

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P	ROJECT NO. 3	
Project Name, Location, and Owner's Contact Information:	Nature of 1	Firm's Responsibility:
Lafitte Area Levee Repair (BA-82) (CPRA 4400007082, Task 8), Jefferson Parish, Louisiana CB&I 2424 Edenborn Avenue Suite 450 Metairie LA 70001 Gene S. Gillen, P.E., 504-832-4881 gene.gillen@cbi.com	surveying services as re included establishing a establishing temporary improvements, determi	graphic and hydrographic equired by the project. This baseline parallel to the shoreline, benchmarks, plotting location of ining pipeline aspects (size, depth, ections, as well as all elements of by of the waterway.
	Estimated Cost:	
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:
2017 March	N/A	\$8,924 (fee)

PROJECT NO. 4			
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:		
Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, Louisiana Greenup Industries, LLC 2200 Veterans Memorial Blvd Ste 114 Kenner LA 70062 Rodney Greenup, Jr., 225-283-4843 rodney@greenupind.com	BFM's scope of services included all topographic & hydrographic surveying as directed; magnetometer surveying was utilized to determine the presence of pipelines within the subject survey area. BFM establishe as client-supplied baseline and Temporary Benchmarks (TBM). Provided cross sections along Bayou Des Allemar and located elements & existing improvements within the designated limits of survey, as well as above- & belowground utilities. As-built data was also taken into account		
	Es	timated Cost:	
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:	
2019 July	N/A	\$118,873 (fee)	

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P	ROJECT NO. 5		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:		
CPRA BA-75-1, Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, Louisiana Lafitte Area Independent Levee District c/o BCG Engineering & Consulting, Inc. 9619 Interline Avenue, Suite A Baton Rouge LA 70809 David T. Dodgen, 225-924-3116 Nicole Cooper, 504-233-1109 ncooper@townofjeanlafitte.com	establishing horizontal established benchmark System, NAD 1983 2011 bulkhead/I-wall centerli every 25 feet along the collected data with cen	s on the project included & vertical control (referenced to and LA State Plane Coordinate), coordination of proposed ine, and collection of spot elevation centerline. BFM also plotted terline overlaid for reference include hardcopy, PDF, and	
	Estimated Cost:		
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:	
2017 June	N/A	\$23,220 (fee)	

PROJECT NO. 6			
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:		
Marsh Island (Lafreniere Park), Metairie, Jefferson Parish, Louisiana Mathes Brierre Architects 201 St. Charles Avenue, Suite 4100 New Orleans LA 70170-4100 Scott Evans, AIA, 504-586-9303 talfortish@mathesbrierre.com	BFM Corporation provided bathymetric and topographic surveying services for the Marsh Island project at Lafreniere Park in Jefferson Parish, Louisiana. The survey encompassed the island and surrounding waters up to an including the sidewalk. Cross sections of the island and surrounding waters were cut after the topographic and hydrographic surveying was completed.		
	Estimated Cost:		
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:	
2016 February	N/A	\$9,568 (fee)	

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P	ROJECT NO.7		
Project Name, Location, and Owner's Contact Information:	Nature of I	Firm's Responsibility:	
Fisher Basin Alignment Extension (Fisher/ Lafitte Tidal Protection Alignment), Jefferson Parish, Louisiana	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.		
Brown Cunningham Gannuch 3012 26th Street Metairie LA 70002 Ann Sprinston, 504-454-3866 aspringston@ardurragroup.com	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. Estimated Cost:		
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:	
2015 April	N/A	\$12,197 (fee)	

PROJECT NO. 8			
Project Name, Location, and Owner's Contact Information:	Nature of 1	Firm's Responsibility:	
SLFPA-E Levee Certification Phase 2 Survey - 40 Arpent & Maxent Levees, Orleans & St. Bernard Levee Systems, Orleans Parish, Louisiana Southeast Louisiana Flood Protection Authority - East (SLFPA-E) CERM Bldg Ste 422 2045 Lakeshore Drive New Orleans LA 70122 Robert A. Turner, P.E., CFM, 504-280-2411 rturner@slfpae.com	(in excess of 124,000 lf of were established utilizing was surveyed and all gralong the centerline of at Violet Canal was also locations (based on field available utility records ground utility poles, we Bathymetry information section point file and control this information was fur elevations as the levee sections were surveyed	erline of the 40 Arpent "Back" Levee on a 100 ft grid). Control points and RTK GPS. Each pump station ade breaks/roads were obtained the levee. The old shrimp building located. Surveys included utility d evidence, investigation, and as well as foundation of abovest wells, and pipeline crossings. In was incorporated into crossombined with ground survey; or ther converted to the same profile work. Additional cross to support detailed geotechnical coordinated with the geotechnical he project.	
	Es	timated Cost:	
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:	
2013 May	N/A	\$166,500 (fee)	

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PROJECT NO. 9				
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:			
Orange Lane Drainage Pump Station Project (Drainage Mapping), Grand Isle, Jefferson Parish, Louisiana AIMS Group, Inc. 4421 Zenith Street Metairie LA 70001	The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue. Scope includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of			
Lowell Pitré, P.E. , 504-887-7045 ljp@aimsgroupinc.com	way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area.			
	Estimated Cost:			
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:		
2020 August	N/A	(\$32,280 (fee); 2020)		

PROJECT NO. 10				
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:			
Lac Des Allemands Shoreline Protection & Restorations, St. John the Baptist Parish, Louisiana GSA Consulting Engineers 1022 S Pupera Avenue Gonzales LA 70707 Jake Lambert, 225-644-5523	The project extended from Vacherie Canal southeast along the shoreline of Lac Des Allemands to Pointe Aux Herbes (approx. 11,000 ft). Surveying included research & review of any existing survey data and establishing a project baseline along the existing shoreline. Crosssections 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 mouths of the Vacherie Canal and Oil Well Canal, noting significant features. Geotechnical borings were located (for plan identification). BFM further 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.			
Completion Date (Actual or estimated):	Estimated Cost:			
	Entire Project:	Work for which Firm was Responsible:		
2010 August	N/A	\$38,399 (fee)		

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

Parties:		St. 4 D. H. C.C.
Plaintiff:	Defendant:	Status/Result of Case:
1. N/A		
2.		
3.		
4.		
	Jerrer	son

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 RELEVANT PROJECT 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, and now offers 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 and LiDAR
- Bathymetric / Hydrographic Surveys
- Property, Boundary, and Right-of-Way Surveys

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N. continued.

- Maps, Cross-Sections, and Data Sets
- 3D Laser Scanning
- Benchmarks
- Construction-Related Surveying
- 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 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). Crews are outfitted with Leica TS series robotic total stations, simplifying and expediting projects. Furthermore, BFM has photogrammetry included into our GS18 GPS Receivers that allow our technicians to capture and utilize point cloud data in the field. The tilt functionality built into the GPS receivers allows for shooting without leveling the rod; this greatly increases speed of fieldwork while keeping accuracy and precision intact. BFM's crews are trained to use this equipment to its full potential to maximize efficiency and accuracy 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). At a flight ceiling of 165 feet, pixel quality is 0.71 CM); this allows 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.

BFM Corporation provides **bathymetric surveying** to handle any **hydrographic surveying tasks**. For large rivers and bodies of water, BFM is 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. The firm uses Hypack Software to process collected data. Further, BFM can execute multi-beam scans, side scans and magnetometer surveys upon request.

Please refer to the projects presented in Item L of this form as well as our personnel bios for an overview of relevant project work executed by BFM Corporation.

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N. continued.

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.

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 OF NEWLY-ASSIGNED WORK

BFM Corporation has the manpower and equipment to execute any surveying task within the reasonable time set forth by the contract or project engineer. It is our continual 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**, 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.

BFM's **Chad M. Poché**, **P.E.** 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 throughout his career.

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 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 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 nearly 40 years with BFM. He has provided professional surveying services for **thousands of projects for and throughout Jefferson Parish**. Additional information beyond the scope of this RFQ response is available upon request.

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N. continued.

