



Request for Statement of Qualifications 24-020 Coastal Engineering Consulting Services (Resolution 144205)

Produced for Jefferson Parish Government

July 12, 2024



In Partnership with



moffatt & nichol



Innovative Solutions for Complex Projects

#Res 144205

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

B. Firm Name & Address:

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:

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.

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

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

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

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

TEC Professional Services Questionnaire

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

1.

2.

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

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

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

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

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. 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:

Project Assignment:

Name of Firm with which associated:

Years' experience with this Firm:

Education: Degree(s)/Year/Specialization:

Active registration: Year first registered/discipline:

Other experience and qualifications relevant to the proposed Project:

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Project Assignment:
Name of Firm with which associated:
Years' experience with this Firm:
Education: Degree(s)/Year/Specialization:
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project:

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Project Assignment:
Name of Firm with which associated:
Years' experience with this Firm:
Education: Degree(s)/Year/Specialization:
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project:

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Project Assignment:	
Name of Firm with which associated:	
Years' experience with this Firm:	
Education: Degree(s)/Year/Specialization:	
Active registration: Year first registered/discipline:	
Other experience and qualifications relevant to the proposed Project:	

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Project Assignment:
Name of Firm with which associated:
Years' experience with this Firm:
Education: Degree(s)/Year/Specialization:
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project:

TEC Professional Services Questionnaire

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

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

TEC Professional Services Questionnaire

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

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

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

Jefferson Parish
State of Louisiana

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

Signature:  **Print Name:** _____

Title: _____ **Date:** _____

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Statement of Qualifications (Technical Evaluation Committee Questionnaire) for Coastal Engineering Consulting Services As-Needed Parish Wide SOQ 24-020 (Resolution No. 144205)

B. Firm Name & Address:

Moffatt & Nichol, Inc.
601 Poydras Street, Suite 1860
New Orleans, LA 70130

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:

Jonathan Hird, PE
Vice President
(225) 610-1930; (225) 773-8019
jhird@moffattnichol.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.

Jonathan Hird, PE
Vice President
(225) 610-1930; (225) 773-8019
jhird@moffattnichol.com

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

<u>160</u> Administrative	<u>11</u> Estimators	<u>0</u> Specification Writers
<u>10</u> Architects (Licensed)	<u>0</u> Geologists	<u>233</u> Structural Engineers
<u>0</u> Chemical Engineers	<u>9</u> Geotechnical Engineers	<u>0</u> Graduate Engineers
<u>114</u> Civil Engineers	<u>0</u> Interior Designers	<u>42</u> Project Managers
<u>20</u> Construction Inspectors	<u>8</u> Landscape Architects	<u>132</u> Clerical
<u>0</u> Ecologists	<u>0</u> Land Surveyor	<u>0</u> Grant/Funding Specialist
<u>32</u> Electrical Engineers	<u>13</u> Mechanical Engineers	<u>0</u> Sanitary Engineers
<u>0</u> Engineer Intern	<u>20</u> Environmental Engineers	
<u>0</u> Professional Land Surveyors		<u>804</u> TOTAL

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

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

TEC Professional Services Questionnaire

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

1.
N/A

2.
N/A

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

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

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

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

70 _____

TEC Professional Services Questionnaire

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Jonathan Hird, PE
Vice President

Project Assignment:

Principal-in-Charge

Name of Firm with which associated:

Moffatt & Nichol, Inc.

Years' experience with this Firm:

17

Education: Degree(s)/Year/Specialization:

MS, 2001, Civil and Environmental Engineering
BS, 1993, Environmental Science

Active registration: Year first registered/discipline:

2006, Civil Engineering, Louisiana, PE0032299

Other experience and qualifications relevant to the proposed Project:

Jonathan Hird has 23 years of experience in multidisciplinary projects across southern Louisiana, including projects for Jefferson Parish. He has served as a project engineer, project manager, and principal-in-charge for a diverse range of coastal engineering and ecosystem restoration projects, including watershed master planning, applying multi-dimensional numerical models to project concept development, assessing project feasibility and project performance evaluations, as well as sediment management and programmatic approaches to marsh creation and restoration. His experience also includes the development of living shorelines, sediment management strategies (on local and regional scales), the beneficial use of dredged material, and the application of long distance pipeline technology for marsh creation and restoration for some of the largest marsh creation projects on the Gulf Coast, involving tens of millions of cubic yards and thousands of acres of marsh.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Gerald Songy, PE Coastal Engineer
Project Assignment:
Coastal Engineering
Name of Firm with which associated:
Moffatt & Nichol, Inc.
Years' experience with this Firm:
9
Education: Degree(s)/Year/Specialization:
MS, 2016, Coastal and Marine Engineering and Management BS, 2013, Civil Engineering 2020 Texas A&M Dredging Engineering Short Course
Active registration: Year first registered/discipline:
2020, Civil Engineering, Louisiana, PE.0044760
Other experience and qualifications relevant to the proposed Project:
Gerald has nine years of experience in coastal and hydraulic engineering, and coastal and ecosystem restoration projects. His project experience includes permitting, analysis, design, and construction administration of marsh creation, tidal creek creation, shoreline protection, beach nourishment, and oyster reef restoration projects. His experience also includes design of living shorelines, beneficial use of dredged material for wetland restoration, sediment management, and dredged material transport for land reclamation. He is experienced in project mapping and spatial data analysis with ArcGIS and has experience with MATLAB for program development, model pre- and post-processing, and visualization. Gerald also has experience with numerical wave and passing vessel modeling in addition to cross-shore modeling of beach and dune processes. He has extensive field experience, which includes site observations during both design and construction phases and accompanying biologists to assist in performing wetland delineations. In addition to Gerald's project experience on the Lake Pontchartrain side of Jefferson Parish, he has spent countless hours of personal time fishing and boating along the Grand Isle coastline.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Maarten Kluijver, PE Senior Coastal and Hydraulic Engineer
Project Assignment:
Coastal Engineering
Name of Firm with which associated:
Moffatt & Nichol, Inc.
Years' experience with this Firm:
18
Education: Degree(s)/Year/Specialization:
MS, 2006, Hydraulic Engineering BS, 2005, Civil Engineering
Active registration: Year first registered/discipline:
2015, Civil Engineering, Texas, 120418
Other experience and qualifications relevant to the proposed Project:
Maarten has broad civil and hydraulic engineering knowledge with a key focus on coastal protection and restoration and associated hydraulic and morphological modeling. With 18 years of experience, Maarten has a thorough knowledge of coastal and riverine processes, regional sediment management, and coastal flood protection, demonstrated through extensive project experience in New Orleans and the Mississippi River Delta. Maarten leads projects to restore and preserve coastal systems on behalf of M&N's clients, most notably the CPRA of the State of Louisiana and the City of New York. Maarten is the project manager and technical lead for a key project that is part of Louisiana's State Master Plan, the "Increase Atchafalaya Flow to Terrebonne" project. He has provided design, analysis, modeling, and project management services for the USACE in New Orleans following Hurricane Katrina as a coastal engineer in the Hurricane Protection Office and performed post-Hurricane Sandy project evaluations for USACE's North Atlantic Division. His most recent coastal engineering project portfolio includes studies on sea level rise and flood risk in the New York metropolitan area. These studies are developed to enhance flood protection systems, design a more effective response to sea level rise and coastal erosion, and restore and preserve coastal systems while synergistically sustaining and maintaining both natural and built environments.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Kevin Hanegan, PhD, PE Coastal Engineer
Project Assignment:
Coastal Modeling
Name of Firm with which associated:
Moffatt & Nichol, Inc.
Years' experience with this Firm:
12
Education: Degree(s)/Year/Specialization:
PhD, 2019, Coastal Hydrodynamics and Morphology MS, 2011, Coastal and Marine Engineering and Management BS, 2009, Civil Engineering
Active registration: Year first registered/discipline:
2017, Civil Engineering, Louisiana, PE0041433
Other experience and qualifications relevant to the proposed Project:
Kevin Hanegan has 12 years of coastal engineering and project management experience, including analyzing coastal and riverine processes to support a range of coastal protection, restoration, and infrastructure projects. He specializes in the development and application of advanced hydrodynamic, sediment transport, and morphologic models to support project analysis and design, as well as the design of shoreline protection, marsh restoration, living shoreline, and other coastal ecologic restoration projects. He is skilled in computer applications including the MIKE21-FlexibleMesh modeling suite for hydrodynamics, waves, and salinity dynamics; the Delft3D modeling suite for hydrodynamics, sediment, transport, and morphology; the SWAN wave model; the USACE's ADDAMS suite for assessing dredging impacts; HEC-RAS and HEC-GeoRAS for riverine and storm-water flow modeling; ArcGIS for project mapping and spatial data analysis; and MATLAB for program development, model pre- and post-processing, and visualization

