



NEW ORLEANS LANDBRIDGE



ROCK DIKE EROSION PROTECTION



LAKE BORGNE PROTECTION PROJECT



WETLANDS SURVEYING



STATEMENT ^{OF} QUALIFICATIONS

COASTAL ENGINEERING CONSULTING
SERVICES ON AN AS-NEEDED BASIS

SOQ: 24-020
RESOLUTION NUMBER: 144205

JULY 16, 2024



IN ASSOCIATION WITH:

ELOS ENVIRONMENTAL, LLC
EUSTIS ENGINEERING, LLC

LINFIELD, HUNTER & JUNIUS, INC.

24M-095



LINFIELD, HUNTER & JUNIUS, INC.

PROFESSIONAL ENGINEERS, ARCHITECTS,
LANDSCAPE ARCHITECTS AND SURVEYORS

3608 18th Street / Suite 200
Metairie, Louisiana 70002
(504) 833-5300 / (504) 833-5350 fax
LHJ@LHJunius.com

Ralph W. Junius, Jr., P.E.
Nathan J. Junius, P.E., P.L.S.
Anthony F. Goodgion, P.E.
Nathan D. Hills, AIA
Charles T. Knight, P.E.
Robert E. Nockton, P.E.
Mark K. Annino
Casey M. Genovese, P.E.

Daniel A. Flores, P.E.
John M. Jackson, P.E.
Vincent J. Leco, III, P.E.
Eric R. Wright, P.E.
Timothy J. Roth, P.E.
Luis F. Sosa, P.E.
Richard A. VanWootten, P.E.

July 16, 2024

Jefferson Parish Council
General Government Building
200 Derbigny Street, Suite 6700
Gretna, LA 70053

**RE: Statement of Qualifications
Supplemental Coastal Engineering Consulting Services
On An As-Needed Basis
SOQ 24-020
Resolution No. 144205
Our File #: 24M-095**

To Whom It May Concern:

Linfield, Hunter & Junius, Inc. (LH&J) is pleased to submit its Statement of Qualifications to provide Coastal Engineering Consulting Services on an As-Needed Basis.

Our Team is composed of Linfield, Hunter & Junius, Inc. (LH&J) (Coastal, Civil, Structural and Hydraulic Engineering); ELOS Environmental, LLC (Permitting and Environmental Services); and Eustis Engineering, LLC (Geotechnical Engineering).

Our Team is well qualified to provide the services required for this project. Our Team is made up of over 45 engineering and environmental professionals and with a supporting staff of well over 80 additional personnel whom are available to meet all project requirements. Our Team meets or exceeds the qualifications and experience required for this project.

Contact Information:

Nathan J. Junius, P.E., P.L.S., President
Linfield, Hunter & Junius, Inc., 3608 18th Street, Suite 200, Metairie, LA 70002
njunius@LHJunius.com - 504-833-5300 - 504-833-5350 fax

We appreciate your business and look forward to continuing our relationship with Jefferson Parish.

Very truly yours,

LINFIELD, HUNTER & JUNIUS, INC.

Nathan J. Junius, P.E., P.L.S.
President

NJJ/dlm

Enclosures

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Coastal Engineering Consulting Services
on an As-Needed Basis for Miscellaneous Projects throughout Jefferson Parish
Resolution No. 144205 – SOQ 24-020

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

LINFIELD, HUNTER & JUNIUS, INC.
3608 18th Street, Suite 200
Metairie, LA 70002



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

Nathan J. Junius, P.E., P.L.S., President
Linfield, Hunter & Junius, Inc.
3608 18th Street, Suite 200
Metairie, LA 70002
504-833-5300 504-833-5350 fax
njunius@LHJunius.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.

Nathan J. Junius, P.E., P.L.S., President
Linfield, Hunter & Junius, Inc.
3608 18th Street, Suite 200
Metairie, LA 70002
504-833-5300 504-833-5350 fax
njunius@LHJunius.com

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

<u>5</u> Administrative	— Estimators	— Specification Writers
<u>1</u> Architects (Licensed)	— Geologists	<u>4</u> Structural Engineers
— Chemical Engineers	— Geotechnical Engineers	— Graduate Engineers
<u>7</u> Civil Engineers (Licensed)	— Interior Designers	— Project Managers
<u>4</u> Construction Inspectors	— Landscape Architects	<u>1</u> Clerical
— Ecologists	<u>5</u> Land Surveyor	— Grant/Funding Specialist
— Electrical Engineers	— Mechanical Engineers	— Sanitary Engineers
<u>8</u> Engineer Intern	— Environmental Engineers	<u>4</u> CADD Drafters
<u>2</u> Professional Land Surveyors	<u>1</u> Architect Intern	<u>42</u> TOTAL

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

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

TEC Professional Services Questionnaire

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

1. N/A

2.

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

YES ☐ NO ☐ N/A

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

Name & Address:	Specialty:	Worked with Firm Before (Yes
1. ELOS Environmental, LLC 607 W. Morris Avenue Hammond, LA 70403	Environmental Services	Yes
2. Eustis Engineering, LLC 3011 28th Street Metairie, LA 70002	Geotechnical Engineering	Yes
3.		

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

20

Staffing Plan – A Diagram showing all key personnel that would be available for assignment. The Staffing Plan should also include the same information for sub-consultants (if applicable).

LINFIELD, HUNTER & JUNIUS, INC. STAFFING PLAN



**Supplemental Coastal
Engineering Consulting
Services on an As-needed
Basis**
SOQ 24-020
Resolution No. 144205

Prime Consultant



LINFIELD, HUNTER & JUNIUS, INC.
PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS

Team Firms

- ★ Linfield, Hunter & Junius, Inc. (LH&J)
- ¹ ELOS Environmental, LLC. (ELOS)
- ² Eustis Engineering, LLC (EE)

Anthony F. Goodgion, P.E. ★
Project Manager

Ralph W. Junius, Jr. P.E. ★
Project Oversight

Richard A. Van Wootten, P.E. ★
Design Quality Control Manager

**Coastal Engineering
and Hydraulic
Engineering**

**Lead Coastal / Hydraulic
Engineer**
Robert E. Nockton, P.E. ★

**Coastal / Hydraulic
Engineers**
John M. Jackson, P.E. ★
Bryce L. Vazquez ★

**Structural
Engineering**

Lead Structural Engineer
Anthony F. Goodgion, P.E. ★

Structural Engineers
Daniel A. Flores, P.E. ★
Eric R. Wright, P.E. ★
Colin V. Landry, E.I. ★

**Environmental and
Permitting Services**

**Lead Environmental /
Permitting Specialist**
Lucas Watkins¹

Environmental Specialists
Brian Fortson¹
Basile Dardar¹
Hunter Perrilloux¹
Michael Bellone¹
Karim Belhadjali¹

**General
Engineering**

Lead Civil Engineer
Robert E. Nockton, P.E. ★

Civil Engineers
Mark K. Annino, BSCE ★
Vincent J. Leco, III, P.E. ★

**Surveying
Services**

Lead Land Surveyor
Nathan J. Junius, P.E., P.L.S. ★

Surveyors
William J. Muller, P.L.S. ★
Daniel D. Bindewald ★
Paul H. Morales, IV ★

**Construction Administration
and Inspection**

Lead Construction Manager
Charles T. Knight, P.E. ★

Construction Inspectors
Brandon M. Barger ★
Parker Verlander ★

**Geotechnical
Engineering**

Lead Geotechnical Engineer
James J. Hance, P.E. ²

Geotechnical Engineers
Sean G. Walsh, P.E. ²
Gwendolyn P. Sanders, P.E. ²
James M. Williams, P.E. ²
Henry C. Worley, P.E. ²

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:

Anthony F. Goodgion, P.E.

Project Assignment:

Project Manager

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

33 Years of Experience with LH&J; 41 Years of Total Experience

Education: Degree(s)/Year Specialization:

Louisiana State University – B.S. /1983 / Civil Engineering

Active registration: Year first registered/discipline:

1991 / Civil / LA License No. PE.0024466

Other experience and qualifications relevant to the proposed Project:

Goodgion is a highly qualified and experienced Project Manager who has managed the successful performance of Planning, Investigation, Engineering Design and Construction Management services for numerous Task Order oriented contracts with the U. S. Army Corps of Engineers, with contract values up to \$90 million in fees. His experience with Coastal Engineering includes projects for Environmental Restoration, Dredging, Hydraulic Modeling and Flood Protection.

Goodgion has led diverse engineering teams performing under the direction of a wide range of public clients including Federal, State, Parish and Local Governments, as well numerous private commercial, institutional and industrial entities. He has successfully managed government projects for Jefferson Parish Department of Public Works, the Port of New Orleans, the City of New Orleans Department of Public Works, the LA-DOTD, the Sewerage and Water Board of New Orleans, the U.S. Army Corps of Engineers and Plaquemines Parish. As Project Manager, Goodgion has overseen the successful preparation of investigations, planning and studies, engineering reports, construction plans and specifications, and cost estimates for a wide range of coastal engineering projects.

Anthony F. Goodgion, P.E.
Project Assignment – Project Manager

Resume

Additional Experience and Qualifications

Grand Bayou Vegetative Ridge Restoration, Plaquemines Parish, LA

Goodgion performed as LH&J's Principal In Charge for this Coastal Restoration Project envisioned for Plaquemines Parish. He was responsible for LH&J overall performance including schedule, budget and design quality compliance, as well as technical oversight for the development of the project planning documents.

Spanish Pass Freshwater Diversion, Venice, LA

As Senior Structural Engineer for this Coastal Restoration Project Concept, Goodgion was responsible for the technical compliance with Structural Codes and other requirements for development of the Hydraulic Diversion Structure and Road Crossing. He analyzed multiple options for the structure to determine optimization for the most cost effective alternative. His expertise in Pile Founded Structures was utilized to determine the best method to support the special structure to minimize settlement and maintain peak efficiency for the Hydraulic Structure.

South Shore Harbor Marina Dredging, New Orleans, LA

Goodgion was the Project Manager for this dredging project located in Lake Pontchartrain adjacent to Lakefront Airport. LH&J provided full civil, hydrographic and topo surveying, and permitting for the project. LH&J investigated and coordinated the placement of the dredged material along the shoreline to build land elevation along the shore. Included in the project was providing a structural assessment of an existing concrete bulkhead for placement of dredge material.

Orleans Marina Seepage Repair Projects, New Orleans, LA

Goodgion was the Project Manager for this multi-phase project to replace a deteriorating steel sheetpile bulkhead. Project includes permitting with CPRA, USACE and DNR for construction. LH&J performed full civil, structural, surveying, hydro-surveying, cost estimating and construction administration for the project.

Murphy Oil U.S.A. Loading and Unloading Wharves, Meraux, LA

As Project Manager/Senior Engineer for all work performed for Murphy Oil, Goodgion was responsible for LH&J's performance in regards to the Client's Budget, Scope and Schedule. He also led inspection teams to identify and document damages and necessary repairs. He also oversaw the preparation of Plans and Specifications for periodic dredging projects to maintain the required depth at the facility's ship and barge berths.

Oakville to LaReussite Non-Federal Levees & Floodwalls, Plaquemines Parish, LA

Goodgion performed as the Principal In Charge for this 8 mile long section of Critical Hurricane Protection in Plaquemines Parish. He was responsible for performing technical, budget and schedule oversight for all work being performed by LH&J, as well as a number of sub-consultants. He was also the company's single point of contact for all contractual dealings with the U. S. Army Corps of Engineers.

Anthony F. Goodgion, P.E.
Project Assignment – Project Manager

Resume

Additional Experience and Qualifications

Inner Harbor Navigation Canal Surge Protection Barrier, New Orleans, LA

Goodgion was the Project Manager for the 32-foot-tall north and south T-wall transitions, the north and south elevated access bridge ramps, the 150-foot-long steel dewatering bulkheads and the elevated safe house. All features were designed to comply with HSDRSDG criteria and construction cost for LH&J designed features was approximately \$66.5 million. Goodgion was the primary contact for business and technical issues, provided oversight of technical design activities, monitored costs and schedules. Many of the features designed by LH&J were unique in size and complexity such as the 32 foot tall T-walls, the Safe House and the 150 foot long dewatering bulkheads which were also designed as temporary storm surge protection.

Storm Proofing Drainage Pumping Station No. 5 and New 600 CFS Pump Station, New Orleans, LA

Goodgion performed as the Principal In Charge for this \$25 million Pump Station modification and expansion project. He was responsible for performing technical, budget and schedule oversight for all work being performed by LH&J, as well as a number of sub-consultants. He was also the company's single point of contact for all contractual dealings with the U. S. Army Corps of Engineers.

NASA Michoud Assembly Facility (MAF) Harbor Improvements, New Orleans, LA

Goodgion served as Project Manager for several harbor projects at MAF which included performing underwater inspections of docks and other marine structures, dock repairs, dock expansions and dredging plans for the harbor. LH&J provided full services for engineering, hydrographic surveying and permitting of these projects.

Professional Engineering Oversight Services for Pontchartrain Levee District, St. Charles Parish, LA

Linfield, Hunter & Junius, Inc. is contracted with the Pontchartrain Levee District to review levee Plans and Specifications by others, review Letter of No Objection Requests and other engineering services. Goodgion served as the Project manager for the preliminary design of a levee lift for LPV 4.2a and 4.2b. He was responsible for coordination with the PLD and the CPRA for determining levee lift quantities and geometry as well as preparing cost estimates and schedules for various levee lift options.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Ralph W. Junius, Jr., P.E.