CRITERIA 5 • LOCATION OF 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 • ADVERSARIAL LEGAL PROCEEDINGS WITH PARISH

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 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 Parishwide 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 Department (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)

Greg Cromer, Mayor, City of Slidell

(985-646-4333 | gcromer@cityofslidell.org)

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:	(e	-1	Print Name:	Chad M. Poché, P.E.		
Title:	Executive Vice Pre	esident	Date:	July 26, 2022		

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Gulf Shore Engineering and Testing, Inc. TEC Questionnaire





A. Project Name and Advertisement Resolution Number:

Supplemental Coastal Engineering and Consulting Services

SOQ **22-036** | Resolution No. **139866**

B. Firm Name & Address:



Gulf South Engineering and Testing, Inc.

15 Veterans Memorial Boulevard Kenner LA 70062

C. Name, title, & 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., Principal/Vice President

telephone 504-305-4401 • cpoche@gulfsoutheng.com Registered Professional Civil Engineer, Louisiana No. 27667 (1998)

D. Name, title, & 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., Principal/Vice President

telephone 504-305-4401 • cpoche@gulfsoutheng.com Registered Professional Civil Engineer, Louisiana No. 27667 (1998)

- E. Please provide the number of employees whose primary function corresponds with each category:
 - 7 Administrative
 - Architects (Licensed)
 - Chemical Engineers
 - Civil Engineers
 - 11 Construction Inspectors
 - Ecologists
 - Electrical Engineers
 - Engineer Intern
 - 1 Professional Land Surveyors

- Estimators
- Geologists
- 2 Geotechnical Engineers
- Interior Designers
- Landscape ArchitectsLand Surveyor (*see PLS)
- Mechanical Engineers
- Micchainear Engineers
- Environmental Engineers
- Specification Writers
- Structural Engineers
- 2 Graduate Engineers
- Project Managers
- Clerical (see Administrative)
- Grant/Funding Specialist
- Sanitary Engineers
- 1 Construction Svcs Managers
- 2 Laboratory Managers

33* TOTAL

*employee count also include 1 CMT Supervisors, 4 Laboratory Technicians, 1 Soil Boring Driller, and 1 Soil Boring Driller Apprentice

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.

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G.	If submittal is by a JOINT-VENTURE, I responsibility (including administrative, additional pages if necessary.	1 1 0	-
1.	N/A		
2.			
Н.	Has this JOINT-VENTURE previously was YES NO N/A	worked together? Please check:	
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 Prime Before (Yes or No):
2.	N/A	arish ate of Louisia	na
3.			
J.	Please specify the total number of support 33 (all personnel will be available to the		

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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 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.

Vice-President

Project Assignment:

Engineering Manager; Geotechnical Engineer

Name of Firm with which associated:



Years experience with this Firm:

11 years with this firm (2011); 29 years total (1993)

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 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.

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.

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Other experience and qualifications relevant to the proposed Project:

Chad M. Poché, P.E. (continued)

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)

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)

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); ongoing)

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)

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)

Airline Highway Backwater Protection Project, St. John the Baptist Parish, LA. Geotechnical engineering services for the construction of floodgates and a pump station at three sites (Blind River/Bayou Trainnasse/M2 Canal). Each site will have a floodgate, and a pump station will be installed in addition to the floodgate at Blind River in St. John Parish, LA. Gulf South's scope includes drilling eight undisturbed soil borings (six at 80 ft bgs, two at 100 ft bgs), laboratory testing, engineering analyses and general construction procedures and recommendations. (\$55,000 (fee); 2020)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Blake E. Vutera, P.E.

Engineering Manager

Project Assignment:

Geotechnical Engineer

Name of Firm with which associated:



Years experience with this Firm:

10 years with this firm (2012); 16 years total (2006)

Education: Degree(s)/Year/Specialization:

M.S., 2018, Civil Engineering, University of New Orleans
Certification - Coastal Engineering, 2018, University of New Orleans
B.S., 2008, Civil Engineering, Louisiana State University

Active registration: Year first registered/discipline:

2013, Civil Engineer, Louisiana, No. 38607

2018, Professional Engineer, Texas No. 129410

Other experience and qualifications relevant to the proposed Project:

Blake E. Vutera, P.E., serves as Gulf South's Engineering Manager and is based in Gulf South's Kenner, LA office. His experience with the firm includes daily work on geotechnical engineering projects, managing all geotechnical investigations, and aiding with laboratory testing and construction materials testing & inspection. Engineering analyses routinely performed includes shallow and deep foundations, slope stability analyses, settlement estimates, and pavement design. He is responsible for engineering design, report preparation, proposal preparation, personnel management, project management, and client interaction.

Mr. Vutera's field work consists of borehole logging; 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); pavement coring; nuclear field density tests; and hand augers. Mr. Vutera has been the geotechnical engineer of record for hundreds of projects throughout his career.

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)

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Other experience and qualifications relevant to the proposed Project:

Blake E. Vutera, P.E. (continued)

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)

Airline Highway Backwater Protection Project, St. John the Baptist Parish, LA. Geotechnical engineering services for the construction of floodgates and a pump station at three sites (Blind River/Bayou Trainnasse/M2 Canal). Each site will have a floodgate, and a pump station will be installed in addition to the floodgate at Blind River in St. John Parish, LA. Gulf South's scope includes drilling eight undisturbed soil borings (six at 80 ft bgs, two at 100 ft bgs), laboratory testing, engineering analyses and general construction procedures and recommendations. (\$55,000 (fee); 2020)

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); ongoing)

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)

South Lafourche Levee District: Cut Off/Point Aux Chenes Levee Design - Reach K, Lafourche Parish, LA. Geotechnical investigation for proposed levee improvements to Reach K along Grand Bayou between Cut Off and Point Aux Chenes in Lafourche Parish, LA. Gulf South's scope includes two drilling phases consisting of three soil borings to a depth of 60 feet each for Phase I (land borings), and drilling six soil borings to depths of 60 feet (3 borings for levee) and 20 feet (3 borings for borrow/fill) for Phase II. Phase II borings drilled in water or marsh. In addition, laboratory testing (strength, classification, consolidation), and geotechnical engineering analysis consisting of new levee design recommendations, slope stability analyses, estimates of settlement, estimate of strength gain, and general construction recommendations were performed. All project elements reviewed by Louisiana CPRA. (\$69,000 (fee); 2015)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Joseph H. "Trey" Binder, III

Laboratory Manager

Project Assignment:

Laboratory Manager; Laboratory Technician

Name of Firm with which associated:



Years experience with this Firm:

11 years with this firm (2011); 16 years total (2006)

Education: Degree(s)/Year/Specialization:

A.D., 2011, General Studies, Nunez Community College

Active registration: Year first registered/discipline:

N/A

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

- HAZMAT Awareness
- HAZMAT Operations Training
- ACI Aggregate Base Testing Technician
- ACI Concrete Strength Testing Technician

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.

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)

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

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Other experience and qualifications relevant to the proposed Project:

Joseph H. Binder, III (continued)

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)

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 within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. 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)

New Earthen Levee, Upper Barataria Risk Reduction Project, Lafourche Basin Levee District (LBLD), Lafourche Parish, LA. Geotechnical investigation for a flood protection project in Lafourche Parish, LA. Project consists of a new earthen levee (totaling approx. 8.8 to 9 miles or 47,000 lf) and control structure. Gulf South's scope includes drilling three undisturbed soil borings to depths of 60 feet (1 boring in canal and 1 boring on land), 200 feet (1 boring in shallow water) and performing five CPT probes to 60 feet below apparent mud line, lab testing (with 1-D Consoles), and engineering analyses including site/soil characterization, slope stability analyses, unbalance forces for structures, allowable pile load capacities, estimates of settlement, and general construction recommendations. (\$100,000 (fee); 2020)

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)

South Lafourche Levee District: Cut Off/Point Aux Chenes Levee Design - Reach K, Lafourche Parish, LA. Geotechnical investigation for proposed levee improvements to Reach K along Grand Bayou between Cut Off and Point Aux Chenes in Lafourche Parish, LA. Gulf South's scope includes two drilling phases consisting of three soil borings to a depth of 60 feet each for Phase I (land borings), and drilling six soil borings to depths of 60 feet (3 borings for levee) and 20 feet (3 borings for borrow/fill) for Phase II. Phase II borings drilled in water or marsh. In addition, laboratory testing (strength, classification, consolidation), and geotechnical engineering analysis consisting of new levee design recommendations, slope stability analyses, estimates of settlement, estimate of strength gain, and general construction recommendations were performed. All project elements reviewed by Louisiana CPRA. (\$69,000 (fee); 2015)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Sara E. Lockwood, E.I.