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Tim Nelson, PG, CFM Coastal Scientist
Project Assignment:
Coastal Modeling
Name of Firm with which associated:
Moffatt & Nichol, Inc.
Years' experience with this Firm:
7
Education: Degree(s)/Year/Specialization:
MS, 2017, Earth and Environmental Sciences 2016 Coastal Engineering Graduate Certificate BS, 2013, Geological Sciences
Active registration: Year first registered/discipline:
2023, Professional Geoscientist, Louisiana, 1395 2020 Certified Floodplain Manager, US-20-11706
Other experience and qualifications relevant to the proposed Project:
Tim has seven years of experience in coastal engineering and environmental consulting which includes design of coastal and hydraulic structures, numerical modeling, program management, and resilience and hazard mitigation planning. He has expertise with applications of Delft3D, SWAN, and Xbeach numerical models for analysis of sediment transport and morphology, determination of design conditions, and wave and current analysis for design calculations. He is particularly skilled with process automation including efforts to program geospatial analysis, data processing, reporting, visualizations, and data sharing with Python, ArcPy, SQL, Matlab, and VBA. Additionally, Tim has experience with coastal planning efforts. He has extensive experience with resilience and hazard mitigation plan preparation and has supported numerous efforts to identify coastal hazards, quantify potential losses, and evaluate potential risk reduction solutions. He has provided program management support for master planning efforts, complex risk reduction projects, and funding allocation programs. He has also extensive experience in pursuing grant opportunities and providing funding strategies for state agencies, local governments, and utilities.

TEC Professional Services Questionnaire

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

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
<p>Large Scale Barataria Marsh Creation: Upper Barataria Component (BA207) Jefferson and Plaquemines Parish, Louisiana</p> <p>NOAA Restoration Center- Jason Manthey 601 East 12th Street, Rm 1702 Kansas City, MO 64106 (816)-426-7841 jason.l.manthey@noaa.gov</p>	<p>M&N served as the Engineer of Record for this \$150M Deepwater Horizon NRDA-funded project. Utilizing the Mississippi River Borrow sites previously permitted as part of the BA43-EB Mississippi River Long Distance Sediment Pipeline Project (MRLDSP) project, the project will dredge an estimated 15 mcyds of Mississippi River sediment, to restore approximately 1,600-acres of critically degraded Barataria Land Bridge marsh habitat. along the as identified in the LA TIG Draft Restoration plan. The Large Scale Barataria Marsh Creation: Upper Barataria Component Project (BA207) is the logical next phase of the Barataria Land Bridge restoration and intends to fully leverage the MRLDSP approach to deliver this project. M&N provided full restoration planning services for the BA207 project.</p>
Completion Date (Actual or estimated):	Estimated Cost:
	Entire Project: Work for which Firm was Responsible:
2019	<div style="display: flex; justify-content: space-between;"> \$3,900 (E&D) \$3,900 (E&D) </div>

PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
<p>Barataria Basinwide Numerical Modeling and Restoration Planning, Jefferson, Plaquemines, and Lafourche Parish, LA</p> <p>Coastal Protection and Restoration Authority of Louisiana Russ Joffrion, PE, Engineer Manager (225) 869-9721 Russ.Joffrion@la.gov</p>	<p>M&N developed a 2D advanced hydrodynamic, hydraulic, and water quality (salinity) numerical model of the entire Barataria Basin capable of evaluating individual project (freshwater and sediment diversions) and basinwide restoration strategies for the entire Barataria Basin System. The model could evaluate multiple existing (Davis Pond) and proposed (Myrtle Grove) diversions to establish their cumulative benefits. The original 2D H&H model was then converted to a 3D morphological model (DELFT3D) to evaluate the land building capacity of the Myrtle Grove Diversion when operated as a sediment diversion. M&N was retained to evaluate restoration strategies and individual project performance, assess salinity impacts in the Barataria Basin, and assess the land building capacities of the Myrtle Grove Diversion. M&N provided:</p> <ul style="list-style-type: none"> - Basin-side multi-dimensional hydrodynamic, hydraulic, and water quality modeling - Freshwater/sediment diversion feasibility and planning - 3-D morphological modeling Delft3D) of delta building capacity of sediment diversion - Multiple project and cumulative impact assessments - Basinwide restoration strategy plan formulation and project evaluation
Completion Date (Actual or estimated):	Estimated Cost:
	Entire Project: Work for which Firm was Responsible:
June 2016	<div style="display: flex; justify-content: space-between;"> \$690,000 \$690,000 </div>