Project Assignment:

Project Oversight

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

50 Years of Experience with LH&J; 54 Years of Total Experience

Education: Degree(s)/Year Specialization:

Tulane University – B.S. / 1970 / Civil Engineering
University of Illinois – M.S. / 1972 / Civil Engineering
Louisiana State University – J.D. / 1974 / Law

Active registration: Year first registered/discipline:

1976 / Civil / LA License No. PE.0016053

Other experience and qualifications relevant to the proposed Project:

Junius joined the firm in 1975 as a design engineer and became a Principal in 1982 with the firm establishing its current name. He has designed and managed many private and public sector projects. Structural projects have included coastal and waterfront structures, single story residences, mid-rise office buildings, bridges, numerous industrial structures, etc. Civil projects include major drainage canals, small site developments, miles of streets, water distribution systems, sewerage collection systems, sewage treatment plants, water purification plants, etc. He has served as an expert and arbitrator in disputes involving structures, paving, drainage and waterfront facilities. Junius authored "Wharf Decks - Design Load vs. Cost" published by ASCE. Junius also wrote Chapter 2.0 of Negotiating for Design Professional Services published by ACEC. He is a frequent lecturer on waterfront structures and engineering ethics.

Murphy Oil U.S.A. Loading and Unloading Wharves, Meraux, LA

In providing Project Oversight for all work performed for Murphy Oil, Junius had high level responsibility for LH&J's entire project performance. He was responsible for ensuring that adequate resources with the proper level of experience and expertise were allocated to completing the project on time. He also provided the highest level of technical authority and reviews all final deliverable plans, specifications and cost estimates to confirm compliance with Company Policies and Standards.

Ralph W. Junius, Jr., P.E.
Project Assignment – Project Oversight

Resume

Additional Experience and Qualifications

Inner Harbor Navigation Canal Surge Protection Barrier, New Orleans, LA

Junius provided Project Oversight for this Monumental USACE Design Build project. In this capacity he was responsible for arranging and complying with all contractual arrangements with the Prime Design Build company. He also provided the highest level of technical authority and reviews all final deliverable plans, specifications and cost estimates to confirm compliance with both Company Policies and Standards, as well as all Governmental Design Standards and Requirements.

Storm Proofing Drainage Pumping Station No. 5 and New 600 CFS Pump Station, New Orleans, LA

Junius's responsibilities for Project Oversight on this project included performing as the highest level of technical authority and reviewing all final deliverable plans, specifications and cost estimates to confirm compliance with both Company Policies and Standards, as well as all Governmental Design Standards and Requirements.

Task Force Guardian - Emergency, Interim & Permanent 17th Street Canal Breach Repairs, Orleans and Jefferson Parishes, LA

In the immediate aftermath of Hurricane Katrina, the USACE relied on LH&J to assist with the daunting task of controlling the intruding floodwaters at the 17th Street Canal Floodwall Breach. Junius was the Project Principal and provided Technical Oversight for the work done by LH&J's in-house employees, as well as all sub-consultants. He was LH&J's highest level representative to the USACE. His extensive experience and expertise was instrumental in LH&J's development of the configuration of the gated structure, including an innovative concept for pre-fabricating the canal closure structures off-site to accelerate construction, improve constructability and save costs. The construction cost of the multiple phases of this project was on the order of \$150 million.

New Orleans Small Business Engineering, a Joint Venture, L.L.C., (NOSBE), New Orleans, LA

Junius was the Managing Partner for the NOSBE Joint Venture, which was comprised of seven small business partners and seven sub-consultants who performed the \$90 million USACE IDIQ Contract No. W912P8-07-D-0059. He was the Joint Venture's highest level representative to the USACE. He made decisions on assignments of work based upon the expertise and capacity of the individual team members to perform the required tasks. He provided Technical Oversight on all Task Orders. The Joint Venture was assigned 59 individual Task Orders between 2007 and 2012 and is currently still performing EDC services for the ongoing NOV-NF-W-04a levee and floodwall project.

General Design Support Services and Multidisciplinary Planning IDIQ, New Orleans District, LA

For this \$5.0 million IDIQ Contract No. W912P8-07-D-0056 with the New Orleans District, Junius was LH&J's Project Principal and provided Technical Oversight for the work done by LH&J's in-house employees, as well as all sub-consultants. He was LH&J's highest level representative to the USACE. The contract was utilized between 2007 and 2012 for seven individual task orders that involved both new construction and existing facilities.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Richard A. Van Wootten, P.E.

Project Assignment:

Design Quality Control Manager

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

20 Years of Experience with LH&J; 50+ Years of Total Experience

Education: Degree(s)/Year Specialization:

Rensselaer Polytechnic Institute / BS / 1957 / Civil Engineering

Active registration: Year first registered/discipline:

1974 / Civil / LA License No. PE.0014620

Other experience and qualifications relevant to the proposed Project:

Mr. Van Wootten has over 50 years of experience in the process industry including petroleum refining, petrochemical and chemical plants, fertilizer and sulphur facilities, pulp and paper mills, food processing plants, oil and gas production, and storage and transportation facilities. In addition, he has extensive experience in operations, maintenance, engineering, construction, project engineering, project management, and program management. At Linfield, Hunter & Junius, Inc. Mr. Van Wootten provides quality assurance on all projects with periodic quality control checks and coordinated reviews.

Spanish Pass Freshwater Diversion, Venice, LA

As Quality Control Manager for this Coastal Restoration Project Concept, Van Wootten was responsible for the Quality Assurance and Quality Control functions for all work products prepared by LH&J.

Oakville to LaReussite Non-Federal Levees & Floodwalls, Plaquemines Parish, LA

Van Wootten's duties as Quality Control Manager included the responsibility for the Quality Assurance and Quality Control functions for all work products prepared by LH&J on this U.S. Army Corps of Engineers (USACE) contract. In this capacity he coordinated and documented the necessary Individual Technical Review (ITR) functions to ensure compliance with all USACE requirements.

Richard A. Van Wooten, P.E.

Resume

Project Assignment – Design Quality Control Manager

Additional Experience and Qualifications

Inner Harbor Navigation Canal Surge Protection Barrier, Orleans Parish, Louisiana

Performed as manager of quality assurance and quality control and oversaw all QA/QC activities for a \$3.0 million engineering subcontract for the IHNC Hurricane Barrier project for the U.S. Army Corps of Engineers. This project consisted of 28 individual task orders and required compliance with the overall quality management plan and contract requirements.

Storm Proofing Drainage Pumping Station No. 5 and New 600 CFS Pump Station, New Orleans, LA

On this USACE project, Van Wooten bore responsibility for coordinating and documenting the necessary Individual Technical Review (ITR) functions for both LH&J, as well as all sub-consultants, to ensure compliance with all Corps QA/QC requirements. He also maintained primary responsibility for developing, obtaining approval, updating and ensuring compliance with the project's QA/QC Plan.

IDIQ General Design Support Services, Multidisciplinary Services and Construction Management Services New Orleans District, New Orleans, LA

LH&J served as the managing partner for the \$90 million NOSBE, JV IDIQ Contract No. W912P8-07-D-0059 with specific responsibility for performing all contractually required QA/QC activities for the entire JV. Van Wooten performed as manager of QA/QC and oversaw all QA/QC activities for a \$90 million, 5-year IDIQ Design Contract for the USACE. Responsibilities included preparation and updating of QA/QC plans for each of 59 individual task orders, performance of ITR at 30%, 60% and 90% stages of completion for each task order and assurance of overall compliance with all contractually required QA/QC requirements and the quality management plan for the program. Two of the task orders were for the performance of quality assurance materials testing and three task orders were for the supplying of construction management staff. In total the NOSBE JV was responsible for over \$300 million in the construction of floodwalls, floodgates, levees, pump stations and storm proofing projects.

Task Force Guardian - Emergency, Interim & Permanent 17th Street Canal Breach Repairs, Orleans and Jefferson Parishes, LA

In the immediate aftermath of Hurricane Katrina, the USACE relied on LH&J to assist with the daunting task of controlling the intruding floodwaters at the 17th Street Canal Floodwall Breach. Van Wooten performed as manager of QA/QC and oversaw all QA/QC activities for a contract with the USACE. This contract along with a following contract provided the design engineering services for the 17th Street Canal Program after Hurricane Katrina. The two contracts totaled 23 task orders. Responsibilities included preparation of DQCP plans, supervision of QA/QC activities and compliance with the program quality management plan and QA/QC requirements of the contracts. The construction cost of the multiple phases of this project was on the order of \$150 million.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Robert E. Nockton, P.E.

Project Assignment:

Lead Coastal / Hydraulic / Civil Engineer

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

29 Years of Experience with LH&J; 29 Years of Total Experience

Education: Degree(s)/Year Specialization:

Rice University / B.S. / 1995 / Civil Engineering

Active registration: Year first registered/discipline:

2000 / Civil / LA License No. PE.0028802

Other experience and qualifications relevant to the proposed Project:

Nockton has been involved in the engineering of a wide variety of coastal, hydraulic, hydrologic and general civil projects. These projects include but are not limited to vegetative ridge restoration, fresh-water diversion, improvements to major drainage structures, storm water management systems with green infrastructure, drainage pump stations, drainage studies, urban streets projects, water and sewerage studies, waterline and sewer line replacement and upgrades, wastewater pump station design and rehabilitation, utility relocations, surveying and site design. Nockton has been Project Manager and/or Lead Civil Engineer on many successful projects in the past ten years.

New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project, New Orleans, LA

Nockton is the Lead Civil Engineer for this **Coastal Restoration Project**. LH&J is providing construction management services, engineering during construction and resident inspection for the \$14 million that includes shoreline stabilization, earthen dike containment, dredging and marsh creation.

Grand Bayou Vegetative Ridge Restoration, Plaquemines Parish, LA

Nockton performed as a Civil Engineer for this Coastal Restoration Project envisioned for Plaquemines Parish. He assisted with the preparation of the Civil Engineering Concept Drawings, Quantity Computations and Cost Estimate. He also assisted with the preparation of the Coastal Use Permit that LH&J prepared for the project.

TEC Professional Services Questionnaire

Robert E. Nockton, P.E.

Resume

Project Assignment – Lead Coastal / Hydraulic / Civil Engineer

Additional Experience and Qualifications

Spanish Pass Freshwater Diversion, Venice, LA

As Civil Engineer for this Coastal Restoration Project Concept, Nockton assisted with preparation of the Roadway Modifications and Utility Relocations, including Drawings and Cost Estimates.

Tidewater Road Reconstruction and Drainage Infrastructure Improvements, Plaquemines Parish, LA

Nockton was Lead Civil Engineer for this project. Tidewater Road is the primary access road serving the Venice Port facilities outside of the Plaquemines Parish Hurricane Protection System in Venice, Louisiana. Because it lies outside of the hurricane protection levee system, the roadway is subject to frequent flooding during high tidal conditions, thus severely limiting access to the critical Venice Port Facilities. LH&J was retained to raise Tidewater Road to improve access to the Venice Port facilities. Phase I improvements raised approximately 6,000 linear feet of roadway to Elevation +5.0 from the Jump to Coast Guard Road. Phase II improvements, which raised the next 10,000 linear feet of roadway to Elevation +5.0 from Coast Guard Road to the entrance of the TARGA Refinery, was recently completed. The total cost was \$27 Million. Phase II was a **CDBG Disaster Recovery Project**.

Elevation of Lake Hermitage Road, Plaquemines Parish, LA

Nockton was Lead Civil Engineer for this project. Lake Hermitage Road is the primary access road serving communities along three bayous that cross Lake Hermitage Road. Lake Hermitage Road lies outside the flood protection levee system, and as such is subject to flooding during high tidal conditions. Under this project, Lake Hermitage Road will be raised and paved to improve access during high tidal conditions. This \$5.5 Million project is being funded in part by the **Community Development Block Grant (CDBG) Program**.

Storm Proofing Drainage Pumping Station No. 5 and New 600 CFS Pump Station, New Orleans, LA

Nockton was Lead Civil Engineer for this project to enhance the resiliency and expand the pumping capacity of this existing S&WBNO Drainage Pumping Station. He was responsible for the design and specification of the two new 300 CFS 1500 HP electrically driven pumps with formed suction intake basin and their 72" discharge piping and ancillary systems. He also developed and supervised the physical modeling program and also assisted with Engineering During Construction (EDC) activities by reviewing Shop Drawings and Submittals and answering Contractor questions.

General Design Support Services and Multidisciplinary Planning IDIQ, New Orleans District, LA

Nockton served as the civil engineer with responsibility for the design of repairs to 16 pumping stations in Plaquemines Parish that had been damaged by Hurricane Katrina. The types of repairs included building repair, repair of trash screens, driver replacements, gear replacement, fuel system rebuilding, electrical and mechanical repairs, and pump rehabilitation. The construction cost of this project was approximately \$12 million.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Nathan J. Junius, P.E., P.L.S., PTOE

Project Assignment:

Lead Land Surveyor

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

23 Years of Experience with LH&J; 23 Years of Total Experience

Education: Degree(s)/Year Specialization:

Tulane University / 2001 / B.S. / Civil Engineering
University of Texas / 2002 / M.S. / Civil Engineering

Active registration: Year first registered/discipline:

2002 / Civil / LA License No. PE.0031843 - 2005 / Land Surveying / LA License No. PLS.0004958

Other experience and qualifications relevant to the proposed Project:

Junius attended Tulane University from 1997-2001. After Graduating in May of 2001, Junius attended the University of Texas at Austin where he graduated with a MS degree in Civil Engineering in August of 2002 with an emphasis in Water Resources. Junius also completed additional classes in the Nicholls State University Geomatics curriculum to further his land surveying knowledge.

LAND SURVEYING

Junius has been responsible for survey operations and daily direction of the survey crew. He was also responsible for the QA/QC of multibeam deliverables. Junius has provided virtual reference station (VRS)/ real time kinematic (RTK) surveys and 3rd Order Levels for Control as well as hydrographic multibeam surveys. Deliverables included an EM Files, ASCII Files, XYZ Files and a detailed survey report.