Associate Geotechnical Engineer

Project Assignment:

Associate Geotechnical Engineer/Engineering Intern

Name of Firm with which associated:



Years experience with this Firm:

3 years with this firm (2019); 5 years total (2017)

Education: Degree(s)/Year/Specialization:

B.S., 2019, Civil Engineering, University of New Orleans

B.S., 2016, Physics, Loyola University

Active registration: Year first registered/discipline:

2020, Engineering Intern, Louisiana, No. El.0034718

Other experience and qualifications relevant to the proposed Project:

Sara E. Lockwood, E.I., is serving as an Associate Geotechnical Engineer, providing such duties as project management, geotechnical engineering analyses, and field & laboratory

- Society of Women Engineers
- American Society of Civil Engineers

testing & inspection. Her coursework included such disciplines as foundation engineering, soil mechanics, geotechnical engineering, structural concrete & structural steel design, and sustainability principals. She worked as an intern during her college career for a local consulting group, assisting on a variety of environmental studies for infrastructure projects, and preparing regulatory permit applications, as well as preparation of various components of Louisiana DEQ and NEPA documents.

New Earthen Levee, Upper Barataria Risk Reduction Project, Lafourche Basin Levee District (LBLD), Lafourche Parish, LA. Geotechnical investigation for a flood protection project in Lafourche Parish, LA. Project consists of a new earthen levee (totaling approx. 8.8 to 9 miles or 47,000 lf) and control structure. Gulf South's scope includes drilling three undisturbed soil borings to depths of 60 feet (1 boring in canal and 1 boring on land), 200 feet (1 boring in shallow water) and performing five CPT probes to 60 feet below apparent mud line, lab testing (with 1-D Consoles), and engineering analyses including site/soil characterization, slope stability analyses, unbalance forces for structures, allowable pile load capacities, estimates of settlement, and general construction recommendations. (\$100,000 (fee); 2020)

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

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Other experience and qualifications relevant to the proposed Project:

Sarah E. Lockwood (continued)

structures within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. 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)

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. 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)

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)

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)

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Bryson S. Beard, E.I.

Associate Geotechnical Engineer/Field Engineer

Project Assignment:

Associate Geotechnical Engineer/Field Engineer

Name of Firm with which associated:



Years experience with this Firm:

less than 1 year with this firm (2022); 1 year total (2021)

Education: Degree(s)/Year/Specialization:

B.S., 2021, Geological Engineering, University of Southern Mississippi

Active registration: Year first registered/discipline:

2022, Engineer In Training (Georgia, No. EIT029180)
Louisiana License In Process

Other experience and qualifications relevant to the proposed Project:

Bryson S. Beard, E.I., is an Associate Geotechnical Engineer/Field Engineer who is primarily serving as a field engineer with Gulf South's drilling crews

- 40-hour HAZWOPER (Field Work)
- Fundamentals of Engineering Exam (FE), NCEES

and providing office support as needed. His experience in the field includes surface and subsurface soil sampling, water sampling, and soil classification.

Mr. Beard's 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. Further, he is a START V Region 4 Responder, and can be used whenever there is a large spill/release of harmful chemical or substance. Mr. Beard is experienced with laboratory sample preparation and testing.

Sewer Lift Station No. F6-2 (W. Napoleon Blvd.), Metairie, Jefferson Parish, LA. Gulf South provided geotechnical engineering services for upgrading an existing below grade sewer lift station (No. F6-2) off West Napoleon Boulevard in Metairie, LA. Gulf South's scope includes drilling a single boring to a depth of 60 feet below the ground surface, laboratory testing, engineering analyses (soil bearing values, bedding & backfill, pile capacities, and estimates of settlement) and general construction procedures and recommendations. (\$5,000 (fee); 2022)

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Other experience and qualifications relevant to the proposed Project:

Bryson S. Beard, E.I. (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); ongoing)

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); ongoing)

Lift Station Rehabilitation (Wildcat Lane), Destrehan, St. Charles Parish, LA. Geotechnical engineering services for rehabilitation of an existing below grade sewer lift station off Wildcat Lane in Destrehan, LA. Gulf South's scope includes drilling a single boring to a depth of 70 feet 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. (\$5,800 (fee); ongoing)

Lee Street Drainage Pump Station Improvements, City of Slidell, LA. Gulf South prepared a Geotechnical Exploration Report for the project site located at the junction of Lee Street and Front Street in Slidell, LA. Gulf South's scope includes drilling soil borings to 50 ft. in depth, laboratory testing, engineering analyses (soil bearing values, bedding & backfill, pile capacities, and estimates of settlement) and general construction procedures and recommendations. (\$4,000 (fee); 2022)

Roosevelt Boulevard Roadway Pavement Improvements (West Metairie Ave. to West Napoleon Ave.), City of Kenner, Jefferson Parish, LA. Geotechnical engineering services for paved roadway improvements for Roosevelt Boulevard between West Metairie Avenue and West Napoleon Avenue in Kenner, LA. Gulf South's scope of services includes drilling 14 borings (depths of 10 feet below pavement surface), laboratory testing, engineering analyses (including pavement design) and general construction procedures and recommendations. (\$14,000 (fee); ongoing)

Charity Hospital Building Redevelopment Project, New Orleans, LA. Gulf South provided all construction materials and environmental testing for the project, which involved the complete renovation of the Charity Hospital Building (more than 1 million sf) in New Orleans, Louisiana. Inspection and testing consisted of soil borings, laboratory testing, asbestos abatement, concrete testing, mortar testing, steel coupon testing, concrete coring, and building envelope testing. The project is valued at \$500 million. (\$200,000 (est. fee); ongoing)

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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.

additional pages if necessary.				
PROJECT NO. 1				
Project Name, Location, and Owner's Contact Information:	Nature of I	Firm's Responsibility:		
Proposed Estuary Mitigation Bank (EMB) GIWW - Deadend Canal, Vendome Canal, Hockey Stick Canal, Crown Point, Jefferson Parish, Louisiana	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			
Natural Resources Investment Group, LLC 3801 Woodland Heights Road, Suite 110 Little Rock AR 72217				
Robert Stainton III, PE, 501-716-2884 robert@tnrig.com				
	Est	timated Cost:		
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:		
2016 October	N/A	\$26,500 (fee)		

PROJECT NO. 2				
Project Name, Location, and Owner's Contact Information:	Nature of Hirm's Responsibility			
Highway 90 Tie-In Levee, Upper Barataria Risk Reduction Program Segment 4, St. Charles Parish, Louisiana	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			
Lafourche Basin Levee District 21380 Highway 20 Vacherie LA 70090	(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.			
Donald Ray Henry, 225-265-7545 drhenry@lbld.us.com				
	Estimated Cost:			
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:		
2021 January	N/A	\$174,720 (fee)		

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

PROJECT NO. 4				
Project Name, Location, and Owner's Contact Information:	Nature of F	Nature of Firm's Responsibility:		
Engineering Analysis Review (EAR) - Lafitte Tidal Protection Project (Phase I), Lafitte, Jefferson Parish, Louisiana G&S Engineering, LLC Post Office Box 71 Mandeville LA 70470 Scott Gros, 504-744-0630 scottgros@gmail.com	Engineering analysis review of alternative pile type/size recommendations (provided by Client) for drainage structure site in Jefferson Parish, near Lafitte, LA. Gulf South's scope includes engineering analysis consisting of LPILE analysis and general construction recommendations.			
	Esti	imated Cost:		
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:		
2016 June	N/A	\$5,000 (fee)		