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Barataria Preserve Future Conditions Modeling, Jean Lafitte National Park – Barataria Preserve, Jefferson Parish, LA National Parks Service Julie Whitbeck, PhD, Ecologist (504)717-9811 Julie_whitbeck@nps.gov	The National Parks Service seeks a sound scientific understanding of key factors influencing the Barataria Preserve landscape, its natural, cultural, and historical resources, and park facilities (buildings, trails, road/boat access), over the next 25 to 50 years. M&N: - Is providing rigorous projections of key coastal environmental conditions across the Barataria Preserve - Is "downscaling" the State of Louisiana's 2023 Coastal Master Plan Integrated Compartment hydrodynamic and ecosystem for the Barataria Basin to simulate water levels, salinities, vegetation cover, and landscape evolution under multiple future climatic and restoration project scenarios - Developed a complementary Mike21-FM hydrodynamic and salinity model of Barataria Basin to simulate water levels, flows, and salinities at very high spatial resolution across the Barataria Preserve Landscape for specific points (10-year intervals) during the 50-year planning horizon - Is estimating urban freshwater runoff volumes - Developed an automated nesting scheme to update the detailed model bathymetry, wetland vegetation type, hydrodynamic roughness, and boundary conditions based on ICM simulation inputs and results and provide the park with valuable information to make resource management decisions in the face of uncertain future conditions and impacts.	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$141,727	\$141,727

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Bucktown Living Shoreline Feasibility, Engineering and Design, and Construction Administration, Jefferson Parish, LA Jefferson Parish Michelle Gonzales, Director, Ecosystem and Coastal Management Department 504-736-6653 mgonzales@jeffparish.net	The Jefferson Parish Ecosystem and Coastal Management Department retained M&N to perform a feasibility study, engineering and design, and construction administration for an integrated approach to: - Enhance shoreline protection and reduce erosion - Rebuild the previously existing riparian habitat as the natural first line of defense against wave activity and rising sea levels - Improve the resilience of the Jefferson Parish Lake Pontchartrain and Vicinity (LPV) Hurricane Storm Damage and Risk Reduction System (HSDRRS) M&N performed a feasibility study on approximately 7,800 LF of the south shoreline of Lake Pontchartrain, of which 4,500 linear feet were moved to engineering and design. M&N characterized the site wave climate using a regional spectral wave model capable of simulating the wind generation, offshore propagation, and nearshore transformation of waves	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
February 2020 (Feasibility) March 2022 (E&D)	\$149,768 (Feasibility) \$290,400 (E&D)	\$149,768 (Feasibility) \$290,400 (E&D)

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Dauphin Island Causeway Shoreline Restoration Mobile County, AL</p> <p>Mobile County Tina Sanchez Environmental Services Director Mobile County Commission 205 Government Street 7th Floor, South Tower (251) 574-3229</p>	<p>Moffatt and Nichol was retained by Mobile County to perform an Independent Technical Review (I TR) of all design efforts performed to-date on the project. The project had stalled and was not implementable under the previous contractor's lead. As part of this Phased approach, Phase I recommend a path forward, with a commensurate design, and schedule necessary to issue the project for bid with all supporting design, construction and permitting documents in alignment with Federal cost-share partners procurement schedules. Phase I also included a review of all documents developed to date, a data gap analysis in order to develop a supplemental field data campaign required to complete the design.</p> <p>M&N's responsibilities included:</p> <ul style="list-style-type: none"> - Independent Technical Review of previous project's work; - Hydrodynamic and wave modeling - Further required field data investigations - Coordination with the permitting and regulatory agencies for issuance of permit. - Full engineering, design (30, 60, 90 and 100% design), plans, specifications, engineers estimate of opinion of probable cost, bid support, and construction administration of the breakwaters; - The agency technical review package for the beneficial use of ~ 1-mycds of dredged material; and - Coordination with the USACE Mobile District throughout design 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2025 (Estimated)	\$466,500 (E&D) \$30,000,000 (Construction)	\$466,500 (E&D)

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Graveline Bay Marsh Creation Project, Dauphin Island, AL</p> <p>Town of Dauphin Island Mayor Jeff Collier Town of Dauphin Island (251) 861-5525</p>	<p>This first-of-its-kind "marsh mound" project in Alabama restored 60 acres of lost back-barrier marsh habitat on the north side of Dauphin Island, enhancing edge habitat and bird nesting habitat. M&N provided engineering and design services, secured a Nationwide-26 permit, oversaw the contractor procurement process, and provided construction administration and inspection services.</p> <p>The project goals were to enhance the existing marsh ecosystem of Graveline Bay while increasing the resilience of Dauphin Island to storm events. With habitat goals in mind, the project objectives were defined to maximize and linear feet of fringe (edge) habitat and area of sub-aerial marsh habitat. These objectives were accomplished by constructing 55 total intertidal marsh mounds (10 large and 45 small) to attenuate wave activity and create critical marsh edge habitat over the 20-year project life span. M&N continues to monitor the project for structural and biological criteria.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2023	\$420,000 (E&D) \$5,430,000 (Construction)	\$420,000 (E&D)

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>St. Charles Parish Hurricane Protection Levee Shoreline Protection & Enhancement Project, St. Charles Parish, LA</p> <p>Pontchartrain Levee District Steve Wilson, President (225) 869-9721</p>	<p>The Pontchartrain Levee District (PLD) retained M&N on a task order-based contract to develop and implement an integrated approach to the protection and enhancement of St Charles Parish Hurricane Protection Levee at the Lake Pontchartrain shoreline, combined with the restoration of the interior LaBranche Wetlands.</p> <p>-M&N performed a feasibility-level study to determine the preferred project alternatives and develop an approach to integrate the proposed features with the existing shoreline protection measures into a single unified strategy for the shoreline. M&N subsequently completed engineering, design, and construction oversight of the stabilization, protection of the St. Charles Parish CIAP funded 1,200 LF LaBranche West (PO42) and 3,400 LF LaBranche East (PO43) enhancement projects.</p> <p>-M&N developed a fully calibrated 2-D hydrodynamic (RMA2) and salinity (RMA4) model of the entire 16,000-acre wetlands.</p> <p>-M&N, in partnership with the USACE and PLD under a PAS agreement, developed a planning level master plan that integrated the shoreline protection measures, with interior marsh restoration & hydrologic restoration into a comprehensive restoration master plan for the LaBranche Wetlands as part of a multiple lines of defense strategy</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2015	<p>\$963,986 (Fee)</p> <p>\$6,200,000 (Construction)</p>	\$963,986 (Fee)