Junius is proficient with Leica Dual Frequency RTK Rovers, Leica DNA03 Digital Auto Level, Leica GPS Base Station, G-882 Magnetometer Leica Total Robotic Total Station, Leica Geo Office, Carlson Survey/Civil Software, Autocad 2016 and Civil 3D.

TEC Professional Services Questionnaire

Nathan J. Junius, P.E., P.L.S., PTOE
Project Assignment – Lead Land Surveyor

Resume

Additional Experience and Qualifications

Junius has conducted numerous boundary, topographic, coastal marsh resubdivision surveys, pre and post dredging surveys, levee surveys, route surveys, ALTA surveys, hydrographic surveys, utility surveys and legal descriptions throughout Louisiana, Mississippi and Texas.

One of Junius' largest surveying projects included the hydrographic and topographic surveying for the Inner Harbor Navigation Canal (IHNC) Lake Borgne Surge Barrier which included over a mile and half of hydrographic surveying through the marsh including topographic surveying for two gates.

Junius has provided first order leveling for hundreds of miles of levee construction including many floodwalls and pump stations. ROW maps, levee profiles and cross sections were also provided before and after construction to confirm as-built conditions.

Junius currently provides surveying in many areas including hydrographic surveying, GPS surveying, single beam technology, multibeam technology and scanning including numerous topographic and boundary surveys. Survey data that LH&J provides has been imported into ArcGis in the following survey data converter formats: ASCII, TDS Coordinate and TDS Raw. The survey work has been in the State Plane Coordinate System based on NAD27.

Junius is a member of the Louisiana Society of Professional Surveyors (LSPS), American Society of Civil Engineers (ASCE), American Public Works Association (APWA), and Louisiana Engineering Society (LES). He currently serves as the President of the ACEC/L New Orleans Chapter.

Recent surveying projects include:

- East Jefferson Levee District Foreshore Protection, Jefferson Parish, LA
- Jesuit Bend Mitigation Bank Hydrographic Survey – Plaquemines Parish, LA
- GIWW to Clovelly Hydrologic Restoration Hydrographic Survey – Lafourche Parish, LA
- LPV 20.2 Foreshore Protection – Jefferson Parish, LA
- Grand About Vegetative Ridge Restoration – Plaquemines Parish, LA
- Saltwater Sill LaBranche Wetlands Hydrographic Survey – St. Charles Parish, LA
- Pipeline Survey – Mississippi River Entergy Site – St. Francisville, LA
- Elevation Assistance Program – St. John the Baptist Parish, LA
- Algiers Lock Forebay Water Line Crossing Hydrographic Survey – Orleans Parish, LA
- Levee Centerline and Cross Section Survey – LPV 109.02a from south of I-10 to CSX Tracks – Orleans Parish, LA
- Mississippi River Ventures Aggregate Yard – St. Charles Parish, LA
- Various Surveys for Pontchartrain Levee District

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Charles T. Knight, P.E.

Project Assignment:

Lead Construction Manager

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

16 Years of Experience with LH&J; 40 Years of Total Experience

Education: Degree(s)/Year Specialization:

University of New Orleans – B.S. / 1982 / Civil Engineering

University of New Orleans – M.S. / 1988 / Civil Engineering

Active registration: Year first registered/discipline:

1986 / Civil / LA License No. PE.0022165

Other experience and qualifications relevant to the proposed Project:

Knight is a versatile civil and structural engineer with a diversified career of performing engineering designs and program and construction management for major projects in both the U.S. and overseas. Knight has been practicing Civil Engineering since graduating from the University of New Orleans in 1982 (40 years) and has designed and managed major Coastal Engineering Projects since graduating. Knight is currently the Program Manager of the nearly complete Kenner 2030 Plan City-Wide Street, Drainage and Beautification Improvement Program and the just completed Corps of Engineers Construction Management IDIQ for the New Orleans District.

Grand Bayou Vegetative Ridge Restoration, Plaquemines Parish, LA

Knight performed as LH&J's Project Manager for this Coastal Restoration Project envisioned for Plaquemines Parish. He was responsible for coordinating the efforts of both in-house staff as well as subcontractors. He met regularly with the prime contractor's staff and provided periodic updates on progress. He provided guidance to all staff and reviewed their work for quality and consistency.

Spanish Pass Freshwater Diversion, Venice, LA

As Structural Engineer for this Coastal Restoration Project Concept, Knight prepared the structural calculations, foundation design and concept drawings for the Hydraulic Structure. He also developed quantity computations and cost estimates for the concrete structure and gates.

Charles T. Knight, P.E.
Project Assignment – Lead Construction Manager

Resume

Additional Experience and Qualifications

Program Management of Kenner 2030 Capital Improvements Project, Kenner, LA

Performed as Program Manager for this \$34 million Capital Improvement Program serving as the Liaison between the City of Kenner and the Design Consultants, Construction Contractors, Resident Inspectors and Testing Labs for each of the nine individual projects. The projects includes construction of Roadways, Bridges, Pedestrian Paths, Bike Paths, and Landscaping enhancements. Due to this State/Federal participation in several of the projects, all design development work and construction of the improvements must be performed in strict compliance with FHWA and LADOTD policies and procedures.

Diamondhead Wastewater Treatment Plant Expansion Program, Diamondhead, MS

Knight served as LH&J's Construction Manager for this \$24 million project to construct a 1.25 MGD wastewater treatment plant in Diamondhead, MS. He performed as the Owner's Representative in all matters between the Design Engineers, the Construction Contractor and the Owner for this FEMA funded project.

Construction Management For Various United States Army Corps of Engineers Projects

Mr. Knight performed as LH&J's Construction Program Manager for the \$15 Million in Construction Management services that were provided to the United States Army Corps of Engineers (USACE) between May 2014 and March 2017. Under this contract, a peak staffing of 38 full time Construction Management personnel consisting of Quality Assurance Representatives, Construction Managers, Project Engineers, Cost Estimators, Construction Schedulers, Supervisory Construction Representatives, Civil Engineering Technicians and Secretaries, were assigned to various USACE project sites throughout Southeast Louisiana from Lafayette, LA to Plaquemines Parish. The USACE evaluated the services provided by LH&J with respect to Customer Satisfaction as "Exceptional", the highest possible rating, in their most recent Performance Evaluation for the work performed under this highly demanding contract. These services provided by LH&J were instrumental in the construction of approximately \$2.0 billion in enhanced Flood Protection and other related projects throughout the Southeast Louisiana region over the last 2.5 years.

Inner Harbor Navigation Canal Surge Protection Barrier, New Orleans, LA

Structural Engineer and LH&J's Construction Manager for the 32-foot-tall north and south T-wall transitions, the north and south elevated access bridge ramps, the 150-foot-long steel dewatering bulkheads and the elevated safe house. All features were designed to comply with HSDRSDG criteria and construction cost for LH&J designed features was approximately \$66.5 million.

Jebel Ali National Container Terminal, Dubai, United Arab Emirates

Chief Resident Engineer for the Construction Management, Inspection and Supervision of a \$625 Million Container Port and Terminal Development at the Port of Jebel Ali, Dubai, United Arab Emirates. This ambitious two year project involved construction administration for two separate contracts to construct an 8,500 foot long wharf, perform earthworks to prepare 430 acres for site development and dredging of new approach channels, basins and berths. Extensive daily coordination between the two contractors was required to maintain productivity and avoid conflicts. The site employed over 1,000 labor personnel and operations continued 24 hours per day, 7 days per week to meet the Owner's ambitious schedule for completing this critical project.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

John M. Jackson, P.E.

Project Assignment:

Coastal / Hydraulic Engineer

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

9 Years of Experience with LH&J; 9 Years of Total Experience

Education: Degree(s)/Year Specialization:

University of New Orleans / 2018 / BS / Civil Engineering
Bob Jones University / 2011 / B.S. / Biology

Active registration: Year first registered/discipline:

2021 / Civil / LA License No. PE.0045804

Other experience and qualifications relevant to the proposed Project:

Jackson specializes in the design of civil projects such as improvements to major drainage structures, drainage studies, storm water management systems, green infrastructure, surveying, urban streets, highways, site developments, and utility expansions and relocations. He is currently the **Coastal / Hydraulic Engineer** for the New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project, **a major marsh creation project**.

Jackson has successfully designed projects for **Jefferson Parish**, Plaquemines Parish, and City of New Orleans Department of Public Works.

Jackson is a licensed Remote Pilot to fly drones for aerial surveys.

New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project, New Orleans, LA

Jackson is the Senior Coastal / Hydraulic Engineer for this **Coastal Restoration Project**. LH&J is providing construction management services, engineering during construction and resident inspection for the \$14 million project that includes shoreline stabilization, earthen dike containment, dredging and marsh creation. Duties include oversight of both office and field personnel, responding to contractor questions, and keeping the CPRA (Coastal Protection and Restoration Authority) informed of construction progress, procedures, and any information relevant from daily construction issues.

TEC Professional Services Questionnaire

John M. Jackson, P.E.
Project Assignment – Coastal / Hydraulic Engineer

Resume

Additional Experience and Qualifications

Geisenheimer Covered Canal Reconstruction, Metairie, LA

Jackson was Civil Engineer for this project. The Geisenheimer Covered Canal is the primary drainage canal for the portion of Jefferson Parish located between Metairie Road to the north, Airline Drive to the south, the Orleans/Jefferson Parish boundary to the east and Causeway Boulevard to the west. This area includes the Metairie Country Club and Metairie Club Gardens subdivision. The project entailed the design of 2,800 feet of **covered concrete box culvert** beneath the Metairie Country Club Golf Course.

Magazine Street Reconstruction, New Orleans, LA

Jackson is the Lead Civil Engineer for this project that consists of reconstruction of 12,500 linear feet of 35' wide roadway, including removal of over 18,720 linear feet of streetcar tracks that are buried under Magazine Street, construction of new concrete roadway, **replacement of the storm drainage system**, gravity sewer lines and water mains.

Canal Street Improvements, Metairie, LA

Jackson assisted in the preparation of plans for the first phase of this project. This project includes the installation of a new double barrel box culvert in an open canal and enclosure of the canal, along with new subsurface drainage to tie the existing drainage into the new box culvert.

FEMA Recovery Roads Program (RR028) Desire Group C, New Orleans, LA

Jackson is the Lead Civil Engineer for this project that consists of 20,585 linear feet of roadway reconstruction and rehabilitation. This includes the design and replacement or repair of the storm drainage system, gravity sewer lines and water mains.

Zatarain's Brands Shipping Facility, Gretna, LA

Jackson was Lead Civil Engineer for this project. This 12-acre facility would hold rainwater for days after a storm event, causing damage to the truck loading area and inhibiting truck movement. The project included an investigation of the site and the surrounding areas, a stormwater management plan for the City of Gretna and the Zatarain's facility, and the design of a new drainage system, improved stormwater storage measures, and new paving.

District 4 Covered Canal Feasibility Study, Jefferson Parish, LA

Jackson was Civil Engineer for this project. The purpose of this project was to study the impact of replacing existing open canals in District 4 of Jefferson Parish with covered concrete box culverts, allowing for land development on top of the existing canals. The project included the modeling of 79,400 feet of canals and the impact of replacing them with box culverts.

Kenner Discovery Modular Campus, Kenner, LA

Jackson was Civil Engineering Designer on this project. This project was a flood mitigation study including hydraulic modeling, drainage design, ecological considerations, storm water detention and green infrastructure.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Bryce L. Vazquez, BSCE

Project Assignment:

Coastal / Hydraulic Engineering

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

3 Years of Experience with LH&J; 3 Years of Total Experience

Education: Degree(s)/Year Specialization:

University of New Orleans/B.S./2020/Civil Engineering

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Since joining LH&J in 2021, Vazquez has received successively more responsible assignments. He has achieved a wide array of civil engineering experience with a focus in waterline and sewer line design, subsurface drainage design and stormwater management systems including green infrastructure. He began his career with LH&J as a resident inspector and is now regularly called upon during construction administration to coordinate with contractors and field personnel.

New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project, New Orleans, LA

Vazquez is performing **Coastal / Hydraulic Engineering** for this **Coastal Restoration Project**. LH&J is providing construction management services, engineering during construction and resident inspection for this \$14 million project that includes shoreline stabilization, earthen dike containment, dredging and marsh creation. Duties include reviewing contractor submittals, progress surveys, and daily inspection reports and photos.

New Orleans Country Club Racquet Center and Golf Course Improvements, New Orleans, LA

Vazquez prepared plans for this project that included site drainage improvements and stormwater management systems with green infrastructure. He also prepared a Stormwater Pollution Prevention Plan (SWPPP) for the work, prepared permit applications with the City of New Orleans and Louisiana Department of Transportation and Development and performed construction administration.

TEC Professional Services Questionnaire

Bryce L. Vazquez, BSCE
Project Assignment – Coastal / Hydraulic Engineering

Resume

Additional Experience and Qualifications

Canal Street Improvements, Metairie, LA

Vazquez performed construction administration for the final phase of this project that included repaving of Canal Street and with new subsurface drainage to tie the existing drainage into the new box culvert.

Magazine Street Reconstruction, New Orleans, LA

Vazquez assisted in the preparation of plans and performed quantity takeoffs for this project that consists of reconstruction of 12,500 linear feet of 35' wide roadway, including removal of over 18,720 linear feet of streetcar tracks that are buried under Magazine Street, construction of new concrete roadway, replacement of the storm drainage system, gravity sewer lines and water mains.