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

PROJECT NO. 6				
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:			
Bayou Gauche/Sunset Levee Flood Protection, Upper Barataria Risk Reduction Program (UBRR) Segment 2, St. Charles Parish, Louisiana Lafourche Basin Levee District 21380 Highway 20 Vacherie LA 70090 Donald Ray Henry, 225-265-7545 drhenry@lbld.us.com	Geotechnical investigation for construction of a new roller gate and T-wall structures within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. 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.			
Completion Date (Actual or estimated):		mated Cost: Work for which Firm was		
	Entire Project:	Responsible:		
xx	N/A	xx		

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PROJECT NO. 7		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
Tchefuncte Marsh Shoreline Protection Project: New Borrow Fill Area, Lake Pontchartrain, St. Tammany Parish, Louisiana Volkert, Inc. 7967 Office Park Blvd, 2nd Fl Baton Rouge LA 70809 Matt Salmon, 225-218-9440 matt.salmon@volkert.com	Geotechnical engineering services for shoreline protection along the Lake Pontchartrain coastline by construction of a rock dike (approximately 15,000 linear feet) and marsh fill area located east of the mouth of the Tchefuncte River in St. Tammany Parish, LA. Gulf South's scope includes drilling 14 borings within the lake, each to a depth of 40 feet below the water surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates.	
	Estimated Cost:	
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:
2021 December	N/A	\$90,000 (fee)

PROJECT NO. 8				
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:			
South Lafourche Levee District: Cut Off/ Point Aux Chenes Levee Design - Reach K, Lafourche Parish, Louisiana	Geotechnical investigation for proposed levee improvements to Reach K along Grand Bayou between Cut Off and Point Aux Chenes in Lafourche Parish, LA. Gulf South's scope includes two drilling phases consisting of three soil borings to a depth			
South Lafourche Levee District c/o All South Consulting Engineers, LLC 652 Papsworth Avenue Metairie LA 70005 Stephen Bourg, P.E., 504-322-2783 sbourg@ascells.com Steven Schorr, P.E., sschorr@ascellc.com	of 60 feet each for Phase I (land borings), and drilling six soil borings to depths of 60 feet (3 borings for levee) and 20 feet (3 borings for borrow/fill) for Phase II. Phase II borings drilled in water or marsh. In addition, laboratory testing (strength, classification, consolidation), and geotechnical engineering analysis consisting of new levee design recommendations, slope stability analyses, estimates of settlement, estimate of strength gain, and general construction recommendations were performed. All project elements reviewed by Louisiana CPRA.			
	Estimated Cost:			
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:		
2016 December	N/A	\$69,000 (fee)		

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PROJECT NO. 9		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
Northshore Living Shoreline Protection, Lake Pontchartrain, St. Tammany Parish, Louisiana	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.	
Barowka & Bonura Engineers 209 Canal Street Metairie LA 70005		
Jeff Bonura, P.E., 504-828-0030 jbonura@bbecllc.com		
	Estimated Cost:	
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:
ongoing	N/A	\$65,000 (fee)

PROJECT NO. 10				
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:			
Airline Highway Backwater Protection Project, St. John the Baptist Parish, Louisiana Burk-Kleinpeter, Inc. 4176 Canal Street New Orleans LA 70119 David Boyd, 504-486-5901 dboyd@bkiusa.com	Geotechnical engineering services for the construction of floodgates and a pump station at three sites (Blind River/Bayou Trainnasse/M2 Canal). Each site will have a floodgate, and a pump station will be installed in addition to the floodgate at Blind River in St. John Parish, LA. Gulf South's scope includes drilling eight undisturbed soil borings (six at 80 ft bgs, two at 100 ft bgs), laboratory testing, engineering analyses and general construction procedures and recommendations.			
	Esti	imated Cost:		
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:		
2020 December	N/A	\$55,000 (fee)		

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

Parties:		C4-4/D14f-C
Plaintiff:	Defendant:	Status/Result of Case:
1. N/A		
2.		
3.		
4.	Jerrer	
	Devial	

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



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 over two 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

Gulf South is a woman-owned, Hudson Initiative-certified & Regional Transit Authority-recognized small business in Louisiana. Our laboratory is AASHTO and CCRL certified and USACE validated.

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testing and field inspection.

N. continued.

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.

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. 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 and inspection services for structures, earthwork, foundations, pipelines, and pavements. The range of services provided by the Gulf South team includes:

- Fill and base compaction and density testing
- Vibration monitoring
- Pre- and post-construction inspection
- Concrete testing and inspection
- Soil testing (field and laboratory)
- Asphalt testing

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N. continued.

- 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 and oversight for projects as small as fill for a house pad to as large as the \$1.2 billion Louis Armstrong New Orleans International Airport New Terminal project.

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 is able to readily meet the time and budget constraints for projects assigned to this contract. Our current work load is such that we can expeditiously complete projects for this contract.

CRITERIA 3 • CAPACITY FOR TIMELY COMPLETION OF NEWLY-ASSIGNED WORK

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 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.

Gulf South's Engineering Manager, Blake E. Vutera, P.E., has over 14 years' experience in geotechnical investigations and has provided engineering analysis, laboratory testing, construction materials testing and inspection. He has been the geotechnical engineer of record for hundreds of projects throughout his career.

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.

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. This would include, **but not be limited to**, the following:

- · Lift Station Rehabilitation (Wildcat Lane), Destrehan, St. Charles Parish, LA
- Lift Station Upgrade (24th St. and Delaware Ave.), City of Kenner, LA
- Lift Station No. F6-2 (W. Napoleon Blvd.), Metairie, Jefferson Parish, LA
- Improvements to Sewer Lift Station No. 48-3, Metairie, Jefferson Parish, LA
- Sewer Lift Station at Mississippi Avenue & 21st Street, Metairie, Jefferson Parish, LA
- · New Lift Station (Elmwood Park Blvd. & Citrus Blvd.), Metairie, Jefferson Parish, LA
- · New Sewer Lift Station (Butler Drive & Grambling Street), Waggaman, Jefferson Parish, LA
- New Sewer Lift Station (Melrose Lane & Walker Road), River Ridge, Jefferson Parish, LA
- New Sewer Force Main Installation (Midway & Wildwood to Lift Station E3-1), Jefferson Parish, LA
- Lift Station Replacement Mississippi Avenue at 21st Street, Metairie, Jefferson Parish, LA

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N. continued.