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lightning Point Shoreline Restoration and Long-Term Site Sustainability Plan, Bayou La Batre, AL</p> <p>The Nature Conservancy Judy Haner, Program Manager (251) 433-1150 jhaner@tnc.org</p>	<p>M&N developed a living shoreline approach to address critical levels of storm-induced erosion at the ecologically important shoreline in Bayou La Batre. M&N:</p> <ul style="list-style-type: none"> - Developed a multifaceted and innovative living shoreline design incorporating lessons learned from previous living shoreline efforts in the region - Included 1.5 miles of segmented containment (51,000 tons of rock), 40 acres of marsh and scrub-shrub habitat (240,000 CY of beneficial use dredged material), and 10,000 LF of the tidal creek into the design - Leveraged advanced spectral and Boussinesq wave modeling to determine design criteria and configure the breakwaters' geometry - Employed a state-of-the-art hydrodynamic modeling approach to configuring the tidal creeks to provide required flushing times to promote ecological benefits - Used ecological guiding principles of order to design the tidal creeks to mimic natural tidal creek systems - M&N also developed Long-Term Site Sustainability Plans that mapped the volumes and schedule of availability for beneficial use of routine maintenance dredged material for placement at the project site 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020	<p>\$1,933,000 (Fee)</p> <p>\$14,000,000 (Construction Est.)</p>	\$1,933,000 (Fee)

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Upper Mobile Bay Beneficial Use Wetland Creation Project, Mobile Bay, AL</p> <p>Alabama State Port Authority Bob Harris, Vice President, Technical Services (251) 441-7082 bharris@asdd.com</p>	<p>M&N is currently performing detailed engineering, design, and permitting for the creation of ~40-acres of intertidal habitat marsh creation areas and shoreline protection in Upper Mobile Bay, from the beneficial use of routine maintenance dredged material. Initial project scope calls for the implementation of the first ~100-acres as well as a permit for the total 1,200-acre project anticipated over the project life. M&N is:</p> <ul style="list-style-type: none"> - Leveraging dredged materials/sediments to create wetlands/habitats, helping to restore coastal wetland habitats, improve water quality, and improve dredging practices to support navigation-related commerce and the region's economy; working with the USACE and the Alabama State Port Authority to identify renewable resources from required maintenance dredge material for wetland creation - Applying Engineering with Nature approaches will be applied to design wetland habitat and sediment containment options that create multiple aquatic habitats to enhance Alabama's estuarine ecosystems - Developing a Long-Term Sustainability Plan to provide a playbook for future wetland creation, schedule, and containment types, guiding flexibility in beneficial use applications accounting for differing material properties - Conducted an EA including a thorough discussion of the affected environment for the physical, biological, and human use and socioeconomic resources; conducted an environmental consequences analysis for each resource for all project activities over the 20-year lifespan of the project to support NEPA determinations with their federal agency partners 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$2,500,000	\$2,500,000

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Pontchartrain-Maurepas Surge Consortium Modeling, Lake Pontchartrain Basin, LA</p> <p>University of New Orleans Ioannis Georgiou, PhD, PG, Director of Coastal and Deltaic Systems Modeling (while previously employed at UNO) (504) 931-5178 igeorgiou@thewaterinstitute.org</p>	<p>The Pontchartrain-Maurepas Surge Consortium's efforts culminated in a series of reports investigating both the nature of hurricane surge hazards and lines of defenses in the Pontchartrain-Maurepas region. The Surge Modeling project included an initial, feasibility-level test of the effectiveness of four proposed projects in reducing storm surge. M&N:</p> <ul style="list-style-type: none"> - Developed a comprehensive surge modeling tool (DHI's MIKE 21 FM) for the Pontchartrain basin, helping to determine which proposed projects were most impactful for reducing risk and increasing understanding of basin surge dynamics - Used the model to test the effectiveness of the proposed projects in reducing storm surge - Evaluated the full reforestation of the Maurepas Land Bridge as well as a series of jetty-type marsh creation features along the hardened New Orleans East shoreline for their impacts on surge - Analyzed the results by comparing both the surge propagation around the basin and the spatially varying maximum surge levels with the evaluated project for the base case of current conditions 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2019	\$53,000	\$53,000

TEC Professional Services Questionnaire

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

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. N/A	N/A	N/A - There is no past or ongoing litigation between Moffatt & Nichol and Jefferson Parish.
2.		
3.		
4.		

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

As one of the leading practitioners of coastal engineering in the marketplace today, M&N provides Jefferson Parish with a unique combination of capabilities and expertise to resolve the Parish's most complex coastal engineering and planning challenges. With a locally-based core group of technical experts with decades of experience in implementing coastal engineering and ecosystem restoration projects across southeastern Louisiana including for Jefferson Parish, M&N's unmatched institutional knowledge of Louisiana's dynamic coastal ecosystems provides Jefferson Parish with implementable, constructible solutions to coastal engineering challenges that prioritize coastal restoration and protection. Our unparalleled in-house capabilities in coastal science, engineering, and protection; sediment management; natural systems; ecological risk numerical modeling; and wetland and marsh restoration are the right choice for Jefferson Parish—we can provide technical and project agility to respond to the dynamics of project evolution and delivery rapidly and adaptively.

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

Signature: Jonathan Hird Print Name: Jonathan Hird, PE
Title: Vice President Date: July 16, 2024

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Coastal Engineering Consulting Services As-Needed
Resolution 144205

B. Firm Name & Address:

Bryant Hammett & Associates, LLC
1104 Dealers Avenue
Suite A
Harahan, LA 70123

**BRYANT HAMMETT
& ASSOCIATES, LLC**
CIVIL ENGINEERING & LAND SURVEYING

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:

Bryant O. Hammett, Jr. PE/PLS
Owner/Manager
504-733-8004
bhammett@bha-engineers.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.

Hugh 'Bud' McCurdy, III, PLS
Professional Land Surveyor
504-733-8004
hmccurdy@bha-engineers.com

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

<u>3</u> Administrative	<u>1</u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u> </u> Geologists	<u> </u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u> </u> Graduate Engineers
<u>1</u> Civil Engineers	<u> </u> Interior Designers	<u>2</u> Project Managers
<u>4</u> Construction Inspectors	<u> </u> Landscape Architects	<u>2</u> Clerical
<u> </u> Ecologists	<u>6</u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u> </u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u> </u> Engineer Intern	<u> </u> Environmental Engineers	<u>8</u> Other
<u>3</u> Professional Land Surveyors		<u>30</u> TOTAL

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

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

TEC Professional Services Questionnaire

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

1. NA

2.

H. Has this JOINT-VENTURE previously worked together? Please check:

YES ☐ NO ☐

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

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. No subcontractors for BHA		
2.		
3.		

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

12

TEC Professional Services Questionnaire

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Hugh 'Bud' McCurdy, III, PLS
Survey Manager

Project Assignment:

Mr. McCurdy will be the professional in charge of the project who is a registered professional land surveyor in Louisiana and has more than 50 years of surveying experience..