Vulcan Street Drainage Improvements, Jefferson Parish, LA

Vazquez performed construction administration for this project that included drainage improvements along Vulcan Street between Par 3 Drive and Telestar Street including replacement of gravity sewer, two waterline offsets, replacement of concrete roadway pavement, curbing, driveways and sidewalks. Vazquez coordinated resident inspection, reviewed inspector daily reports, reviewed contractor invoices and provided resident inspection on an as-needed basis.

N. Sibley Street at West Napoleon Subsurface Drainage Improvements (Phase I & II) Jefferson Parish, LA

Vazquez was the Resident Inspector for this subsurface drainage project that consisted of removing concrete walks and drives to install a new 1,130 linear feet of 8" PVC/C900 Water Main, removing 1000 feet of PCC pavement to install new 24" R.C.P. drain line, and replacing 6" sewer lines with PVC on a residential street in Metairie, LA. Vazquez monitored the work and contractor QC and QA activities, coordinated materials testing activities, verified contractor payment request quantities and prepared daily reports summarizing construction activities.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Daniel A. Flores, P.E.

Project Assignment:

Structural Engineer

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

16 Years of Experience with LH&J; 16 Years of Total Experience

Education: Degree(s)/Year Specialization:

University of New Orleans – B.S. / 2009 / Civil & Environmental Engineering

University of New Orleans – M.S. / 2013 / Civil Engineering

Active registration: Year first registered/discipline:

2013 / Civil / LA License No. PE.0038154

Other experience and qualifications relevant to the proposed Project:

Flores has structural engineering design experience in a wide variety of projects, including buildings, bridges, flood control structures and pump stations. He is very proficient in foundation design and in the use of structural engineering design software.

Bulkhead & Site Improvements, Southern Yacht Club, New Orleans, LA

Flores was the Lead Structural Engineer for the design of a bulkhead replacement and site improvements at the Southern Yacht Club in New Orleans, LA for this Coastal Engineering Project. Flores was responsible for the design of new steel sheet pile bulkhead with tie-back anchors and foundations for two new 5 ton jib cranes. Flores prepared the Permit Application documents for the Joint Coastal Use Permit/USACE Section 10 and Section 404 Permit. Flores also was responsible for the Bid Phase and Construction Administration services on the project. The features designed by LH&J had a construction cost of approximately \$1.1 million.

East of Harvey Canal Floodwall-Contract 2; Westbank & Vicinity; New Orleans, LA-Boomtown Casino to Hero Pumping Station, Harvey, LA

Flores assisted with the engineering and design, as well as the Engineering During Construction for this USACE Hurricane Protection project that consisted of over 8,000 LF of T-wall, large steel floodgates, drainage, roadways, sluice gates, marine fender system, dolphins, boat ramps, architecture. Project alignment and design criteria changed and redesigned after Katrina. LH&J provided design documentation report, plans and specifications and engineering during construction. Floodwall up to 23' tall designed to latest COE standards. Cost \$150 Million.

Daniel A. Flores, P.E.
Project Assignment – Structural Engineer

Resume

Additional Experience and Qualifications

Preparation of Plans and Specifications for the Hurricane Protection System at West Bank Non-Federal Levee NOV-NF-W-04 Oakville to LaReussite in Plaquemines Parish, LA

Flores was the Structural Engineer for this project to provide a 50-year level of hurricane protection for the west bank of Plaquemines Parish. His primary responsibilities were the engineering analyses and preparation of the calculations, plans and specifications for the T-walls and I-wall transitions into the levee sections. The north T-wall is 550 feet long with 11 concrete monoliths, including right angle and 45 degree PI monoliths with wall heights up to 8.5 feet tall. At the southern end of the project he was responsible for the structural design of the 540-foot long T-wall with special 22-foot tall monoliths that cross the LaReussite canal and are penetrated by eight siphon tubes that are each six feet in diameter.

Inner Harbor Navigation Canal Surge Protection Barrier, Orleans Parish, LA

Flores was the primary Structural Engineer for the design of each of the features that were designed by LH&J as a sub-consultant to Shaw E&I. These features included the north T-wall transition, the south T-wall transition, the north access ramp, the south access ramp, the dewatering bulkheads and the elevated safe house. He performed the calculations for the foundations and above ground structures in compliance with all HSDRSDG requirements. The features designed by LH&J had a construction cost of approximately \$70 million.

Storm Proofing Orleans Parish Drainage Pump Stations, New Orleans, LA

Assisted with the structural engineering design for the Storm Proofing of S&WB pump stations Nos. 5 and 17. Project consisted of structural enhancement of historic masonry structures to withstand 156 mph winds and flooding. Assisted with Engineering During Construction to review shop drawings and submittals and help resolve construction related problems.

Professional Engineering Oversight Services for Pontchartrain Levee District, St. Charles Parish, LA

Assisted with the review of the Cross Bayou Pump Station structural design that was prepared by another engineering firm. Flores also assisted with preparing the structural calculations, design drawings, specifications and cost estimate for the District's New Administration Building.

Lincoln Beach Floodwall and Floodgate, LPV 107, New Orleans, LA

Flores was the structural engineer for this project to replace 1500 feet of existing I-walls and 34 foot wide floodgate with new HSDRSDG compliant T-walls and a new rolling floodgate. He participated in the preparation of a design documentation report (DDR) that considered using a levee, with and without deep soil mixing, and a T-wall alternative. Due to restrictive ROW requirements the 17-foot tall T-wall with prestressed concrete piles was selected for final design and construction. He was also participated in the EDC activities. The construction cost for this project was \$9.3 million.

Golden Meadow and South Lafourche Crawfish Farms Pumping Station Floodwalls, Golden Meadow, LA

Flores was the primary structural engineer for the designs and preparation of plans and specifications for Phase 1 repair at Golden Meadow and South Lafourche Crawfish Farms Pumping Station Floodwalls. This project upgraded existing protection to post-Katrina design standards including new sheet piling and kicker pile walls, concrete scour protection and related features. The construction cost for this project was \$12.8 million.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Eric R. Wright, P.E.

Project Assignment:

Structural Engineer

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

4 Years of Experience with LH&J; 4 Years of Total Experience

Education: Degree(s)/Year Specialization:

Louisiana State University/ B.S. / 2020 / Civil Engineering

Active registration: Year first registered/discipline:

2024 / Civil / LA License No. PE.0049045

Other experience and qualifications relevant to the proposed Project:

Wright has been with LH&J full time since 2020 and has the following relevant experience:

NASA Michoud Assembly Facility – East & West Barge Dock Projects and Drainage Pump Station Outfall Condition Assessment, New Orleans, LA

LH&J has been NASA's Michoud Assembly Facility's go to marine engineering firm since 1994. Structural Engineer Intern on the recently completed inspections and assessments of the West and East Barge Docks and Mooring Dolphins. Wright prepared calculations, repair details, assisted in writing the assessment report, and developed opinions of probable construction costs.

Avondale Shipyard Redevelopment, Westwego LA

Assisted in the analysis and design for multiple parts of the project. Some of the parts include designing a new truck access ramp, a new topping for the wet docks, and also beam modifications for crane rails. Additionally, Wright worked on AutoCAD structural drawings and AutoCAD drawings for the dredging phase of the project.

Bayou Segnette Drainage Pump Station No. 1 Bridge, Jefferson Parish, LA

Wright assisted in analyzing and designing bridge deck and bridge bent caps for a bridge at a drainage station on Bayou Segnette.

TEC Professional Services Questionnaire

Eric R. Wright, P.E.
Project Assignment – Structural Engineer

Resume

Additional Experience and Qualifications

Rehabilitation of Berths 2 & 3 City Docks, Port of Lake Charles, LA

Performed structural engineering designs and drafting on this CMAR project requiring Substructure Inspection, Coordination with the CMAR Contractor, Partnering, Design Constructability Reviews, Value Engineering Reviews, Cost Estimating, Detailed Design, Preparation of Plans and Specifications to demolish the existing timber pile wharf and replace with a new concrete wharf with a uniform live load capacity of 2,000 PSF and capable of supporting a Liebherr Mobil Harbour Crane LHM 550.

Polk Street Bridge, Terrebonne Parish, LA

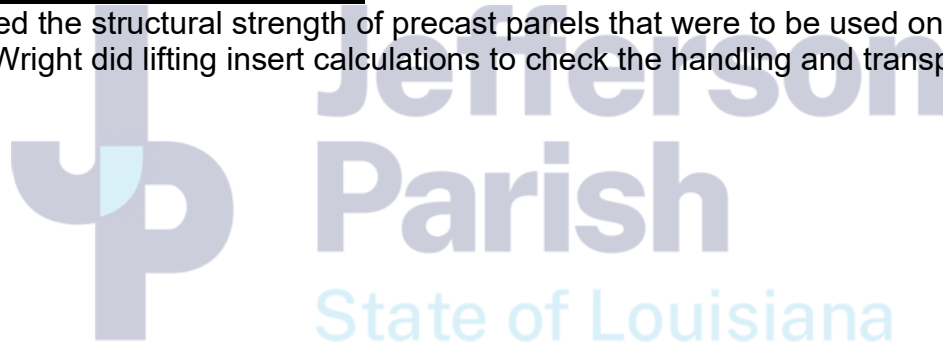
Wright was a part of producing design calculations for a bridge deck and bridge bent caps for a bridge with three 23 foot spans of 29 foot clear crowned roadway with an 8 percent skew.

Mermentau River GXC Delivery Meter Station, Cameron Parish, LA

In this project Wright helped analyze and design a 71 foot 8 inch by 78 foot platform to be used in an oil and gas field. Furthermore, shop drawings for the platform were created.

SUNOCO Ship Dock, Netherlands, TX

Wright checked the structural strength of precast panels that were to be used on a ship dock. Additionally, Wright did lifting insert calculations to check the handling and transport stresses on the panel.



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Colin V. Landry, E.I.

Project Assignment:

Structural Engineering

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

4 Years of Experience with LH&J; 4 Years of Total Experience

Education: Degree(s)/Year Specialization:

University of Louisiana at Lafayette / B.S. / 2021 / Civil Engineering

Active registration: Year first registered/discipline:

2022 / Civil / LA License No. EI.0035122

Other experience and qualifications relevant to the proposed Project:

Landry has been with LH&J since 2017 and has the following relevant experience:

Avondale Shipyard Redevelopment, Avondale, LA

Assisted in the analysis and design for multiple parts of the project. Some of the parts include designing a new truck access ramp and beam modifications for crane rails. Landry also worked on AutoCAD structural drawings.

Rehabilitation of Berths 2 & 3 City Docks, Port of Lake Charles, LA

Performed structural engineering designs and drafting on this CMAR project requiring Substructure Inspection, Coordination with the CMAR Contractor, Partnering, Design Constructability Reviews, Value Engineering Reviews, Cost Estimating, Detailed Design, Preparation of Plans and Specifications to demolish the existing timber pile wharf and replace with a new concrete wharf with a uniform live load capacity of 2,000 PSF and capable of supporting a Liebherr Mobil Harbour Crane LHM 550.

Darrow Sandpit, Darrow, LA

Created a permit application for dredging in a sandpit, including plans and cross sections.

Wilson Investment Bulkhead, Belle Chasse, LA

Assisted in the analysis and design of a cantilevered steel sheet pile bulkhead and an earthen ramp over the adjacent flood protection levee. Landry also worked on the AutoCAD drawings for the project.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Mark K. Annino, E.I.

Project Assignment:

Civil Engineering

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

29 Years of Experience with LH&J; 29 Years of Total Experience

Education: Degree(s)/Year Specialization:

University of New Orleans / B.S. / 1995 / Civil Engineering

Active registration: Year first registered/discipline:

1995 / Civil / LA License No. EI.0016308

Other experience and qualifications relevant to the proposed Project:

Annino has vast experience preparing plans and specifications for numerous municipal and private projects. The scopes of these projects include roadways, bridges, subsurface and major drainage structures, water distribution systems, utility system replacement / relocation (sewer, water, drain, etc.), hydraulic structures and horizontal / vertical geometric layouts. Annino has also been involved in the permit application process and construction administration of most projects he has designed.

Jefferson Parish District 5 Streets Project, Metairie, LA

Annino performed as Civil Engineering Design Team Leader on this project. This project includes the rehabilitation of over 100 flood damaged streets on the East Bank of Jefferson Parish. The project is being funded by FEMA.

Dakin Street Improvements, Metairie, LA

Annino performed Civil Engineering on this project. The Dakin Street Corridor project is divided into three Phases. Phase 1 entailed the construction of an underpass, railroad bridge and pump station at Dakin Street and Airline Drive. Phase 2 includes a 3,200 feet overpass and 1,250 feet of 4-lane roadway from the underpass to Jefferson Highway. Phase 3 will extend L&A Road from Dakin Street to the Earhart Expressway and includes installation of new subsurface drainage.

Canal Street Improvements, Metairie, LA

Annino is the Civil Engineering Design Team Leader for this project. This project includes the installation of a new double barrel box culvert in an open canal and enclosure of the canal, along with new subsurface drainage to tie the existing drainage into the new box culvert.

TEC Professional Services Questionnaire

Mark K. Annino, E.I.
Project Assignment – Civil Engineering

Resume

Additional Experience and Qualifications

17TH Street Canal Widening Between Hoey's Canal and Airline Drive, Jefferson Parish / New Orleans, LA

Annino was the Civil Engineering Design Team Leader for this project. This project entails the widening and concrete lining of approximately 700 feet of the 17th Street Canal between the Hoey's Canal and Airline Drive, including the construction of new pile-supported concrete canal bottom and pile-supported concrete retaining side walls.

East and West Livingston Place Drainage Improvements, Metairie, LA

Annino was the Civil Engineering Design Team Leader for this project. This project consisted of the reconstruction of East and West Livingston Place including installation of new subsurface drainage and utility relocation.