- Kawanee at Olympic Lift Station, Metairie, Jefferson Parish, LA
- St. Peter's Ditch Phase IV (Pump Station at Clearview), Metairie, Jefferson Parish, LA
- Waggaman Subsurface Drainage Improvements, Waggaman, Jefferson Parish, LA
- Lift Station Replacement N. Pierce Avenue & Versailles Street, Metairie, Jefferson Parish, LA
- Marrero WWTP New Administration Building and Safe Room, Marrero, Jefferson Parish, LA
- New Sewer Lift Station, Mississippi Ave. and Fulton St., Metairie, Jefferson Parish, LA
- New Building and Parking Lot, East Bank Juvenile Services, Jefferson Parish, LA
- Metairie Lawn and Ridgelake Drive Roadway & Utility Project, Metairie, Jefferson Parish, LA
- N. Sibley Drainage Improvements (N. Sibley at W. Napoleon), Metairie, Jefferson Parish, LA
- Jefferson Parish Fire Department Garage (River Road), Bridge City, Jefferson Parish, LA
- Jefferson Parish Dept. of Public Works West Bank Central Warehouse, Bridge City, Jefferson Parish, LA
- New Charter School, Behrman Highway, Terrytown, Jefferson Parish, LA
- Jefferson Parish Library Renovations (2350 Metairie Road), Metairie, Jefferson Parish, LA
- Clancy-Maggiore Elementary School New Art and Band Wing, Kenner, Jefferson Parish, LA
- Johnny Bright Playground Gymnasium HVAC Installation, Metairie, Jefferson Parish, LA
- Kennedy Heights Playground Gymnasium HVAC Renovation, Avondale, Jefferson Parish, LA
- Trudeau Drive at Canal No. 5 Drainage Improvements, Metairie, Jefferson Parish, LA
- Earhart Expressway (Clearview Parkway to Central Avenue) Lighting Improvements, Jefferson Parish, LA
- West Esplanade Avenue Restoration (Tartan Drive to Haring Road), Metairie, Jefferson Parish, LA
- Citrus Road and Greg Court Subsurface Drainage Improvements, Jefferson Parish, LA
- Improvements to Sewer Lift Station M-11-3 & Force Main, Marrero, Jefferson Parish, LA
- Westgate Drainage Improvements, Metairie, Jefferson Parish, LA
- Bike Path Soil Borings, Jefferson Highway to Northline Street, Jefferson Parish, LA
- Green Acres Road New Street Lighting, Metairie, Jefferson Parish, LA
- Drainage Infrastructure Improvements, South Avondale Subdivision, Avondale, Jefferson Parish, LA
- Parish Line Drainage Pump Station Improvements Phase I, City of Kenner, Jefferson Parish, LA
- Drainage Improvements, Citrus Road & Greg Court, Metairie, Jefferson Parish, LA
- Marsh Island Restoration Project, Lafreniere Park, Metairie, Jefferson Parish, LA
- Clearview Parkway Drainage Project, Metairie, Jefferson Parish, LA
- Submerged Roads Program Multiple Phases, Metairie, Jefferson Parish, LA
- St. Peter's Ditch (4700 W. Metairie Ave.), Metairie, Jefferson Parish, LA
- Engineering Analysis Review (EAR) Lafitte Tidal Protection Project (Phase I), Lafitte, Jefferson Parish, LA
- David Drive Drainage Improvements (West Esplanade Avenue to Bruin Drive), Jefferson Parish, LA
- Trudeau Drive Drainage Improvements at West Metairie Canal, Metairie, Jefferson Parish, LA
- Canal Bank Stabilization, Wayne Avenue at West Bank Expressway, Jefferson Parish, LA

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 PRINCIPAL OFFICE

Gulf South is located in Jefferson Parish at 15 Veterans Memorial Boulevard in Kenner, Louisiana.

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N. continued.

CRITERIA 6 • ADVERSARIAL LEGAL PROCEEDINGS WITH PARISH

See Item M; Gulf South has not been involved in litigation with Jefferson Parish.

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. We are proud that a majority of its work is from repeat clients —we complete our projects on-time and within budget. Multiple examples of this work are included throughout this form in both the Personnel Résumés section (Item K) and Representative Project Work (Item L).

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

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 Department (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, Sewerage Capital Improvement Program, Jefferson Parish (504-736-6386 | STrouard@jeffparish.net)

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

O. To the best of my knowledge, the foregoing is an accurate statement of facts.			
Signature:	Coe Marie Constitution of the Constitution of	Print Name:	Chad M. Poché, P.E.
Title:	Vice President	Date:	July 26, 2022

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ELOS Environmental, LLC TEC Questionnaire





A. Project Name and Advertisement Resol	ution Number:			
Jefferson Parish Coastal Engineering Consulting Services				
138902				
B. Firm Name & Address where Project w	ork will be performed:			
ELOS Environmental, LLC				
607 W. Morris Avenue				
Hammond, LA 70403				
C. Name, title and contact information of				
Code of Ordinances, who is a registere	d, licensed architect, professiona	al engineer, or surveyor in the		
State of Louisiana:				
N/A				
	MITARE			
D. Name and contact information of emp				
engineer, or surveyor in the State of L				
substituted here only if the advertised P	Project requires more than one di	iscipline.		
N/A				
	State of Louis	iana		
	tate of Louis	Idiid		
		1 41 1 4		
E. Please provide the number of employees	whose primary function corresp	onds with each category:		
2 Administrative	Estimators	Specification Writers		
Architects (Licensed)	Geologists	Structural Engineers		
Chemical Engineers	Geotechnical Engineers	Graduate Engineers		
Civil Engineers	Interior Designers	3 Project Managers		
Construction Inspectors	Landscape Architects	2 Clerical		
12 Ecologists	Land Surveyor	Grant/Funding Specialist		
Electrical Engineers	Mechanical Engineers	1 Sanitary Engineers		
Engineer Intern	1 Environmental Engineers	summary Engineers		
Professional Land Surveyors		<u>21</u> TOTAL		
1 101000101101 Dalla Dall 10 J 010				
F. Is this submittal by a JOINT-VENTUR	EP: Pleasecheck: YES	NO ✓		
•				
If marked "No" skip to Section I. If marked	d "yes" complete Sections G-H.			

G. If submittal is by JOINT-VENTU responsibility (including administ additional pages if necessary.		
1. N/A		
2.		
H. Has this JOINT-VENTURE previous YESNO	iously worked together? Please	check:
fully completed copy of this ques	<u>tionnaire,</u> applicable licenses, a	that <u>all subcontractors must submit a</u> and any other information required by c. 2-928(a)(3). Please attach additional
Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. N/A	Paris	h
	State of Lo	uisiana
2.		
3.		
J. Please specify the total number of	support personnel that may ass	sist in the completion of this Project:

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Lucas Watkins, President

Project Assignment:

ELOS Principal/Senior Environmental Scientist

Name of Firm with which associated:

ELOS Environmental, LLC

Years' experience with this Firm:

15

Education: Degree(s)/Year/Specialization:

Master of Science, 2005, Biological Sciences Bachelor of Science, 2000, Forest Management

Active registration: Year first registered/discipline:

2010, LA Department of Agriculture and Forestry, Arborist, License No. 19-1827

Other experience and qualifications relevant to the proposed Project:

Lucas Watkins has over 21 years of experience as a professional consultant. His experience covers environmental regulatory compliance as well as program and project management. This includes the management of large scale, multi-faceted projects, such as disaster recovery debris removal efforts, wetland restoration implementation, government grant management, and complex construction projects. His extensive experience as a professional consultant and involvement in identifying and addressing environmental compliance issues covering a wide range of the environmental industry is instrumental to the support of ELOS clients and projects. Mr. Watkins' key strengths include wetland delineations, wetland permitting, wetland restoration, NEPA compliance, ASTM Phase I ESAs, storm water management, FERC regulatory overview and guidance, endangered species surveys, and timber and forest management. He has substantial experience in permitting municipal infrastructure, levees, borrow pits, oil and gas exploration, productions, and transmission activities as well as working on other public and private sector environmental related issues. He works to ensure that ELOS acquires the best tools and techniques to guarantee efficient and cost-effective delivery of services to clients.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:		
Name & Title:		
Brian Fortson, Senior Environmental Scientist		
Project Assignment:		
Senior Ecologist		
Name of Firm with which associated:		
ELOS Environmental, LLC		
Years' experience with this Firm:		
8		
Education: Degree(s)/Year/Specialization:		
Bachelor of Science, 1995, Wetland Ecology		
Juris Doctor, 2006, Civil Law		
Active registration: Year first registered/discipline:		
State of Louisiana		
Other experience and qualifications relevant to the proposed Project:		
Other experience and quantications relevant to the proposed Project:		