Name of Firm with which associated:

Bryant Hammett & Associates, LLC

Years' experience with this Firm:

6 years

Education: Degree(s)/Year/Specialization:

Non-degreed

Active registration: Year first registered/discipline:

1991/Professional Land Surveyor, LA

Other experience and qualifications relevant to the proposed Project:

Hugh 'Bud' McCurdy, III is a registered land surveyor in Louisiana with over 45 years' experience in land surveying, beginning his career as a rodman in 1973. He is involved in all aspects of boundary/property surveys for real estate transfer and the surveying required for engineering, rights-of-way acquisition, and construction projects, and is responsible for courthouse research and coordination of work. McCurdy has provided surveying services for oyster leases; pre- and post- dredging; construction projects, pipelines, accident sites, and boundary establishment. He recently oversaw the surveying for a Beneficial Use of Dredged Material project in Jefferson Parish, as well as the topographic and hydrographic surveying for the future construction of a flood wall in the Lower Barataria Basin.

Since 1978, Mr. McCurdy has worked on oyster leases for local fishermen and has exhaustively surveyed most all bays and bayous in Jefferson, Plaquemines and St. Bernard Parishes. In the late 1970's and early 1980's, he worked on pipelines and well locations in Venice, LA and in the Barataria Basin. Hydrographic surveys include pre-dredging and post-dredging, as well as dredge volume calculations.

He is responsible for supervision of all field crew activities, drafting, property descriptions, plats, and all surveying-related operations. Mr. McCurdy has extensive experience in all aspects of surveying, including but not limited to property boundary surveys for real estate transfer; subdivision and re-subdivision of properties; topographic and hydrographic/bathymetric survey for engineering and construction; and preparation of legal descriptions for attorneys. He is registered with the courts in Orleans, Jefferson, St. Tammany and Plaquemines Parishes.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Jeff Carey, PLS, CFM
Professional Land Surveyor

Project Assignment:

Survey field manager; Certified Floodplain Manager

Name of Firm with which associated:

Bryant Hammett & Associates, LLC

Years' experience with this Firm:

12 years

Education: Degree(s)/Year/Specialization:

BS/2009/Disaster Management

Active registration: Year first registered/discipline:

2024/Professional Land Surveyor
2010/ASFPM Certified Floodplain Manager US-10-05305
2012/Contractor's License: Residential Construction
2012/FEMA Substantial Damage Estimator (SDE) 1.1
2010/EMI-273 Managing Floodplain Development through NFIP
2022/ATSSA Traffic Control Technician, Supervisor, and Flagger
2012/Certified Construction Inspector, National Stormwater Center

Other experience and qualifications relevant to the proposed Project:

Mr. Carey manages boundary, topographic, hydrographic and magnetometer surveys and all surveying activity required for engineering, rights-of-way and construction projects. He is involved in all aspects of land surveying projects, including legal descriptions and elevation certificates. Mr. Carey leads the surveying required the Jefferson Parish's Hazard Mitigation Grant Program through providing elevation data and plot plans.

Mr. Carey has managed many hydrographic survey projects using RTK GPS and SonarMite Echosounders, and he is adept at magnetometer surveying. He is responsible for client liaison, directing field crews, supervising CADD operators, equipment calibration and maintenance, and communicating with field and office personnel. Mr. Carey was recently licensed as a Professional Land Surveyor.

He has completed surveying on the following relevant surveys:

Hydrographic/Magnetometer Survey, Jonathan Davis Consolidated Force Main, Jefferson Parish
BUDMAT Barataria Waterway Survey, Jefferson Parish
Long Distance Sediment Pipeline, Phase 2, Jefferson Parish
New River Weir Removal and Channel Improvements, Ascension Parish
MROV BUDMAT TP-10, Plaquemines Port
Bayou Eau Noire Vegetative Ridge and March Creation Project, Plaquemines Parish
Lower Lafitte Basin, Lafitte Tidal Protection Project, Jefferson Parish
Lower Jefferson Waterway Debris Removal, Jefferson Parish
Goose Bayou Hydrographic Survey, Jefferson Parish
Bayou Conway/Panama Canal Channel Improvements, Ascension Parish
Hurricane Storm Damage Risk Reduction Levee Lifts Prior to Armoring, Plaquemines Parish
Outfall Canal Surveys, New Orleans, LA
MRL Encroachment Surveys, Jefferson Parish
Lake Borgne Surge Barrier Levee Floodwall Surveys, Orleans Parish

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Paul Schiele
CADD Draftsman

Project Assignment:

Provide computer-aided design and drafting.

Name of Firm with which associated:

Bryant Hammett & Associates, LLC

Years' experience with this Firm:

16 years

Education: Degree(s)/Year/Specialization:

B.Arch/2008/Architecture

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Paul Shiele provides CADD services for all survey projects, including: drainage projects; state highway, road, and bridge projects; levee surveys; hydrographic and topographic surveys; magnetometer/pipeline surveys; rights-of-way maps; accident investigation layouts; crime scene layouts; and survey plats.

Schiele is trained in use of AutoCAD and Carlson computer drafting software. Mr. Schiele has served as a civil draftsman and CADD technician at BHA since graduating college in 2008. He prepares topographic drawings and maps used in major construction projects such as highways, buildings, bridges, pipelines, flood control structures, roadways, and water and sewerage systems.

He provides right-of-way plats, topographic drawings (including horizontal and vertical control) and design services. Has been involved in the computer drafting of several subdivisions, levee analysis, sanitary sewer systems, and street and drainage projects.

Recent Projects:

BUDMAT Barataria Waterway Survey
Encroachment Surveys along MRL
OLD IHNC Surge Barrier Visitor and Learning Center
Bayou Conway/Panama Canal Channel Improvements
Jesuit Bend Flood Protection Improvements
PPHTD: MROV BUDMAT TP-10
Mississippi Long Distance Sediment Pipeline Phase 2 Survey (Barataria)
Hurricane and Storm Damage Risk Reduction Systems, NOV-NFL-05: La Reussite to Myrtle Grove
South Louisiana Submerged Road Program-FEMA Eligible Repairs
Hurricane Storm Damage Risk Reduction Levee Lifts Prior to Armoring
Lafitte Tidal Protection Levee, Goose Bayou/The Penn Levee Basin
Lower Jefferson Waterway Debris Removal
Crown Point Drainage Improvements