Cuddihy Drive and Woodvine Avenue Drainage Improvements, Metairie, LA

Annino was the Civil Engineering Design Team Leader for this project. This project consisted of the upgrading of the subsurface drainage system along Cuddihy Drive and a part of Woodvine Avenue and the reconstruction of the affected roadways.

Magazine Street / Prytania Street Reconstruction, New Orleans, LA

Annino was the Civil Engineering Design Team Leader for this project. This project entailed the reconstruction of 26,500 feet of roadway including replacement of subsurface drainage and utility relocation.

Replace Six Canal Crossings Over General DeGaulle Boulevard Canal, New Orleans, LA

Annino was the Civil Engineering Design Team Leader for this project. This project required the removal of 6 existing canal crossings and replacement them with double 20 wide concrete box culverts and replacement of roadway crossing.

Louisville Street /Catina Street Reconstruction, New Orleans, LA

Annino was the Lead Civil Engineering Designer for this project. This project entailed the reconstruction of 3,950 feet of roadway including replacement of subsurface drainage and utility relocation.

Claiborne Avenue Box Canal I-Monticello Canal to Leonidas Street, New Orleans, LA

Annino performed as Lead Civil Engineering Designer on this project. This project entailed the construction of a 20 foot wide by 10 foot deep Drainage Culvert and reconstruction of the Claiborne Ave damaged roadway under the SELA program for the Corps of Engineers (COE). Also included replacement of local street subsurface drainage.

Hollygrove Drainage Improvements, New Orleans, LA

Annino performed Civil Engineering on this project. LH&J designed all drainage improvements including the Forshey Street-Railroad Embankment Drainage Culvert Improvements, the Dublin Street and Eagle Street Drainage Culvert Improvements, the Oleander Street Culvert modifications, and the Pritchard Street Pumping Station.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Vincent J. Leco, III, P.E.

Project Assignment:

Civil Engineer

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

4 Years of Experience with LH&J; 4 Years of Total Experience

Education: Degree(s)/Year Specialization:

University of New Orleans - B.S. / 2019 / Civil Engineering

Active registration: Year first registered/discipline:

Civil / LA License / PE.0047935

Other experience and qualifications relevant to the proposed Project:

Leco has been with LH&J since 2020. He has worked on various civil engineering projects including improvements to major drainage structures, storm water management systems with green infrastructure, drainage pump stations, drainage studies, new waterlines, new sewer lines, utility expansions and relocations, surveying and site design.

New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project, New Orleans, LA

LH&J is providing construction management services, engineering during construction and resident inspection for this \$14 million **coastal restoration project** that includes shoreline stabilization, earthen dike containment, dredging and marsh creation. Leco assists with engineering services needed during construction.

Dollar General Stores, Various Locations, TX

Civil Engineer. Site developments for Dollar General Stores at various locations throughout Texas. These site developments consist of parking lot design, site water and sewerage, drainage and stormwater management systems including detention storage.

Tractor Supply Stores, Various Locations, LA

Civil Engineer. Site developments for Tractor Supply Stores at various locations throughout Louisiana. These site developments consist of parking lot design, site water and sewerage, drainage and stormwater management systems including detention storage.

TEC Professional Services Questionnaire

Vincent J. Leco, P.E.
Project Assignment – Civil Engineer

Resume

Additional Experience and Qualifications

Desire Street Neighborhood, New Orleans, LA

Civil Engineer. The project includes subsurface drainage improvements and roadway reconstruction on Piety St. from Florida Ave. to Higgins Blvd. The project also includes numerous paving incidental repairs and bringing all involved intersections to meet ADA code throughout Desire neighborhood and replacement of water, gravity sewer and subsurface drainage.

Hayne Boulevard Relief Well Drainage, New Orleans, LA

Civil Engineer. Prepared plans and specifications for the connection of a relief well system into the existing subsurface drainage system along Hayne Blvd. Work required design and detailing of a 12-inch water main offset.

Geisenheimer Canal Improvements, Metairie, LA

Engineer Intern. Assisted in design and detailing of a 8' x12' covered canal box culvert paralleling existing Geisenheimer drainage canal over a distance of approximately 2,800 linear feet. Box culvert is structurally integrated with existing drain lines at three junction box tie-in locations.

Loumor Outfall Ditch Improvements, Metairie, LA

Engineer Intern. Developed final plans for two (2) new underground drainage lines. One drainage line consists of 78" x 122" Reinforced Concrete Pipe Arch (RCPA) segments along the existing drain line identified as Loumor Ditch combining for a length of approximately 1,300 linear feet. The second line consists of a 9' x 6' covered canal box culvert spanning approximately 320 linear feet. These new segments will tie-into the existing below-grade Geisenheimer Canal box culvert that extends along Airline Drive.

Vulcan Street, Harvey, LA

Engineer Intern. Developed plans and specifications for subsurface drainage system upgrades and road replacement along Vulcan St. from Par 3 Dr. to Telestar St. The project includes removal and replacement of driveways, handicap ramps, and approximately 1,000 linear feet of 28' wide of concrete road.

MAF Building 103 Drainage Study, New Orleans, LA

Assisted project engineer in analyzing hydraulics of the roof drainage system for Building 103 Michoud Assembly Facility including the subsurface drainage under the building and extending to the pumped outfall canal and to recommend improvements to reduce ponding on the approximate 38 acre building roof.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

William J. Muller, P.L.S.

Project Assignment:

Land Surveyor

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

20 Years of Experience with LH&J; 50+ Years of Total Experience

Education: Degree(s)/Year Specialization:

Southeastern Louisiana University / 1954

Active registration: Year first registered/discipline:

1995 / Land Surveying / LA License No. PLS. 0004756

Other experience and qualifications relevant to the proposed Project:

Muller has extensive experience in all aspects of land surveying throughout Louisiana. He was technical manager for the largest land survey firm in Southeast Louisiana for many years. Prior to that he worked in the offshore industry spotting well locations, run field crews for numerous Louisiana Power and Light topographic and boundary surveys, analyzed thousands of boundary surveys, and supervised multiple field crews, draftsmen and land surveys. He has been providing land surveying for the firm the past 11 years.

Following is a small sampling of Muller's experience:

Woodland Drive – General DeGaulle Drive to Tullis Drive

Lead Land Surveyor. Topographic and boundary survey for City of New Orleans roadway project.

Magazine Street - Roadway Improvements

Lead Land Surveyor. Topographic and boundary survey for City of New Orleans roadway project.

General DeGaulle Canal Crossings

Lead Land Surveyor. Topographic and boundary survey for State Highway 428.

South Claiborne Avenue Canal I

Lead Land Surveyor. Topographic and boundary survey for State Highway 90.

St. Charles Avenue Napoleon Avenue to Calliope Street

Lead Land Surveyor. Topographic and boundary survey for City of New Orleans roadway.

William J. Muller, P.L.S.
Project Assignment –Land Surveyor

Resume

Additional Experience and Qualifications

I-10 Metairie – Causeway to Orleans Parish Line

Lead Land Surveyor. Topographic and boundary survey for Interstate 10.

I-10 Metairie – Clearview to Causeway

Lead Land Surveyor. Topographic and boundary survey for Interstate 10.

I-10 Metairie – Veterans Memorial Boulevard to Clearview

Lead Land Surveyor. Topographic and boundary survey for Interstate 10.

I-10 Kenner – Williams Boulevard Interchange

Lead Land Surveyor. Topographic and boundary survey for Interstate 10.

US 190 - Mandeville – Causeway to State Park

Lead Land Surveyor. Topographic and boundary survey for U.S. Highway 190.

US 190 - Slidell – Fremaux Interchange

Lead Land Surveyor. Topographic and boundary survey for U.S. Highway 190.

US 190 - Slidell – Fremaux - 9th To I-10

Lead Land Surveyor. Topographic and boundary survey for U.S. Highway 190.

I-10 Slidell - LA 433 to US 190

Lead Land Surveyor. Topographic and boundary survey for Interstate 10.

US 190 Slidell - US 11 to Thompson Rd.

Lead Land Surveyor. Topographic and boundary survey for U.S. Highway 190.

ST. Tammany Parish East of Abita Springs – New Highway from LA 36 to LA 435

Lead Land Surveyor. Topographic and boundary survey for new Louisiana state highway.

LA 611 – Metairie Road

Lead Land Surveyor. Topographic and boundary survey for State Highway LA 611.

I-10 New Orleans - South Broad to St. Charles

Lead Land Surveyor. Topographic and boundary survey for Interstate 10.

LA 3139 Earhart Boulevard – Jefferson/Orleans Parish Line to Clara Street

Lead Land Surveyor. Topographic and boundary survey State Highway 3139.

Lake Charles – McNeese/Airport

Lead Land Surveyor. Topographic and boundary survey for Lake Charles, Louisiana airport.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Daniel D. Bindewald

Project Assignment:

Survey Party Chief

Name of Firm with which associated:

LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

15 Years of Experience with LH&J; 15 Years of Total Experience

Education: Degree(s)/Year Specialization:

Southeastern Louisiana University / B.A. / Criminal Justice

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Bindewald has served as a survey party chief on numerous projects.

His land surveying experience includes a variety of survey types: boundary, coastal marsh, topographic, base flood elevation, drainage, elevation grid surveys for contour development and hydrographic surveys. He has coastal marsh survey and mapping experience at sites across south Louisiana, Mississippi and Texas.

He was the party chief responsible for several U.S. Army Corps of Engineers survey contracts across south Louisiana; responsibilities included levee centerline profiles, cross section surveys, baseline traversing and riverfront topographic surveys.

Survey Experience:

- East Jefferson Levee District Foreshore Protection, Jefferson Parish, LA
- Jesuit Bend Mitigation Bank Hydrographic Survey – Plaquemines Parish, LA
- GIWW to Clovelly Hydrologic Restoration Hydrographic Survey – Lafourche Parish, LA
- LPV 20.2 Foreshore Protection – Jefferson Parish, LA
- Grand About Vegetative Ridge Restoration – Plaquemines Parish, LA
- Saltwater Sill LaBranche Wetlands Hydrographic Survey – St. Charles Parish, LA
- Pipeline Survey – Mississippi River Entergy Site – St. Francisville, LA
- Elevation Assistance Program – St. John the Baptist Parish, LA

Daniel D. Bindewald
Project Assignment – Survey Party Chief

Resume

Additional Experience and Qualifications

- Algiers Lock Forebay Water Line Crossing Hydrographic Survey – Orleans Parish, LA
- Levee Centerline and Cross Section Survey – LPV 109.02a from south of I-10 to CSX Tracks – Orleans Parish, LA
- Mississippi River Ventures Aggregate Yard – St. Charles Parish, LA
- Various Surveys for Pontchartrain Levee District
- Avondale Dock Multi-Beam Sonar/Hydrographic Survey – Jefferson Parish, LA



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Paul H. Morales, IV

Project Assignment:

Survey Party Chief

Name of Firm with which associated:

LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

10 Years of Experience with LH&J; 11 Years of Total Experience

Education: Degree(s)/Year Specialization:

University of New Orleans / B.S. / 2013 / Civil Engineering

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Morales has surveying, civil engineering design and resident inspection experience. During two summers while still in college, he often served as an LH&J survey crew member. He was a design engineer for civil site work on numerous CVS/Pharmacy and Dollar General store sites. Large Scale Topographical and ALTA Surveys for U.S. Army Corps of Engineers, Plaquemines Parish Government, and a major pharmacy chain. Elevation, Construction Layout and Pile Layout, GPS, Robotics, Total Station experience including data transfer, plotting and printing. Manual and Mechanical Traffic Counts.

Survey Experience

- Large Scale Topographical and ALTA Surveys for U.S. Army Corps of Engineers, Plaquemines Parish Government and a major pharmacy chain.
- Lake Borgne Shoreline Protection Side Scan Sonar, St. Bernard Parish, LA
- Hydrographic Survey of Darrow Sand Pit Dredge Operations, Ascension Parish, LA
- Hydrographic Survey for Charenton Flood Gate, St. Mary Parish, LA
- Elevation, Construction Layout and Pile Layout
- GPS, Robotics, Total Station experience including data transfer, plotting and printing.
- Manual and Mechanical Traffic Counts.
- Pile Layout and Topographic Surveys for U.S. Army Corps of Engineers, Inner Harbor Navigation Canal and MRGO Closure Structure.
- Survey of levees abutting Pump Stations in St. Tammany, Plaquemines and St. Bernard Parish
- Mississippi River Dredging Survey, Avondale Shipyard Redevelopment, Avondale, LA
- South Shore Harbor Marina Dredging Survey, New Orleans, LA

TEC Professional Services Questionnaire

Paul H. Morales, IV
Project Assignment – Survey Party Chief

- Grand Isle Dredging Study, Grand Isle, LA
- HSDRRS Levee Profiles for Southeast Louisiana Flood Protection Authority-East, Lake Pontchartrain Levee System, New Orleans, Jefferson and St. Bernard Parishes, LA

His resident inspection experience includes the following:

- Multiple CVS/Pharmacy stores
- Multiple Dollar General stores
- Hoey's Canal Improvements (Phase II & III), Jefferson Parish, LA
- Alliance Levee Breach Repair - Plaquemines Parish, LA
- Pontchartrain Center – Front Driveway Asphalt Project, Kenner, LA
- Jefferson Parish N. Hullen Sewer Force Main Rehabilitation, Metairie, LA
- Jefferson Parish Canal Street Median Improvements, Metairie, LA
- Avondale Dock Multi-Beam Sonar/Hydrographic Survey – Jefferson Parish, LA



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Brandon M. Barger

Project Assignment:

Construction Inspector

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

1 Year of Experience with LH&J; 14 Years of Total Experience

Education: Degree(s)/Year Specialization:

N/A

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Barger's 14 years of experience includes construction inspection and performing as a senior technician at a geotechnical engineering firm and as a quality control supervisor at a local construction contractor. His experience at LH&J includes:

New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project, New Orleans, LA

Barger is the Construction Inspector for this **Coastal Restoration Project**. LH&J is providing construction management services, engineering during construction and resident inspection for the \$14 million project that includes shoreline stabilization, earthen dike containment, dredging and marsh creation. Duties include daily oversight of construction operations, documentation of tide gages and site conditions, daily reading of marsh fill grade stakes, and preparation of daily reports.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Timothy "Parker" Verlander

Project Assignment:

Construction Inspector

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

3 Years of Experience with LH&J; 3 Years of Total Experience

Education: Degree(s)/Year Specialization:

Elon University / B.S. / 2021 / Civil Engineering

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project, New Orleans, LA

Verlander was a Construction Inspector for this **Coastal Restoration Project**. LH&J is providing construction management services, engineering during construction and resident inspection for the \$14 million project that includes shoreline stabilization, earthen dike containment, dredging and marsh creation. Duties included daily oversight of construction operations, documentation of tide gages and site conditions, daily reading of marsh fill grade stakes, and preparation of daily reports that summarized the construction work performed.