Mr. Fortson served as a Planner, Environmental Specialist and Coastal Wetland and Environmental Resources Manager for St. Tammany Parish Government from 1990 to 2012. He was responsible for the administration of the St. Tammany Parish Local Coastal Program under the Coastal Zone Management Act and was responsible for managing the natural resource permitting efforts for Parish Government. Mr. Fortson was the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) representative for St. Tammany Parish beginning with Project Priority List 1 and has proposed and presented multiple coastal restoration projects and facilitated the approval of projects through that process. With ELOS, Mr. Fortson has led permitting efforts for multiple projects for local development and infrastructure improvement efforts. Mr. Fortson provides technical expertise on many other projects for which he is not the lead scientist.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Jerry Graves PhD, VP of Coastal Resiliency
Dustrot Assignments
Project Assignment: Biological and Environmental assessments
Biological and Environmental assessments
Name of Firm with which associated:
ELOS Environmental, LLC
= =
Years' experience with this Firm:
<1
lottorcon
Education: Degree(s)/Year/Specialization:
BA, Political Science, University of Louisiana at Lafayette, 2003
MPA, Hazard Policy, University of New Orleans, 2007
PhD, Urban Studies, University of New Orleans, 2012
The croam stadies, emiversity of fields, 2012
Active registration: Year first registered/discipline:
State of Louisiana
Other experience and qualifications relevant to the proposed Project:
Jerry V. Graves specializes in project management, urban and environmental planning, and emergency
management. Dr. Graves is an experienced hazard mitigation, resilience, and coastal restoration planner. He is also an experienced administrator who previously worked in the public sector for over a decade. Dr. Graves currently
serves as the Vice President of Coastal Resilience at ELOS, where he provides a wide range of project management
and consulting services to clients throughout the region.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Ryan Carter, Geographical Information Systems (GIS) Manager
Project Assignment:
GIS Manager
NI CIE: 'AI I I I A I
Name of Firm with which associated:
ELOS Environmental, LLC
Years' experience with this Firm:
2
lottorcon
Education: Degree(s)/Year/Specialization:
BA, Urban Planning, Minor in GIS, University of New Orleans, 2017
BA, Orban I familing, without in G13, University of New Orleans, 2017
Active registration: Year first registered/discipline:
5tate of Louisiana
Other experience and qualifications relevant to the proposed Project:
Almost all ELOS projects begin with data collection and mapping. As such, Mr. Carter and his team touch ever
project providing data collection and mapping services for clients. Mr. Carter has served as a GIS Technician
ELOS since he began in December 2019 and has since become GIS Manager. His responsibilities have include
assisting in preparing technical reports and analyzing collected data through the use of GIS on nearly all ELO
projects. He has experience with ArcGIS Online, ArcGIS Pro, AutoCAD, Collector of ArcGIS, Survey 123, Exp

GPS, BaseCamp, and Google Earth. With the use of these software programs, he collects and interprets field data in support of environmental analyses and impact assessments. The figures and maps he creates are vital to the development of National Environmental Policy Act (NEPA) documentation, Threatened and Endangered Species Surveys, Wetland Delineations and Jurisdictional Determinations, Phase I Environmental Site Assessments, Section 404/10 and Coastal Use Permit applications, and wetlands assessment models. He has also completed a

land title course conducted by the American Land Title Association (ALTA).

LEV DEDGON CDECLATICE OD INDIVIDITAL CONCILIENTE
KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT: Name & Title:
Flynn Daigle, Project Manager
Project Assignment:
Project Manager / Environmental Specialist
Name of Firm with which associated:
ELOS Environmental, LLC
Years' experience with this Firm:
7
Offorcon
Education: Degree(s)/Year/Specialization:
Bachelor of Science, 2005, Environmental Management Systems
Parish
Active registration: Year first registered/discipline:
5tate of Louisiana
Other experience and qualifications relevant to the proposed Project:
Mr. Daigle is the Lead Project Manager and an Environmental Scientist with experience in many phases of
Environmental compliance, including National Environmental Policy Act (NEPA), Section 10 and 404 permitting,
wetland delineations, Phase I and II subsurface investigation, and Floodplain Management. He is a Certified
Floodplain Manager (CFM) accredited through the Association of State Floodplain Managers (ASFPM). He is
well-versed in regulations governing Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

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.			
pages if necessary.	PROJECT NO. 1		
Project Name, Location and Owner's contact information: Nature of Firm's Responsibility:			
Laketown Harbor GOMESA Project	ELOS collected data, prepared a wetland delineation report, submitted a		
Jefferson Parish, LA	joint permit application, a levee permit application, and conducted cultural resources review for authorization from the U.S. Army Corps of		
Michelle M. Gonzales	Engineers (USACE), the Louisiana Department of Natural Resources		
Jefferson Parish	(LDNR), the Southeast Louisiana Flood Protection Authority - East		
Dept. of Coastal Management	(SLFPA-E), and the Louisiana Office of State Lands (OSL) for the		
1221 Elmwood Park Blvd.,	proposed Laketown Harbor Project located in Jefferson Parish, LA. The		
Suite 310	project area includes the 60-acre Laketown area located north of the		
Jefferson, LA 70123	terminus of Williams Boulevard and the Lake Pontchartrain levee,		
(504)736-6719	including the boat launch, fishing pier, parking areas, Treasure Chest		
MGonzales@jeffparish.net	Casino, and undeveloped property along the western property boundary.		
Completion Date (Actual or	Estimated Cost:		
estimated):	Entire Project: Work for which Firm was Responsible:		

N/A

June 2020 – Present

Responsible:

\$91,500

PROJECT NO. 2			
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:		
Bucktown Living Shoreline	ELOS was sub-contracted to provide Cultural Resources tasks in support		
Jefferson Parish, LA	of the Bucktown Living Shoreline Project located in Jefferson Parish, LA. This \$1.7 million project funded by the parish and the EPA will		
Michelle M. Gonzales	include a boardwalk, breakwater	s, high-marsh shrubs, and mainland	
Jefferson Parish	fringing tidal marsh to create a natural resilient shore. The tasks included		
Dept. of Coastal Management	a Desktop Cultural Resources Ar	nalysis covering the shoreline project	
1221 Elmwood Park Blvd.,	area and all potential borrow areas identified on the attached figure and		
Suite 310	an underwater Phase I Cultural Resources Investigation of the 100-acre		
Jefferson, LA 70123	portion (13.63 transect miles) of the northeastern borrow area.		
(504)736-6719			
MGonzales@jeffparish.net			
Commission Date (Actual on	Estimated Cost:		
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:	
February 2021	N/A	\$41,500	

PROJECT NO. 3			
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility		
Veterans Memorial Boulevard Pump	ELOS is currently contracted to provide Environmental Services in		
Stations	support of the Jefferson Parish Pump Stations Project on Veterans		
New Orleans, LA	Memorial Boulevard in Jefferson Parish, LA. ELOS is responsible for applying for Coastal Use, Clean Water Act Section 404, and Rivers and		
Gary E. Lehmann, P.E.	11 0	wee permits for two pump stations	
Jefferson Parish located north and south of Veterans Memorial Boulevard alo			
Dept. of Capital Projects		ew Orleans. The designs include the	
1221 Elmwood Park Blvd.,		the existing levee and through the	
Suite 906	1 1 0	ess gates are also included in the	
Jefferson, LA 70123 designs to allow for maintenance. Due to the proposed imp		Due to the proposed impacts to the	
(504)736-6779 levee and floodwalls, the project must be reviewed by the		nust be reviewed by the Completed	
GLehmann@jeffparish.net	Works section of the U.S. Army Corps of Engineers for compliance with		
	Section 408. This review process includes preparing an Environmental		
	Assessment to determine potential impacts on cultural resources,		
	threatened and endangered species, essential fish habitat, water quality		
	air quality, etc. The project's purpose is to improve street drainage at the		
	Veterans Boulevard crossing the 17 th Street Canal.		
Completion Date (Actual or	Estimat	ted Cost:	
estimated)	Entire Project:	Work for which Firm was Responsible:	
July 2023 (estimated)	N/A	\$21,380	

PROJECT NO. 4			
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:		
Canal Street Ferry Terminal Phase I	ELOS conducted a Phase I Environmental Site Assessment (ESA) on		
ESA	behalf of Royal Engineers & Consultants, the New Orleans Regional		
Jefferson Parish, LA	Transit Authority (RTA), and the Federal Transit Administration (FTA).		
	The project goal was to demolish the	ne existing complex of buildings and	
Taylor Marcantel, AICP	replace it with a smaller ferry terminal building. The ESA was performed		
Senior Transportation Planner	in accordance with the E1527-13 m	nethodology and the All Appropriate	
Transdev, in service to the New Orleans	ans Inquiries (AAI) documentation requirements set forth in 40 Code of		
RTA	Federal Regulations (CFR) Part 312. The Purpose was to identify		
2817 Canal Street, New Orleans, LA	recognized environmental conditions (REC) in, on, or at the Subject		
70119	Property and to make a recommendation about the need for additional		
(504) 827-8315	assessments or actions prior to construction of the project.		
taylor.marcantel@transdev.com			
Commission Date (Actual on	Estimated Cost:		
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:	
July 2021	N/A	\$16,500	