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:
Bryant O. Hammett, Jr, PE/PLS Owner/Manager
Project Assignment:
Hammett will serve as the principal and professional in charge of the project and will be the main point of contact
Name of Firm with which associated:
Bryant Hammett & Associates, LLC
Years' experience with this Firm:
40 years
Education: Degree(s)/Year/Specialization:
BSCE/1978/Civil Engineering
Active registration: Year first registered/discipline:
1983/Civil Engineer/LA 1985/Professional Land Surveyor/LA 1996/ Environmental Engineer/LA 1985/Civil Engineer/MS
Other experience and qualifications relevant to the proposed Project:
<p>Bryant Hammett, Jr., PE/PLS, has been the sole proprietor of Bryant Hammett & Associates, L.L.C., since 1984. He leads a team of highly qualified, experienced, and licensed engineers, surveyors, technicians, cost estimators, GIS managers, certified floodplain managers, administrators, disaster recovery subject matter experts, inspectors, CADD operators and clerical support. Hammett has over 40 years of experience in the land surveying and engineering fields.</p> <p>Hammett has been the surveyor and engineer of record for numerous types of projects including: wastewater collection and treatment; water treatment, transmission and distribution; natural gas distribution and transmission; electrical transmission; oil transmission; off-system bridges; levee systems; construction servitudes and roadway and drainage.</p> <p>As infrastructure manager for the Louisiana Office of Community Development's Disaster Recovery Unit, Hammett performed and oversaw professional civil, structural and/or transportation engineering work related to the planning, design, development, construction and maintenance of projects funded under the Louisiana Community Development Block Grant/Disaster Recovery Programs. Such projects included capital improvements, storm water and drainage systems, wastewater systems, potable water systems, natural gas systems, fire protection systems, roads, bridges and utility systems. He managed complex engineering programs; provided professional assistance and technical advice to state and local officials; coordinated project development and implementation with contractors, other departments and other agencies; administered professional services contracts; evaluated requests for changes and/or additional work; directed the work of subordinate professional staff; and performed related work as required. Hammett oversaw the development of programs to rebuild schools damaged by Hurricane Katrina ineligible for FEMA assistance. He oversaw disbursements of more than \$178 million for infrastructure projects in the state related to Hurricanes Katrina and Rita.</p>

TEC Professional Services Questionnaire

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

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Barataria Waterway Beneficial Use of Dredged Material (BUDMAT)</p> <p>Jefferson Parish, LA</p> <p>Jefferson Parish Ecosystem and Coastal Management Department</p> <p>Michelle Gonzales</p> <p>Mgonzales@jeffparish.com</p>	<p>BHA performed a topographic and bathymetric survey of 181 acres of marshland of the Barataria Waterway in support of a BUDMAT project to aid in the analysis and evaluation of selected project alternatives.</p> <p>Elevations in the four-marsh creation and nourishment areas were be taken on a 200-foot grid. Elevation information was referenced to North American Datum of 1983 (NAD83) and North American Vertical Datum of 1988 (NAVD88) with northings and easting coordinates shown as State Plane Coordinates. Pipeline information from USACE data was included in the mapping exercise.</p> <p>For approximately 14 miles of water way, BHA collected water depth information to aid in the determination of the best route for barge access to the proposed dredging areas. In any water segment where +8' of water exists, water depths were collected at approximate 2000' intervals; in other water depths, data was collected at approximate 500' intervals, depending on depth and professional judgement. As field evidence was collected, BHA made adaptations as necessary to provide information requested. BHA used a SonarMite Singlebeam Echosounder for this portion.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2018 (A)	Unknown	\$46,000

TEC Professional Services Questionnaire

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Bayou Eau Noire Vegetative Ridge Restoration and Marsh Creation</p> <p>Plaquemines Parish, LA</p> <p>Plaquemines Parish Government Ken Dugas kdugas@ppgov.net</p>	<p>BHA performed a topographic, bathymetric, and magnetometer survey in the marsh area between Port Sulphur and Empire in southern Plaquemines Parish, which encompasses approximately 26,400 linear feet of ridge restoration and 505 acres of marsh creation.</p> <p>Cross sections were surveyed across the alignment of the proposed ridge Reaches A and B. Sections were taken at 200-foot intervals. The width is approximately 150 feet on the Mississippi River side and of sufficient width to cover the proposed pipeline access corridor on the other.</p> <p>Elevations in the 4 marsh creation and nourishment areas were taken on a 100-foot grid, bottom elevations were taken in open-water areas, approximately 2,200 locations for which data was collected.</p> <p>The shoreline surrounding the entire marsh creation and nourishment areas was located, providing X, Y, and Z coordinates.</p> <p>To obtain approximate locations of pipelines and metallic structures and that may hinder construction, the magnetometer survey covered the entire length along the alignment of both proposed ridges as well as the marsh creation and nourishment areas</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020 (A)	unknown	\$145,000

TEC Professional Services Questionnaire

PROJECT NO. 3

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility
<p>Lower Lafitte Basin (Orange Street) Basin, Lafitte Tidal Protection Project</p> <p>Jefferson Parish, LA</p> <p>Lafitte Area Independent Levee District Timothy Kerner jeanlafittetownhall@yahoo.com</p>	<p>BHA provided the necessary surveying for the design of the proposed Tidal Protection Levee and Floodwall that encompasses approximately 300 acres of land in Jefferson Parish. The project includes installation of approximately 31,500 cubic yards of levee fill to elevation 8.5 MSL along several sections of the existing earthen levee along the northern, eastern, and southern perimeter.</p> <p>BHA provided topographic and hydrographic surveying, including acquiring adequate bathymetry to define the bottoms of the borrow canals on both the protected side and flood side of the existing earthen levee and take readings across the bottom of the main channel sections, as well as top of bank locations. All linear features of the levee system (bottom of canal, top of bank, toe of levee, top of levee, etc.) were acquired as continuous break lines and existing ground spot elevations adequate to create a reasonable continuous ground surface model.</p>
Completion Date (Actual or estimated)	Estimated Cost:
	<div style="display: flex; justify-content: space-between;"> <div style="width: 60%; text-align: center;">Entire Project:</div> <div style="width: 35%; text-align: center;">Work for which Firm was Responsible:</div> </div>
2018 (A)	<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;">unknown</div> <div style="width: 35%;">\$165,000</div> </div>

PROJECT NO. 4

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
<p>Mississippi Long Distance Sediment Pipeline Phase 2 (Barataria) and Alternate Route</p> <p>Jefferson Parish, LA</p> <p>Jefferson Parish Ecosystem and Coastal Management Department Michelle Gonzales Mgonzales@jeffparish.com</p>	<p>BHA provided surveying services for the LDSP project in Jefferson Parish, which aims to construct an efficient sediment delivery pipeline system from a renewable resource in the Mississippi River to strategic locations in Barataria Basin by facilitating large-scale marsh creation and providing immediate restoration to natural landscape features.</p> <p>BHA provided cross section surveys, hydrographic surveys, and topographic surveys for approximately 12.5 miles of marsh land and shore line. Topographic features included structures that may impact the location of the pipeline such as fishing camps, bulkheads, piers, spoil banks, ridge lines, large trees, etc. Any pipeline markers encountered in the survey area were collected in the field.</p>
Completion Date (Actual or estimated):	Estimated Cost:
	<div style="display: flex; justify-content: space-between;"> <div style="width: 60%; text-align: center;">Entire Project:</div> <div style="width: 35%; text-align: center;">Work for which Firm was Responsible:</div> </div>
2022 (A)	<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;">unknown</div> <div style="width: 35%;">\$250,000</div> </div>