Vulcan Street Drainage Improvements, Jefferson Parish, LA

Verlander was a Construction Inspector for this project that included drainage improvements along Vulcan Street between Par 3 Drive and Telestar Street including replacement of gravity sewer, two waterline offsets, replacement of concrete roadway pavement, curbing, driveways and sidewalks. Duties included daily oversight of construction operations, determining construction quantities, and preparation of daily reports that summarized the construction work performed.

Canal Street Improvements, Metairie, LA

Verlander was a Construction Inspector for the final phase of this project that included repaving of Canal Street and with new subsurface drainage to tie the existing drainage into the new box culvert. Duties included daily oversight of construction operations, determining construction quantities, and preparation of daily reports that summarized the construction work performed.

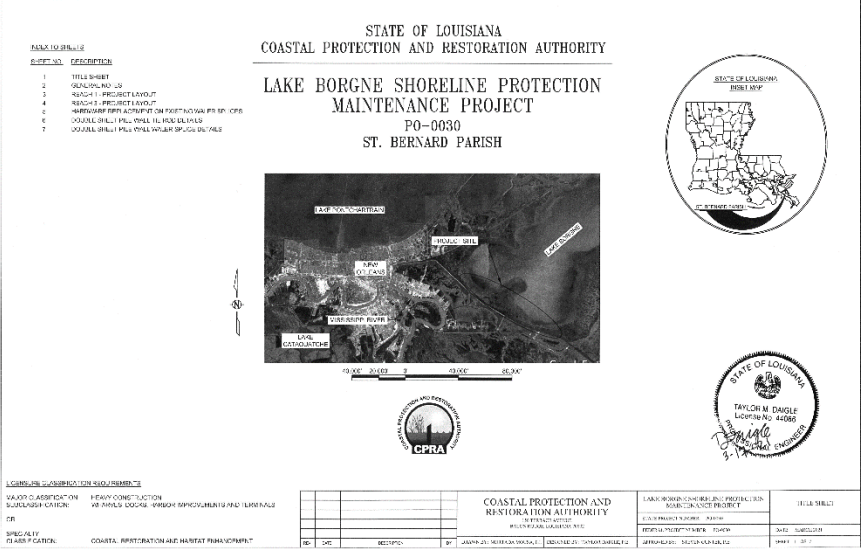

TEC Professional Services Questionnaire

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>New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project New Orleans, LA</p> <p>Coastal Protection & Restoration Authority 150 Terrace Avenue Baton Rouge, LA 70802 David Chambers, P.E.-504-280-4069</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="color: red; text-align: center;">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Coastal Restoration ✓ Construction Management ✓ Engineering During Construction ✓ Resident Inspection <p style="color: red; text-align: center; margin-top: 10px;">Relevant Key Personnel</p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S., PTOE ✓ Robert E. Nockton, P.E. ✓ John M. Jackson, P.E. ✓ Vincent J. Leco, III, P.E., ✓ Bryce L. Vazquez ✓ T. Parker Verlander ✓ Brandon M. Barger ✓ Paul H. Morales, IV </div> <div style="text-align: center; margin-top: 10px;">  </div>	<p>Linfield, Hunter & Junius, Inc. is performing Construction Management, Engineering During Construction and Resident Inspection for the New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project.</p> <p>The project is a major shoreline stabilization, dredging, earthen containment and marsh creation project. LH&J's scope includes review of contractor submittals and as-built surveys, review of contractor invoices, responding to contractor RFIs, review of contractor certified payrolls, David Bacon wage review, archaeological services and resident inspection services.</p> <div style="text-align: center; margin-top: 20px;">  </div>	
<div style="text-align: center;">  </div> <p style="text-align: center; font-size: small;">August 29, 2022 N 30° 9' 13.711" W 89° 44' 34.620" New Orleans, LA United States Lake Borgne Project Number: 10</p>	<div style="text-align: center;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2024 E	\$14.3 Million (Estimated)	\$14.3 Million (Estimated)



TEC Professional Services Questionnaire

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lake Borgne Shoreline Protection Maintenance Project St. Bernard, LA</p> <p>Coastal Protection and Restoration Authority 150 Terrace Avenue Baton Rouge, LA 70802 Taylor Daigle 504-282-3536</p>	<p>Linfield, Hunter & Junius, Inc. provided Construction Management, Engineering During Construction and Resident Inspection for the Lake Borgne Shoreline Protection Maintenance Project.</p> <p>The project consisted of the repair and rehabilitation of a long reach of shoreline protection bulkheads in Lake Borgne. LH&J's scope included review of contractor submittals, attending weekly progress meetings, review of contractor invoices, responding to contractor RFIs, review of contractor certified payrolls, David Bacon wage review, and resident inspection services.</p>	
<div style="border: 1px solid #ccc; background-color: #f0f0f0; padding: 10px; margin-bottom: 10px;"> <p style="color: #C00000; text-align: center;">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Construction Management ✓ Engineering During Construction ✓ Resident Inspection </div> <div style="border: 1px solid #ccc; background-color: #f0f0f0; padding: 10px;"> <p style="color: #C00000; text-align: center;">Relevant Key Personnel</p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S., PTOE ✓ Robert E. Nockton, P.E. ✓ Paul H. Morales, IV </div>	<div style="text-align: center;">  </div>	
<p style="text-align: center; font-size: 2em; color: #0070C0; opacity: 0.5;">P</p>	<div style="text-align: center;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021 (A)	\$340,000	\$340,000

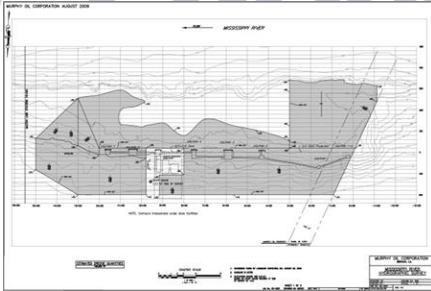

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Grand Bayou Vegetative Ridge Restoration Plaquemines Parish, LA</p> <p>Plaquemines Parish Government 333 F. Edward Hebert Blvd, Bldg. 500 Belle Chasse, LA 70037 Mr. Ken Dugas (504) 394-6115</p> <div style="background-color: #f0f0f0; padding: 10px; margin-top: 10px;"> <p style="color: #c00000; text-align: center;">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Coastal Planning and Design ✓ Permitting ✓ Ridge Restoration ✓ Shoreline Stabilization and Protection ✓ Beneficial Use of Dredge Material ✓ Living Shoreline Design ✓ Hydrologic and Hydraulic Modeling ✓ Design Analysis and Reports ✓ Technical Evaluations ✓ Cost Estimates and Value Engineering ✓ Field Investigations </div>	<p>LH&J was retained by the Plaquemines Parish Government to perform site investigations and preliminary engineering designs that would be used to restore the historic natural ridge that had previously meandered along the eastern bank of Grand Bayou. Initial efforts included site visits and assimilation of existing soils information that was available for nearby coastal restoration, as well as other types of projects. All aspects of constructability and long term survivability were considered in the planning stages. Considerations included the source and transportation of suitable materials to be used in reconstruction of the historic natural ridge, avoidance of underground pipelines and utilities that could be damaged by the construction operations and potential long term settlement, minimizing impacts to cultural resources and endangered species and long term survivability and performance of the reconstructed ridge.</p> <div style="display: flex; align-items: center;">  <div style="width: 55%;"> <p>The natural ridges that have previously existed in Southeastern Louisiana not only provided unique bio-diversity and habitat, but also assisted in flood risk reduction during tropical storms and hurricanes by functioning as a “speed bump” defending against coastal surges and waves by reducing wave heights and reducing surge levels. The natural rebuilding of these historic ridges has been hampered by the flood protection levees along the Mississippi River.</p> <p>To construct this project, natural sandy deposits will be dredged from designated borrow areas within the Mississippi River and transported overland by pipeline to the ridge restoration location along Grand Bayou. Access channels will be excavated to allow flotation of the ridge construction equipment and the marshy top soils will be retained on-site and used as a capping material to provide a loamy layer on top of the reconstructed ridge to facilitate plant establishment and growth.</p> <p>The ridge cross section was selected to provide optimum hydraulic performance in reducing overtopping wave heights and surge levels during tropical events. The ridge crest elevation was selected to account for future settlement of the weak underlying soils to ensure an acceptable long term resiliency and performance of the reconstructed ridge.</p> </div> </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Project is On Hold Awaiting Funding	\$100 Million (Estimated)	\$100 Million (Estimated)

TEC Professional Services Questionnaire

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Spanish Pass Freshwater Diversion Project, Venice, LA</p> <p>Plaquemines Parish Government 333 F. Edward Hebert Blvd, Bldg. 500 Belle Chasse, LA 70037 Mr. Ken Dugas (504) 394-6115</p> <div style="text-align: center; margin: 20px 0;">  </div> <div style="background-color: #d3d3d3; padding: 10px; margin-top: 10px;"> <p style="color: #c00000; margin: 0;">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Coastal Planning and Design ✓ Permitting ✓ Wetland Restoration ✓ Shoreline Stabilization and Protection ✓ Beneficial Use of Dredge Material ✓ Living Shoreline Design ✓ Hydrologic and Hydraulic Modelin ✓ Design Analysis and Reports ✓ Technical Evaluations ✓ Cost Estimates and Value Engineering ✓ Field Investigations ✓ Freshwater Diversion </div>	<p>While designing a project for the Plaquemines Parish Government to elevate Tidewater Road in Venice, LA, recently flown infrared imagery of the area was examined. The imagery indicated that Spanish Pass and Red Pass had once converged at the S- curve in Tidewater Road. Both Passes had originated at this point just below the junction of Grand Pass and the Mississippi River. Further research showed the passes had been shut off from Grand Pass in the 1960s, thereby eliminating a natural source of sediment and fresh water during high river periods. West of this point of convergence, Spanish Pass ran northwest and Red Pass ran west approximately 3 miles to the Wagon Wheel, a natural salt dome. The triangular area bounded by Spanish Pass, Red Pass, and the Wagon Wheel had been a vibrant marsh just 30 years ago but was now open water.</p> <p>LH&J recognized this site provided an ideal setting for a freshwater diversion project. Natural flow could be easily restored and at low cost by constructing a bridge and river outfall at the S-curve, the natural ridges along the passes and the high elevation of the Wagon Wheel salt dome would confine the fresh water and sediments and allow a natural setting for land creation. With support from Plaquemines Parish Government the firm nominated the project for consideration through the Coastal Wetlands Planning, Protection, and Restoration Act nomination process. The Spanish Pass Diversion Project was accepted as a Candidate Project in the Priority Project List Number 13 (PPL13). After going through a competitive evaluation with other candidate projects, the Spanish Pass Diversion Project received the highest ranking on PPL13 and was authorized to proceed to Phase I design.</p> <p>This project documents specialized experience in design of unique coastal restoration projects, technical presentations, knowledge of wetland morphology, and design of outfall structures.</p> <div style="text-align: right; margin-top: 20px;">  </div>	
<p style="text-align: center;">Completion Date (Actual or estimated):</p> <p style="text-align: center;">Project is On Hold Awaiting Funding</p>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
<p>Project is On Hold Awaiting Funding</p>	<p>\$4.5 Million (Estimated)</p>	<p>\$4.5 Million (Estimated)</p>