PROJECT NO. 5			
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:		
West Esplanade Boulevard Pump Station	ELOS is currently sub-contracted by ECM Consultants, Inc. to provide		
Jefferson Parish, LA	Environmental Services in support of the Jefferson Parish Pump Station		
	Project in Jefferson Parish, LA. EI	LOS is responsible for applying for	
Gary E. Lehmann, P.E.	Coastal Use, Clean Water Act Secti	on 404, and Rivers and Harbors Act	
Jefferson Parish	Section 408, and levee permits for a proposed pump station to be located		
Dept. of Capital Projects	in the neutral ground of West Esp	planade Boulevard across Orpheum	
1221 Elmwood Park Blvd.,	Avenue from the 17th Street Canal.	The designs include the outflow pipe	
Suite 906	being lifted above the existing levee	and floodwall into the canal. Due to	
Jefferson, LA 70123	the proposed impacts to the levee from outflow pipe support piles, the		
(504)736-6779	project must be reviewed by the Completed Works section of the U.S.		
GLehmann@jeffparish.net	Army Corps of Engineers for compliance with Section 408. This review		
	process includes preparing an Environmental Assessment to determine		
	potential impacts on cultural resources, threatened and endangered		
	species, essential fish habitat, water quality, air quality, etc. The project'		
	purpose is to improve street drainage in the West Esplanade/Lake		
	Avenue vicinity.		
Completion Date (Actual or	Estimated Cost:		
estimated):	Entire Project:	Work for which Firm was Responsible:	
June 2023 (estimated)	N/A	\$14,920	

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Jefferson Transit Bus Stop	ELOS was contracted by the Jefferson Parish Government to assess and	
Improvements District 4	analyze the current condition of Jefferson Transit (JeT) bus stops in	
Jefferson Parish, LA	Jefferson Parish Council District 5 to assist in improvements to advance	
	compliance with the Americans with Disabilities Act (ADA) of 1990 and	
	2009 by investigating the pedestrian facilities nearby, identifying priority	
Gary E. Lehmann, P.E.	areas, and creating a plan for connectivity and accessibility of bicycle,	
Jefferson Parish	transit, and pedestrian facilities. ELOS utilized Geographic Information	
Dept. of Capital Projects	System (GIS) tools to assess and analyze transit assets and conditions to	
1221 Elmwood Park Blvd.,	facilitate compliance with the "Louisiana Complete Streets" policy	
Suite 906	established by the Louisiana Department of Transportation and	
Jefferson, LA 70123	Development. The data collected included roadways, bus routes, and	
(504)736-6779	council district boundaries. A list of stops with geographic coordinates	
GLehmann@jeffparish.net	from the 2011 inventory report was cross-referenced with the COA list,	
	which included ridership information. This dataset, along with other GIS	
	mapping and imagery databases, were the basis for development of the	
	GIS database for the project. In addition to these layers, the GIS team	
	created fields for field assessment of the existing condition of transit-	
	related infrastructure and immediate access at each stop. Each stop was	
	paired with the nearest corner at the intersection of the bus route road	
	way and the next cross street as determined by measurements using GIS	

The Trotessional Services Ouestionnance		
	data. Attributes in the GIS database were created for condition survey data such as pathways in the immediate vicinity of the bus stop, access to and from the corner along with curb conditions, crosswalks, and pedestrian aids such as detectable warning and signals.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
August 2018	N/A	\$126,000

PROJECT NO. 7			
Project Name, Location and Owner's contact information:		Nature of Firm's Responsibility:	
Bayou Terre Aux Boeufs R Restoration Armoring St. Bernard Parish John Lane St. Bernard Parish Governm 8201 West Judge Perez Dri Chalmette, LA 70043 504.278.4223 jlane@sbpg.net	idge nent	ELOS was contracted to provide the wetlands delineation and permitting for 20,420 linear feet of armoring of the Bayou Terre Aux Boeufs Ridge Restoration Project in Delacroix, LA. ELOS field crews collected soil, vegetation, and hydrology data for the wetlands delineation of 16 acres, and prepared a request for jurisdictional determination (JD). The JD was approved in August 2017. ELOS prepared a permitting strategy prior to submitting any applications that accounted for the need for a cultural resource survey as a condition of permits for both the geotechnical borings as well as construction. ELOS identified sensitive areas within the project area and worked with the geotechnical engineer to modify the boring plan to avoid these. Subsequently, ELOS arranged a preapplication meeting with the LASHPO and received approval on the modified work plan. This strategy prevented cost overruns and delays. Approximately 250 shovel test plots were investigated for the presence of artifacts, which were then evaluated and catalogued. All data points were located with GPS points and organized in a GIS database allowing ELOS to share the data by way of shapefiles and map displays that are accurate at sub-meter resolution. ELOS submitted the geotechnical	
		permit application to the Corps (borings are assigned a No Determination of Significant Impacts by the Office of Coastal Management). ELOS also provided on site monitoring once the construction phase of the project commenced.	
Completion Date (Actual or estimated):	Estimated Cost:		
	Entire Project:	Work for which Firm was Responsible:	
August 2018		N/A	\$126,000

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm	's Responsibility:
Plaquemines Parish Coastal Team	ELOS was a key member of the Plaquemines Parish Coastal Team that	
Consulting	assisted in designing, evaluating, and permitting a series of potential	
Plaquemines Parish, LA	ridge and marsh restoration projects in Plaquemines Parish. The ridge projects are evaluated for their potential to reduce impacts. The	
Vincent Frelich	assessment for these projects evaluated plant species, height, diameter,	
Director of Coastal Restoration	and densities along the ridges. ELOS performed ecological assessments	
Plaquemines Parish Government	for 7 large scale coastal ridge and marsh restoration projects proposed by	
333 F. Edward Hebert Blvd., Bldg. 100,	Plaquemines Parish Government for inclusion in its Coastal Master Plan.	
Suite 212, Belle Chasse, LA, 70037	ELOS worked with 7 different engineering firms to design and assess the	
504.297.5629	benefits and impacts associated with the construction of ridge formations	
vfrelich@ppgov.net	and adjacent marsh platform creation through the use of dedicated	
	sediment delivery from dredging in the Mississippi River and transporting the sediment through long distance pipelines to the project	
	site.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
August 2014	N/A	\$143,000

PROJECT NO. 9			
Project Name, Location and Owner's contact information:	Nature of Firm	's Responsibility:	
Lake Lery Marsh Creation and Rim	ELOS was contracted to assist St. Bernard Parish Government with		
Restoration	professional environmental and cultural resource investigations to		
St. Bernard Parish, LA	support the large-scale marsh creation and rim restoration initiative. The		
	project created 177 acres of vital m	narsh within Lake Lery, nourished an	
John Lane	additional 209 acres, and developed a rock embankment along the		
St. Bernard Parish Government	northwestern sector of Lake Lery that improved shoreline protection.		
8201 West Judge Perez Drive	ELOS personnel collected data and completed an environmental review		
Chalmette, LA 70043	of site conditions to support a joint permit application to the regulatory		
(504) 278-4223	agencies authorizing the project. ELOS has concurrently consulted with		
jlane@sbpg.net	the USACE and the Louisiana State Historic Preservation Office to establish the Area of Potential Effect and determine the required level of cultural resource investigations. Subsequently, ELOS personnel has completed a review of available cultural resource data and previous investigations to determine the potential likelihood of the presence of		
cultural resources. The collected information and dat		formation and data are to be provided	
	to Parish personnel for use in completing the project.		
Completion Date (Actual or	Estimated Cost:		
	Entire Project:	Work for which Firm was	
estimated):		Responsible:	
May 2021	N/A	\$59,000	