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lafitte Tidal Protection-Goose Bayou Basin, Frontal Levee, Bayou Barataria</p> <p>Jefferson Parish, LA</p> <p>Lafitte Independent Area Levee District</p> <p>Gene Gillen, P.E. APTIM Program Manager (504) 832-4881</p>	<p>Goose Bayou Basin is located on the eastern bank of Bayou Barataria in Jefferson Parish, LA. The West Jefferson Levee District constructed sections of earthen levee along the eastern perimeter of the project area at the west shore of The Penn, which, in conjunction with the existing ridge on the east bank of Bayou Barataria, provided limited protection.</p> <p>Subsequently, steel sheet pile was driven into the crown of the Penn Levee to increase the tidal flood protection in that reach of the project to +8.0 feet. The project area is bounded on the north by Goose Bayou, south by Reservoir (Pump) Canal, east by the western shoreline of The Penn, and west by the eastern bank of Bayou Barataria (Barataria Bay Waterway).</p> <p>As part of the larger Lafitte-area 100-year Flood Protection Ring Levee System, BHA has been providing surveying services since 2016 for this project, including:</p> <ul style="list-style-type: none"> • Establishing baselines • Topographic surveys on either side of existing banks • Locating property lines, existing servitudes • Locating all utilities • Locating all structures including roads/bridges <p>In 2021, BHA provided a topographic survey of the Western half of the new bridge on Highway 45 that crosses Goose Bayou. The limits of the survey The survey included the area between the centerline of Highway 45 to the face of the houses on the West side of the highway.</p> <p>In 2022, BHA provided topographic and utility surveying for a New Wall Alignment extending from right-of-way to right-of-way along Highway 45. The survey also included the area between Highway 45 and Bayou Barataria. BHA also conducted the necessary research and field work to identify the DOTD right-of-way along Highway 45.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022 (A)	unknown	\$147,000

TEC Professional Services Questionnaire

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>MROV BUDMAT TP-10</p> <p>Plaquemines Parish, LA</p> <p>Plaquemines Port Harbor & Terminal District</p> <p>David St. Marie dstmarie@coastalengsolutions.net</p>	<p>Bryant Hammett & Associates, LLC (BHA) provided a topographic and bathymetric survey in the marsh area of the Mississippi River Outlet in Venice, Louisiana in support of the Beneficial Use of Dredged Material Program (BUDMAT) to aid in the analysis and evaluation of selected project alternatives. The four survey areas included 226 acres of marshland, detailed as TP-10, along with three route surveys to help determine the best route for the dredge pipe access.</p> <p>Elevations in the TP-10 marsh creation and nourishment were taken on a 200-foot grid. Adequate elevation top bank shots were collected to identify the elevation of the adjacent marsh land. Elevations were also taken at 50-ft intervals across the marshland between Tante Phine Pass and the open bay to the east of TP-10.</p> <p>Bathymetric survey: BHA collected sufficient water depth information to aid in the determination of the best route for dredge pipe access along the Southernmost route. Elevations were collected at 50-foot intervals and at any abrupt changes in elevation along the route.</p> <p>Any pipeline markers showing a potential pipeline crossing the survey route were identified with a Northing and Easting coordinate and noted on the drawing. BHA used a SonarMite Singlebeam Echosounder compatible with GPS mounted to a flat-bottom boat for portions of the survey. When water depths were not conducive to use the Sonarmite, BHA collected rod soundings along the route to obtain elevations.</p> <p>Magnetometer Survey: To obtain locations of pipelines and metallic structures, a magnetometer survey was conducted within the TP-10 site. The magnetometer survey covered the entire TP-10 area from Tante Phine Pass to the Open Bay to the East and identified all existing pipelines and wells within the site. A G882 magnetometer was used to locate these approximate locations. Once located, BHA probed the pipeline to obtain elevations on the top of the pipe. BHA contacted various pipeline owners to investigate information relative to pipeline material and sizes.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020 (A)	Unknown	\$85,000

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Encroachment Surveys along Mississippi River Levee Jefferson Parish, LA Southeast Louisiana Flood Protection Authority-East Chris Humphreys chumphreys@floodauthority.org	<p>BHA performed the necessary surveying work to confirm encroachments on the Mississippi River Levee System in Jefferson Parish (East Bank) and to determine property ownership and property lines for specific features. BHA performed complete boundary surveys, including:</p> <ul style="list-style-type: none"> Courthouse research; Recovering or establishing existing USACE MRL baseline; Calculating existing rights-of-way; Performing boundary surveys; Locating levee toe to established property lines Locating topography within right-of-way; Calculating boundary lines. <p>BHA prepared individual plats for each property detailing property boundaries, encroachment items and their relationship to the subject property and existing MRL baseline.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2018 (A)	Unknown	\$50,400

TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lower Jefferson Waterway Debris Removal</p> <p>Jefferson Parish, LA</p> <p>Jefferson Parish Public Works 1221 Elmwood Park Blvd. Suite 904 Jefferson, LA 70123</p> <p>504-736-6783</p>	<p>BHA provided a hydrographic and sonar survey of 8 canals in Lafitte, LA along Arthur Lane, Jenic Lane, Denice LeBlanc Lane, Kaylee Lane, Fran Lane, Joan Marie Drive, Deborah Ann Drive, and Lisa Ann Drive in support of a debris removal project after Hurricane Ida.</p> <p>A hydrographic survey was performed within the limits utilizing High Resolution Side Scan Sonar technology. The water bottoms were surveyed and elevations collected to help identify foreign objects and any potential impacts to marine navigation. Cross sections on each end of the canals and every 50-feet were collected.</p> <p>A drone survey to produce current aerial imagery of the survey area.</p> <p>BHA collected a water surface elevation during each day of the field survey. Water surface data was collected in the morning and afternoon to help determine depths at low tide.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
<p>2022 (A)</p>	<p>Unknown</p>	<p>\$36,480</p>

TEC Professional Services Questionnaire

PROJECT NO. 9

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Surveying/Mapping Goose Bayou Hydrographic Survey for Vehicle Recovery</p> <p>Jefferson Parish, LA</p> <p>John Sullivan DRC Emergency Services jsullivan@drcusa.com</p>	<p>BHA performed a hydrographic survey within Goose Bayou to locate sunken vehicles and debris after Hurricane Ida. BHA utilized High Resolution Side Scan Sonar technology. A Triton Starfish 990F unit was used to perform the survey of the seafloor within the Goose Bayou limits to help identify foreign objects and any potential impacts to marine navigation.</p> <p>BHA utilized HYPACK software to process the data from the Side Scan Sonar. Any anomalies found on the bottom were identified with imagery from the sonar. The locations of all anomalies were staked in the field with a buoy marking each location.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021 (A)	unknown	\$15,300