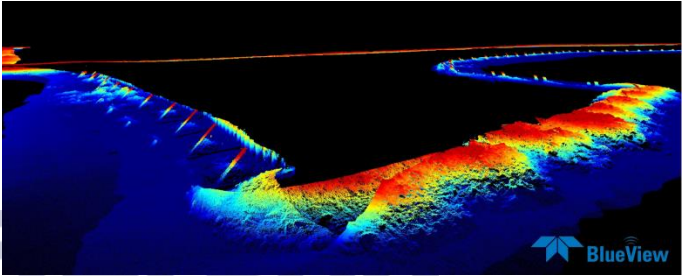
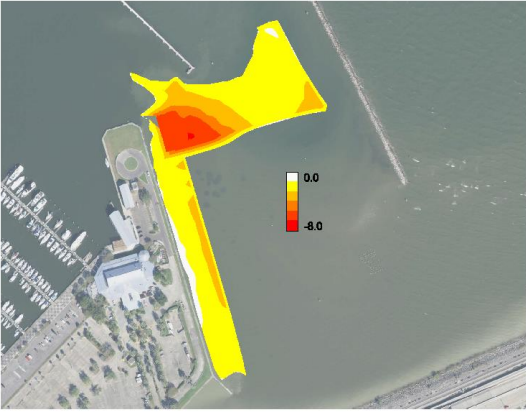
TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Murphy Oil U.S.A., Inc., Loading & Unloading Wharves Meraux, LA</p> <p>Murphy Oil U.S.A., Inc. Valero Refinery 2235 Jacob Drive Chalmette, LA 70043 504-277-4141</p> <div style="background-color: #d3d3d3; padding: 10px; margin-top: 10px;"> <p style="color: #a52a2a; text-align: center;">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Coastal Planning ✓ Permitting ✓ Design ✓ Beneficial Use of Dredge Material ✓ Design Analysis and Reports ✓ Technical Evaluations ✓ Cost Estimates and Value Engineering ✓ Field Investigations ✓ Conducting Geotechnical analysis, material testing and analysis </div>	<p>Since 2000 Linfield, Hunter & Junius, Inc. has been serving as Murphy Oil U.S.A.'s engineering consultant for their import/export docks on the Mississippi River in St. Bernard Parish. Murphy's dock consists of one berth for large deep draft ocean oil tankers and ocean going oil barges and two additional berths for smaller oil barges. Prepared plans and specifications for annual maintenance dredging, damage repairs, maintenance and improvements to barge and ship bulk oil loading and unloading facilities.</p> <p>Projects to date include the following:</p> <ul style="list-style-type: none"> ❖ Preparation of plans and specifications for annual dredging (2002 to 2013) ❖ Inspection of piles from mudline to deck (Dolphin No. 5). ❖ Analysis of dolphins for repair after ship collision damages. ❖ Performed engineering analyses to confirm compatibility and prepared designs, plans & specifications for the replacement of four (4) Raykin fenders on Dolphin #4. ❖ Prepared all designs and provided complete spans, specifications and details for modifications to Dolphin #7 to allow the coordinated installation of two new pre-fabricated aluminum gangways. ❖ Developed engineering designs and provided detailed plans and specifications for Modifications to Dolphin #3 for extending the structural deck to allow vessel gangplanks to access this dolphin. ❖ Preparation of plans and specifications for modifications to walkway No. 4. ❖ Preparation of plans and specifications for two (2) new hydraulic pedestal cranes. <div style="display: flex; justify-content: space-around; align-items: flex-end; margin-top: 20px;"> <div style="text-align: center;">  <p style="font-size: small;">TECHNICAL DRAWING OF THE DOCK</p> </div> <div style="text-align: center;">  <p style="font-size: small;">Murphy Oil Import/Export Dock</p> </div> </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2013	\$20 Million	\$20 Million

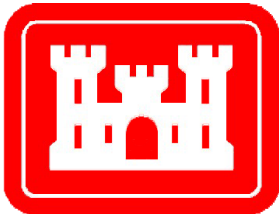

TEC Professional Services Questionnaire

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>NOV-NF-W-04a Levee Improvements Oakville to La Reussite Plaquemines Parish, LA</p> <p>USACE Vicksburg District 4155 Clay Street Vicksburg, MS 39183 Mr. Ben Caldwell, PE 601-631-5593</p> <div style="text-align: center; margin: 10px 0;">  </div> <div style="background-color: #D3D3D3; padding: 5px; margin-top: 10px;"> <p style="color: #8B0000; font-weight: bold; margin: 0;">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Coastal Planning and Design ✓ Permitting ✓ Designing Earthen Levees, Levees & Floodwalls ✓ Hurricane and Storm Damage Risk Reduction System Project ✓ Shoreline Stabilization & Protection ✓ Design Analysis and Reports ✓ Technical Evaluations ✓ Cost Estimates ✓ Field Investigations ✓ Outreach and Educational Support ✓ Preparation of Plans ✓ Preparation of Specifications ✓ Surveying ✓ Agency Coordination </div>	<p>LH&J prepared the right-of way drawings, design documentation report, plans, specifications and cost estimates for the NOV-NF-W-04 project which is constructing 8.3 miles of new levees and T-wall transitions paralleling Highway 23 from Oakville, LA to the LaReussite Siphon in Plaquemines Parish, LA. This \$46 million project will replace the existing non-federal levees with a new flood protection system that is designed and constructed in compliance with the post-Katrina developed requirements of the Hurricane and Storm Damage Reduction System Design Guidelines (HSDRSDG). At the south end of the project, the flood protection alignment crosses the discharge canal for the LaReussite Siphon adjacent to Highway 23. To maintain the functionality of the existing siphon, LH&J developed designs for 550 feet of T-walls for construction using eight 72-inch diameter siphon tubes extending through the new line of protection at a depth of 8 feet below the normal water level in the discharge canal. LH&J also supervised the design of a separate project to construct T-wall fronting protection and a new pre-cast concrete bridge at the Ollie Pumping Station.</p> <p>Team member Eustis performed the geotechnical analyses and engineering for this project that included design phase services for the earthen levee raise, the north and south T-walls, the T-wall fronting protection system at the Ollie Pump Station, and five complicated transitions between levees and pile supported T-walls. Initial services included the evaluation of significant geotechnical data comprising 5-inch diameter undisturbed soil borings and CPTs taken along the existing levee alignment. Eustis developed soil design reaches based on data review and provided geotechnical recommendations and analyses for the design of the 8.3-mile levee enlargement. The original feasibility study efforts centered around evaluation of single and multiple stages of levee construction, two levee crown/floodwall elevations, and the use of prefabricated vertical drains (wicks) to accelerate consolidation settlement beneath levee enlargements. The option without wicks was chosen by the USACE for development of final plans and specifications.</p> <div style="text-align: right; margin-top: 10px;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2018	\$46 Million	\$46 Million



TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>South Shore Harbor Marina Dredging Project: Civil, Structural, Coastal, Geotechnical Engineering, Permitting and Hydrographic Surveying New Orleans, LA</p> <p>Lakefront Management Authority, 6001 Start & Stripes Blvd., Suite 149 New Orleans, LA 70126 504-782-0458</p> <div style="background-color: #f0f0f0; padding: 10px; margin-top: 10px;"> <p style="color: #C00000; text-align: center;">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Coastal Planning ✓ Permitting ✓ Design of Floodwalls ✓ Design Analysis and Reports ✓ Shore Stabilization and Protection ✓ Beneficial Use of Dredge Material ✓ Living Shoreline ✓ Technical Analysis ✓ Cost Estimating ✓ Field Investigations ✓ Hydrographic and Topographic Surveying ✓ Dredge Volumes ✓ Turbidity Testing </div>	<p>LH&J provided full civil, structural engineering, project management, environmental permitting, hydrographic and topographic surveying services to the Lakefront Management Authority (Non-Flood Protection Asset Management Authority) to dredge the entrance to the Southshore Harbor on Lake Pontchartrain in New Orleans. The project consisted of pre-construction surveys and a dredge fill analysis to determine the amount of fill available to rebuild approximately 20 acres of the North Peninsula with the dredge material approximately ¼ of a mile away. A detailed structural and geotechnical analysis was performed on the existing North Peninsula bulkhead to determine if the structure was capable of supporting hydraulic fill to the top of the bulkhead wall. After determining the bulkhead could not accept additional fill LH&J met with various state and local officials regarding disposal of the dredge material into Lake Pontchartrain. After evaluating a number of spoil disposal options it was decided to place the spoil material adjacent to the existing shore to build additional wetlands in the Lake. LH&J prepared and submitted all required permits. The project was permitting through CPRA, LADEQ, USACE and SLFPA-E. A Teledyne RESON SeaBat T20P High resolution multibeam echosounder was used to conduct the hydrographic survey. HYPAK/HYSWEEP was used for the post processing of the data with Teledyne Blueview for data imaging and viewing. LH&J produced full plans and specifications and cost estimates and assisted the LMA in bidding of the project. LH&J also provided engineering services during construction and full-time resident inspection during construction. The project was successfully completed on time and within budget.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>	
<p style="text-align: center;">Completion Date (Actual or estimated):</p>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020	\$150,000	\$150,000



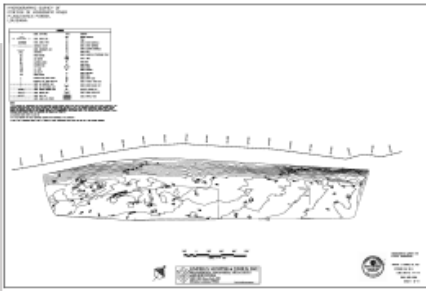
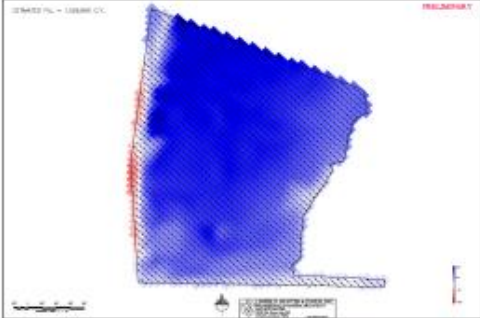
TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Inner Harbor Navigation Canal Surge Protection Barrier New Orleans, LA</p> <p>USACE New Orleans District P.O. Box 60267 New Orleans, LA 70160 Mr. Christopher Dunn 504-862-1799</p> <div style="text-align: center; margin: 10px 0;">  </div> <div style="background-color: #d3d3d3; padding: 5px; margin-top: 10px;"> <p style="color: #a52a2a; font-weight: bold; margin: 0;">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Coastal Planning ✓ Design of Floodwalls ✓ Shoreline Stabilization and Protection ✓ Hydrologic and Hydraulic Modeling ✓ Design Analysis and Reports ✓ Technical Evaluations ✓ Cost Estimates ✓ Field Investigations ✓ Hurricane and Storm Damage Risk Reduction System Project ✓ Geotechnical Engineering ✓ Surveying </div>	<p>The Inner Harbor Navigation Canal (IHNC) is the largest Design-Build Project ever undertaken by the USACE. LH&J provided planning, engineering design, and construction of this monumental project with responsibility for the surveying, engineering designs, preparation of construction drawings and development of specifications for the following features:</p> <p>North T-Wall and Tie-in – This massive pile supported T-wall provides the transition from the Gulf Intracoastal Waterway (GIWW) Sector Gate to the west end of project. The monolith stem sections extend 25 feet above the top of the base slabs to elevation greater than 26 feet (NAVD 88). The T-wall monoliths are supported by 36-inch diameter battered pipe piles designed to resist the tremendous unbalanced loads generated by 26 feet of surge loads against the flood side face. The total length of the North T-wall is approximately 740 feet.</p> <p>South T-wall and Tie-in – The 570 foot long South T-wall provides a continuous transition from the end of the IHNC Surge Protection Barrier Floodwall to the concrete T-walls of the LPV-145 project and is similar to the North T-wall in construction.</p> <p>North and South Access Ramps – The North Access Ramp is a 520-foot-long by 17-foot-wide pile supported concrete structure that provides vehicular access from grade to the Safe House parking platform at elevation more than 26 feet (NAVD 88). The 430 foot long South Access Ramp provides vehicular access from the top of levee at the St. Bernard end of the project up to the roadway atop and along the entire length of the IHNC Surge Protection Barrier Floodwall.</p> <div style="text-align: right; margin-right: 20px;">  </div> <p>GIWW Safe House – The GIWW safe house is a 1,150-square-foot, pile supported, concrete structure with a finished floor elevation at elevation of 32 feet (NAVD 88), which is 6 feet above the top of floodwall. The safe house provides a refuge for operations personnel to remain on site and weather out severe storms and it is designed for 250 MPH winds. It also houses the remote monitoring systems and controls to operate the GIWW Sector Gate, as well as redundant emergency back-up generators with capacity to fully power and operate the gate.</p> <p>Dewatering Bulkheads – The GIWW dewatering bulkheads are 155-foot-long by 6-foot-tall and 20-foot-wide steel truss structures, each weighing 80 tons and are used to allow dewatering for maintenance and inspection of the GIWW gate bay.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2015	\$1.5 Billion	\$66.5 Million

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p><i>Elevation and Reconstruction of Tidewater Road, Plaquemines Parish, LA</i></p> <p><i>Plaquemines Parish Government</i> <i>333 F. Edward Hebert Blvd, Bldg. 500</i> <i>Belle Chasse, LA 70037</i> <i>Mr. Ken Dugas</i> <i>504-394-6115</i></p> <div style="text-align: center;">  </div> <div style="background-color: #f0f0f0; padding: 10px; margin-top: 10px;"> <p style="color: #c00000; text-align: center;">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Coastal Planning ✓ Erosion Control ✓ Coastal Grant Writing ✓ Permitting ✓ Design ✓ Shoreline Stabilization and Protection ✓ Hydrologic and Hydraulic Modeling ✓ Design Analysis and Reports ✓ Technical Evaluations ✓ Cost Estimating and Value Engineering ✓ Field Investigations ✓ Surveying ✓ Coastal Erosion Control </div>	<p>Tidewater Road is a 3 mile long roadway that is the primary access road serving the Venice Port facilities outside of the Plaquemines Parish Hurricane Protection System in Venice, Louisiana. The Venice Port is an essential facility for servicing the Mississippi River Maritime Industry and the Offshore Oil Industry. Because it lies outside of the hurricane protection levee system, the roadway is subject to flooding during high tidal conditions.</p> <p>In 2002 the Plaquemines Parish Government retained Linfield, Hunter & Junius, Inc. to raise Tidewater Road to improve access to the Venice Port facilities. The first task undertaken by the firm was to assess the level to which the road should be raised to reduce flooding. Levels were run along the roadway and tied into nearby United States Corps of Engineers flood gages. Local businesses were interviewed to determine the frequency and depth of reported flooding. This assessment indicated that raising the roadway to elevation 5.0 NAVD 88 would reduce the occurrence of roadway flooding substantially. Significant improvement in roadside drains was also recommended. Means of raising the road were then identified and construction cost estimates were prepared.</p> <div style="text-align: right;">  </div> <p>Phase I improvements raised approximately 6,000 linear feet of roadway from the Jump to Coast Guard Road. A detour road was constructed to maintain traffic during construction and substantial improvements were made to roadside drainage. In addition, an old 12-inch asbestos-cement waterline was replaced with a new 12" PVC waterline the length of the project. LH&J prepared joint coastal use permit applications for both phases</p> <p>Phase II improvements, which raised the next 11,000 linear feet of roadway from Coast Guard Road to the entrance of the TARGA Refinery, were recently completed. The isolated location and limited land space available along the roadway presented a number of logistically challenging issues for maintaining vehicular traffic during construction. Unlike Phase I, limited land space made construction of a detour roadway impractical. Accordingly, an in-place phased construction sequence was utilized to maintain continuous vehicular traffic during construction. Both phases of the Tidewater Road Design included erosion control design. Both sides of the road are protected from erosion by various sizes of stone riprap as well as steel sheet pile walls for Phase II of the road.</p>	
<p style="text-align: center;">Completion Date (Actual or estimated):</p>	<p>Estimated Cost:</p>	
	<p style="text-align: center;">Entire Project:</p>	<p style="text-align: center;">Work for which Firm was Responsible:</p>
<p>2017</p>	<p>\$27 Million</p>	<p>\$27 Million</p>