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
	The Lake Pontchartrain Shoreline Protection Project involved the construction of two offshore breakwaters to protect the rapidly eroding	
	shoreline extending from the existing breakwaters south to Pass	
Hon. Robby Miller Parish President	Manchac and from the Tangipahoa River north to the Tangipahoa/St. Tammany Parish Line. In anticipation of the proposed constriction,	
	ELOS was contracted to provide a section 106 review and pedestrian survey, and a phase I underwater cultural resources investigation to	
Amite City, LA 70442	identify any cultural resources materials. ELOS also collected data and	
	submitted applications for several permits to obtain authorization from the office of coastal management, USACE, Louisiana Department of Environmental Quality, and the Office of State Lands.	
	Estimated Cost:	
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:
December 2021	N/A	\$93,400

M. List all prior and/or or	n-going litigation between I	Firm and Jefferson Parish. Please attach additional		
pages if necessary.				
Parties:		Status/Result of Case:		
Plaintiff:	Defendant:	Status/Result of Case:		
1. N/A	N/A	N/A		
2.				
3.				
4.				
N. Use this space to provid	le any additional informat	ion or description of resources supporting Firm's		
qualifications for the p				
ELOS Environmental, LLC	(ELOS) is a professional cor	asulting firm established in 2006 by two young		
		uisiana. Since its founding, ELOS has become one of the		
		siana, performing a variety of technical services and		
managing projects at all leve	ls of government. ELOS is a	privately owned Limited Liability Company and a		
certified Louisiana Small and	d Emerging Business Enterp	rise (Certification No. 11198). ELOS's familiarity with		
		nation with expertise in relevant scientific technologies		
		its, saving them time and money.		
Our services include:				
- Environmental Asses	- Environmental Assessments & Monitoring			
- Permit Applications		FRAMOAN		
- Cultural Resources S	ervices	1161261		
- Mold, Asbestos, & Lead Testing				
- Inspection Services				
- GIS Services				
- Drone Services				
- Program Management				
- Grant Management & Support				
O. To the best of my knowledge, the foregoing is an accurate statement of facts.				
Signature: Men Men Print Name: Lucas Witkins				
Title: Residen	<u>†</u>	Pate: 7/26/22		



Additional Information





Name: Public Address:

P. O. Box 19087

Burk-Kleinpeter, Inc.

New Orleans, Louisiana 70179

License/Certificate Information w/ Supervision

License Status First Issuance Date Expiration Date Supervisor(s)

EF.0000124 Active 09/12/1984 09/30/2023 Mr. Rene Adrian Chopin III # PE.0025174 - Active

Name: Public Address:

Burk-Kleinpeter,

P. O. Box 19087

Inc.

New Orleans, Louisiana 70179

License/Certificate Information w/ Supervision

License Status First Issuance Expiration Date Supervisor(s)

VF.0000024 Active 09/12/1984 09/30/2023 Mr. Henry Maurice Picard III # PLS.0004736 -

Active

Self-Certification demonstrating the status of Burk-Kleinpeter, Inc. as a Small Business

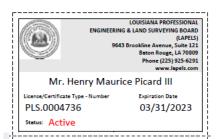
Are you a small business eligible for government contracting?

541330 Small Business Size Standards **Engineering Services** \$16,500,000 annual revenue YES Exception #1 Military and Aerospace Small Business Size Standards Equipment and Military \$41,500,000 annual revenue YES Weapons Exception #2 Contracts and Subcontracts for Small Business Size Standards **Engineering Services** \$41,500,000 annual revenue YES Awarded Under the National Energy Policy Act of 1992 Exception #3 **Small Business Size Standards** Marine Engineering and \$41,500,000 annual revenue YES Naval Architecture

Results derived from the "Measure My Business" tool at www.sba.gov/size demonstrating that Burk-Kleinpeter,Inc. is a "small" business according to the SBA standard for our industry (NAISC codes).

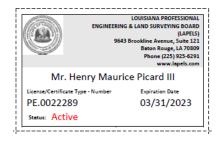
TEC Professional Services Questionnaire

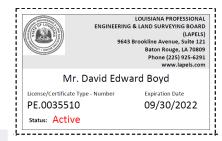


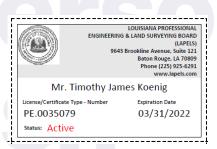














Revised 02/02/2022

Public Address: Name:

15 Veterans Memorial Boulevard

BFM Corporation, LLC

Kenner, Louisiana 70062

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
VF.0000008	Active	09/11/1984	09/30/2023	Mr. Ralph P. Fontcuberta Jr. # PLS.0004329 - 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

Expiration Date

PLS.0004329

09/30/2022

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

09/30/2022

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

03/31/2023

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. marter, In

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 9/28/2021 to 9/28/2022

Certification No. 9551

Stephanie Hartman, Director, Small Business Services

Name: Public Address:

Gulf South Engineering and

Mr. Chad Poche, PE 15 Veterans Memorial Boulevard

Testing, Inc.

Kenner, Louisiana 70062

License/Certificate Information w/ Supervision

License Status First Issuance Expiration Date Supervisor(s)

EF.0004626 Active 07/27/2010 03/31/2023 Mr. Chad Mitchell Poche # PE.0027667

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 09/30/2022

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. Blake Elliot Vutera

License/Certificate Type - Number Expiration Date

PE.0038607 09/30/2022

Status: Active



LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD

(LAPELS) 9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809

Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com

Ms. Sara Elinor Lockwood

License/Certificate Type - Number Expiration Date

EI.0034718 03/31/2023

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 Expiration Date

PLS.0004329 09/30/2022

Status: Active





DIVISION OF SMALL BUSINESS SERVICES

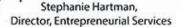
This certification acknowledges that

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 2/25/2022 to 2/25/2023.

Certification No. 11011





July 28, 2022

Cassandra Poche
Gulf South Engineering and Testing Inc
15 Veterans Memorial Blvd
Kenner, LA 70062

Dear Ms. Poche:

The Regional Transit Authority (RTA) have received your firm's Small Business Enterprise (SBE) annual affidavit. Based on the information, which you provided, it has been confirmed that your firm continues to meet the eligibility requirements of our program.

Your firm remains certified in the SBE Program until there are any changes to your company or to your personal net worth that exceed the SBE eligibility criteria. Please note that you must notify our office immediately regarding any changes which affect the economic disadvantage, size, ownership or control of your firm.

In order to main eligibility, you are required to submit an annual affidavit stating that your firm continues to meet the eligibility requirements of the program. If you are both DBE and SBE certified, you will receive a Disadvantaged Business Enterprise Annual Affidavit approximately 4 weeks prior to your DBE Certification anniversary date. The annual affidavit for the DBE program will automatically apply to your SBE certification. If you are SBE certified only, you will receive a Small Business Enterprise Annual Affidavit approximately 4 weeks prior to your SBE Certification anniversary date.

We reserve the right to withdraw this certification if at any time it is determined that SBE certification knowingly obtained by the submission of false, misleading, or incorrect information. We further reserve the right to request additional information and/or conduct an on-site visit at any time during your certification period.

If we can be of further assistance, please contact the Office of Small Business Development at (504) 827-8301.

Sincerely,

Adonis C. Expose'

DBE/SBE Liaison Officer III



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).

AASHTO Executive Director

Moe Jamshidi, AASHTO COMP Chair

This certificate was generated on 08/17/2021 at 7:12 PM Eastern Time. Please confirm the current accreditation status of this laboratory at aashtoresource.org/aap/accreditation-directory



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:**

02 JUN 2020 AT 18:10 HOURS

ALL METHODS LISTED ON THIS CERTIFICATE OF VALIDATION WILL EXPIRE ON 06/02/2022

(Renewal is Currently in Process)

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

Ind a. Justine

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

SOILS

Soils - D 698 - Req - Compaction Characteristics by Standard Effort

Soils - D 1140 - Req - Material Finer than 75 \square m (No. 200) Sieve

Soils - D 1557 - Req - Compaction Characteristics by Modified Effort

Soils - D 2216 - Req - Water Content
Soils - D 2974 - Req - Moisture, Ash, & Organic Matter of Peat & Other Organic Soils
Soils - D 4318 - Req - Liquid & Plastic Limits & Plasticity Index

Soils - D 4643 - Req - Determination of Water Content of Soil by Microwave Oven