PROJECT NO. 10

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lake Borgne Surge Barrier Levee Floodwall Survey</p> <p>Orleans Parish, LA</p> <p>Orleans Levee District and Lake Borgne Basin Levee District Chris Humphreys chumphreys@floodauthority.org</p>	<p>Over the past several years, Orleans Levee District conducted RTK surveys on most of the earthen levees. In 2020, OLD required surveying of the hard structures (floodwalls, surge barriers, gates, etc). BHA performed a survey of the Lake Borgne Surge Barrier Settlement Markers in 2020. The Flood Protection Authority – East identified 50 settlement markers that required surveying, along with 3 monoliths. BHA is currently performing this survey on 193 settlement markers on the Surge Barrier Wall across the Intercoastal Canal and the MRGO Canal. Data will be compared to prior data in order to determine the amount of subsidence.</p> <p>A main control point, which will be used as the base station, was tied into the NGS monument "Waste Well 2". LSU's Geomatics Center has converted the Waste Well 2 NGS monument to a CORS site, so it could not be occupied as a base station for the survey.</p> <p>BHA collected data on the 50 and then 193 settlement markers identified by the Flood Protection Authority and 3 monoliths identified as SL1, SL2, and SL3. Northings, Eastings, and Elevations were collected at each marker and monolith to help determine if any settlement has occurred since construction.</p> <p>BHA will report three sets of elevations for each settlement marker. One set of elevations will be based on the most up to date OPUS elevation and the second set of elevations will be based on the 2004.65 elevation published from the Waste Well 2 control at the time of construction. Within each set of elevations, three elevations were recorded and compared: data from 2013, 2020, and 2024.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2024 (E)	Unknown	\$52,280

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary. NOT APPLICABLE

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. NA		

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

Bryant Hammett & Associates, LLC (BHA) is a Louisiana-based Limited Liability Corporation specializing in land surveying, civil engineering, and disaster response. The firm which provides professional services for various governmental and private concerns. BHA was first organized in Concordia Parish in August 1984, starting as a small 4-member firm providing civil engineering and land surveying services to surrounding municipalities. Since then, the firm has grown to operate offices in Plaquemines, Jefferson, East Baton Rouge, and Concordia parishes. Work to perform the required services outlined in the scope of work will be headquartered out of the Harahan, LA office location.

BHA maintains a staff of highly qualified, experienced and licensed engineers, surveyors, technicians, cost estimators, GIS managers, certified floodplain managers, administrators, disaster recovery subject matter experts, inspectors, CADD operators and clerical support. Our central locations allow us to work easily throughout Louisiana and in neighboring states.

BHA is a **HUBZone** business certified by the U.S. Small Business Administration and is certified under the Small Entrepreneurship Program as a **Hudson Initiative Certified Firm** by the Louisiana Department of Economic Development.

SURVEYING

BHA has been providing land surveying services in Louisiana for 35 years. BHA surveyors are registered in Louisiana and each have over 40 years of professional experience in the field. BHA offers a wide range of surveying services:

- boundary and control surveys •ALTA surveys• hydrographic surveys •topographic surveys •right-of-way determination •control for photogrammetric surveys and aerial photography •establishing benchmarks •accident site surveys •wetlands delineation •construction surveys/construction layout •utility layout •pipeline surveys •elevation certificates •magnetometer surveys

DRAFTING: Our CADD technicians have over 30 years of combined experience in producing 3D planimetric drawings, topographic and contour maps, right-of-way maps, boundary plats, cross section diagrams and field data points; BHA utilizes AutoCAD, Intellicad, and Microstation, drafting software to meet the deliverable format required by any client.

GPS TECHNOLOGY: BHA's association and membership with the LSU's Center for GeoInformatics (C4G) GULFNet system allows us to provide our services efficiently, accurately and in a relatively short time span. LSU's GULFNet is a Real-Time Network (RTN) that presently consists of over 70 Continuously Operating Reference Stations (CORS), 26 of which are National CORS providing the data that ties Louisiana into the National Spatial Reference System (NSRS) defined and managed by the National Geodetic Survey (NGS). The NSRS is a consistent national coordinate system that specifies latitude, longitude, height, scale, gravity, and orientation throughout the Nation, as well as how these values change with time. The network extends from east Texas across to Alabama and up into northern Louisiana. BHA also utilizes TopNET+ by TopCon, which is a

TEC Professional Services Questionnaire

duel-constellation network solution providing GPS+GLONASS satellite tracking. BHA uses the newest data collectors and most up-to-date software which includes on-board surveying calculations, engineering calculation abilities, and will work with a total system, robotic total station, or a GPS-systems.

SONAR SURVEYING: BHA utilizes a Single Beam Echo Sounder (SBES) when applicable for hydrographic surveying, which collects accurate water depth and bottom contour information in shallow waters such as lakes, small rivers, channels, canals, harbors, and ditches. The SBES produces an echogram of the water's floor at a point directly below the transducer. This identifies the seabed features and determines whether the echo sounder has picked up the actual water bed or another feature such as debris. The SBES that BHA uses is comprised of a dual frequency transducer. The two frequencies are made up of a high frequency and low (typically 200kHz & 30kHz). The high frequency will generate a first return on the signal and depict the seabed, sea grass, rock etc. The low frequency has some penetrating properties, for example in areas of silt, it can penetrate the material to the harder layers below. Multi-Beam Sonar is be used for collecting numerous soundings across a wide swath of seabed, more appropriately used for major rivers or in the Gulf of Mexico. BHA also utilizes multi-beam side scan sonar equipment as the project requires.

MAGNETOMETER SURVEYING: BHA is adept in the use of magnetometers for the detection and mapping of all sizes of ferrous objects including pipelines, debris, and any other magnetic objects. Magnetometer data is acquired through passively measuring the local variations in the earth's magnetic field. BHA utilizes the G-882 Marine Magnetometer, which is particularly well suited for the detection and mapping of all sizes of ferrous objects. This includes anchors, chains, cables, pipelines, ballast stone and other scattered debris, munitions of all sizes (UXO), aircraft, engines and any other object with magnetic expression. The G-882 magnetometer's digital output can be recorded with any serial data logger to log, display, and print GPS positioned measurement results.

In addition to surveying, BHA offers the following professional services:

Civil Engineering
Construction Management and Resident Inspection
Cost Estimating and Closeout Services
Construction Supervision for HMGP
Disaster Management & Recovery
CBGC Expertise

LOCATIONS

1104 Dealers Ave., Suite A • Harahan, LA • 70123
830 North Street, Suite B • Baton Rouge, LA • 70802
6885 Highway 84 West • Ferriday, LA • 71334
8649 Hwy 23 • Belle Chasse, LA • 70037

www.bha-engineers.com

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

Signature:  Print Name: Bryant O. Hammett, Jr.

Title: owner/manager Date: 07/03/2023