TEC Professional Services Questionnaire

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Jesuit Bend Mitigation Bank (Dredging and Marsh Creation) Plaquemines Parish, LA</p> <p>Restoration Systems, LLC 1101 Haynes Street, Suite 211 Raleigh, North Carolina 27604 919-755-9490</p> <div style="text-align: center; margin-top: 20px;"> <p>Marsh Creation</p>  </div> <div style="background-color: #cccccc; padding: 10px; margin-top: 20px;"> <p>Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Coastal Planning ✓ Marsh Creation ✓ Beneficial Use of Dredge Material ✓ Technical Evaluations ✓ Field Investigations ✓ Hydrographic and Topographic Surveying ✓ Dredge and Fill Volume Analysis </div>	<p>LH&J was selected to perform pre and post-construction surveying for the CPRA Jesuit Bend Mitigation Bank (Dredging and Marsh Creation Project). Over one million cubic yards of material was dredged from the Mississippi River and pumped to fill over 50 acres of marsh.</p> <div style="text-align: center; margin-top: 20px;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;">   </div>	
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:
2016	\$65,000 (Fee)	\$65,000 (Fee)

TEC Professional Services Questionnaire

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

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

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

INTRODUCTION

Linfield, Hunter & Junius, Inc. (LH&J) is pleased to submit its proposal for the **Jefferson Parish Coastal Engineering Consulting Services on an As-Needed Basis**. LH&J and previous firms have been providing quality engineering and architectural services for over 65 years and to Jefferson Parish since 1991. As the design engineering consultant for a number of previous Jefferson Parish projects, LH&J is well postured to provide Jefferson Parish with a team of highly experienced and extremely capable engineers, land surveyors, and other design professionals who are intimately familiar with the critical design and construction considerations that are unique to **Coastal Engineering Projects**. Our past similar experience throughout Southeast Louisiana gives us the knowledge and understanding of the needs for these types of projects. This along with our extensive experience in Coastal Engineering design and land surveying puts LH&J in the unique position of being able to dive straight into any assigned projects without a learning curve.

In response to this Request for Qualifications to perform Engineering and related services on an as needed, Task Order basis for Coastal Engineering Projects, we have assembled a team of sub-consultants to provide Jefferson Parish with proven capability in performing all services identified in the solicitation. The assembled Team allows us to be both responsive and efficient in performing task orders assigned by Jefferson Parish. For each Task Order assigned to us, LH&J will select the sub-consultants to assist us based upon the type and location of the work as well as the past experience

TEC Professional Services Questionnaire

and current workload of the Team member. Using our Team resources, LH&J will provide Jefferson Parish with an experienced, efficient, and effective team suited for the requirements of each individual task order.

Together, our Team provides expertise and experience in all of the required disciplines and tasks associated with this solicitation, and more importantly, we provide relevant experience working with Jefferson Parish. The following text describes our team member firms.



Prime Contractor: Linfield, Hunter & Junius, Inc.

LH&J has provided quality engineering, surveying and architectural services for over 50 years, including work for Jefferson Parish for over 27 years.

LH&J at a Glance

- Small business, as defined by the NAICS Code 541330
- 4 offices, including 2 in southern Louisiana

As prime contractor, LH&J has successfully completed thousands of projects for clients such as Jefferson Parish, the Orleans Levee District, the USACE, Port of New Orleans, City of New Orleans, Sewerage and Water Board of New Orleans, Plaquemines Parish Government, and many others. As the managing partner for New Orleans Small Business Engineering, A Joint Venture, L.L.C., (NOSBE), LH&J successfully performed program and contract management, as well as much of the technical engineering design and construction management services, for the USACE 5 year, \$90 million IDIQ Contract No. W912P8-07-D-0059.

For this contract, LH&J will self-perform Contract, Program and Project Management as the prime professional, as well as Professional Coastal, Civil and Structural Engineering, Bathymetric and Topographic Surveying, Construction Administration and all Quality Control services.

LH&J's Role as Prime Contractor includes:

- Program management
 - Primary Jefferson Parish point-of-contact/issue resolution/performance/quality/customer satisfaction
 - Accountable for team's performance (program and task level)
 - Integrate overall program standards and procedures
 - Manage team members
- Program Quality Control
 - Implement program QA/QC procedures
 - Conduct team member and subcontractor performance audits
- Jefferson Parish Customer Satisfaction
 - Implement customer satisfaction plan
- Task Order Management,
 - Implementation, technical support, and deliverables
 - Evaluate team assets to provide best value proposal to the Jefferson Parish on each task
 - Assign and manage task orders; ensure QC and product delivery schedule

Subcontractor: ELOS Environmental, L.L.C. (ELOS)



ELOS Environmental, LLC (ELOS) professionals provide data-supported analysis to federal, state, and local agencies along

with private clients in order to secure environmental clearances, permits, and authorizations as required by the National Environmental Policy Act (NEPA), Sections 404 and 401 of the Clean Water Act, Section 10 of the Rivers and Harbors Act as codified in 33 USC 408 (Section 408) for modifications to federal projects, and Section 106 of the National Historic Preservation Act.

ELOS at a Glance

- High level of experience and expertise with Jefferson Parish regulatory and environmental considerations.
- Main office in Hammond, LA
- 19 total staff all domiciled in Louisiana

and Harbor Act, and Section 14 of

TEC Professional Services Questionnaire

ELOS is expert in regulatory affairs related to environmental permitting and compliance. In addition to the above-listed permits, they have been providing the following products to our clients for over 10 years:

- Wetlands assessments, delineations, and findings reports (for NEPA compliance)
- Requests for Wetlands Jurisdictional Determinations (JD)
- Wetlands restoration design, implementation, and monitoring
- Phase I Environmental Site Assessment (ESA) for hazardous, toxic, and radioactive waste (HTRW) evaluations
- Cultural resource, threatened and endangered (T&E), essential fish habitat (EFH), migratory bird, and other surveys
- Environmental monitoring (seismic and other oil field related activities)
- GIS mapping for other environmental impact analysis

ELOS Environmental provides the LH&J Team with an extensive background in Jefferson Parish Regulatory and Environmental Regulations and Wetland Creation and will assist our Team with all Environmental Permitting and Regulatory activities.



Subcontractor: Eustis Engineering, L.L.C. (Eustis)

Eustis has been the premier geotechnical engineering consultant in southeast Louisiana since 1946. They are a long time provider of professional geotechnical engineering services in the New Orleans region and no other local or regional geotechnical engineering firm exceeds Eustis's qualifications. Eustis has an extensive level of demonstrated experience and expertise that is necessary to properly design Coastal Projects. They are highly skilled and adept at performing the complex analyses that formulate the basis of a sound design. Eustis has provided the geotechnical services listed in the Solicitation directly to LH&J on numerous projects in the past such as the East of Harvey Canal Floodwall, the 17th Street Canal Breach Repairs and Closure Structure, LPV 105, LPV 106, LPV 107, LPV 109.02c, the entire \$200 million Orleans Storm Proofing Program, the NOV-NF-W-04 Levee & Floodwalls and France Road reconstruction and floodgate to name a few.

Eustis at a Glance

- Main office in Metairie, LA
- Extensive background in the Geology and Geotechnical considerations throughout Jefferson Parish
- 77 total staff all domiciled in Louisiana

The staffs of professionals at LH&J and Eustis have a long and extensive history of working together on major coastal engineering projects and are highly accustomed to working together to solve geotechnical related challenges in a timely, efficient and cost effective manner. Eustis has extensive materials testing staff and facilities, both field and office, and their laboratory is validated by the USACE Materials Testing Center in Vicksburg, MS and is also accredited by AASHTO and ASTM.

Eustis will provide Geotechnical Investigations, Laboratory Testing, Evaluations and Geotechnical Design Recommendations for the LH&J Team.

The LH&J Team offers Jefferson Parish a very compact team of local professionals with specialized experience specific to the scope of work required by this solicitation. With all of the work being performed at the offices of LH&J and our subconsultants locally, and with our past experience working together on similar projects, we believe that there will be seamless coordination and interaction between team members. Furthermore, LH&J's in-house land surveyors will be prioritized to this project to ensure that field survey data is rapidly obtained and furnished to our design team. Also, during design, any requirements to obtain supplemental data as the project progresses will be quickly addressed to avoid delays.

TEC Professional Services Questionnaire

Major continuing repeat public clients include:

- ✓ Jefferson Parish since 1991 (33 years)
- ✓ The Port of New Orleans since 1971 (53 years)
- ✓ U.S. Army Corps of Engineers since 1973 (51 years)
- ✓ Plaquemines Parish Government since 1973 (51 years)
- ✓ City of New Orleans since 1974 (50 years)
- ✓ U.S. Navy, Southern Division since 1975 (49 years)
- ✓ Sewerage & Water Board of New Orleans since 1979 (45 years)

A. MINIMUM REQUIREMENTS FOR SELECTION

The persons or firm submitting a Statement of Qualifications shall have the following minimum qualifications:

1. The persons or firms under consideration shall have at least one (1) principal who is a licensed professional engineer in the State of Louisiana.

Nathan J. Junius, P.E., P.L.S. has over 23 years of design experience in Civil Engineering projects including major Coastal Engineering projects that are identified elsewhere in this submittal. He is a Principle of the firm and has been continuously registered as a Professional Engineer in the State of Louisiana since 2005.

2. The persons or firms under consideration shall have a professional in charge of the Project who is a licensed, registered engineer in the State of Louisiana with a minimum of five (5) years of experience.

Anthony F. Goodgion, P.E. has over 40 years of design experience in Civil Engineering projects including major Coastal Engineering projects that are identified elsewhere in this submittal. He is a Principle of the firm and has been continuously registered as a Professional Engineer in the State of Louisiana since 1991.

3. The persons or firms under consideration shall have one (1) employee who is a licensed professional engineer in the State of Louisiana in the applicable discipline involved. A subcontractor may meet this requirement only if the advertised Project involves more than one discipline.

Linfield, Hunter & Junius, Inc. (LH&J) has thirteen (13) full-time professional engineers registered in the State of Louisiana with over 360 years of combined experience in Coastal and Civil Engineering. LH&J will make available as many as five (5) professional engineers for this project.

Nathan J. Junius, P.E., P.L.S. is a Professional Land Surveyor registered in Louisiana with more than twenty-three (23) years of experience in conducting topographic and bathymetric surveys.

William J. Muller, P.L.S. is a Professional Land Surveyor registered in Louisiana with more than forty (40) years of experience in conducting topographic and bathymetric surveys.

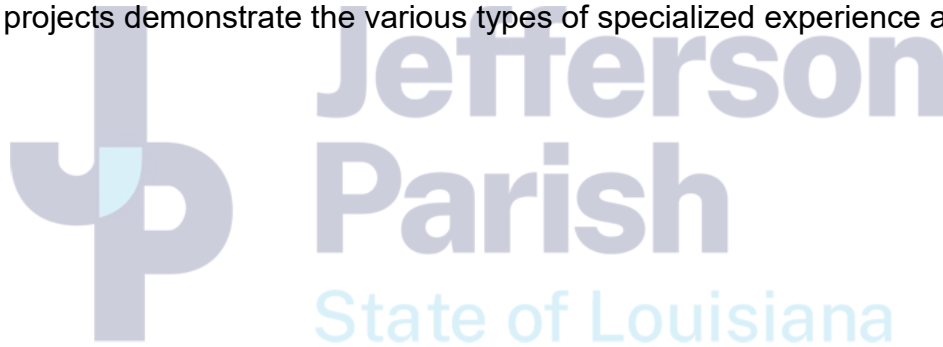
B. EVALUATION CRITERIA

B.1 Professional Training and Experience

LH&J has been both designing and providing construction management services to assist Jefferson Parish with the development of Community Enhancement projects for more than 27 years. Our past experience with Jefferson Parish Public Works projects include designing improvements to the Potable Water Distribution System, the Sanitary Sewerage Collection and Treatment Systems, the Major Canals and Sub-surface Drainage Systems, and the Roadway and Transportation Systems, as well as other Community Enhancement and Beautification type projects. The Linfield, Hunter & Junius Team offers Jefferson Parish a strong, diverse and proven engineering and surveying firm coupled with a premier Southeast Louisiana environmental compliance, permitting and monitoring firm. Their combined technical, engineering and environmental capabilities are more than adequate to address any type of Coastal Engineering assignment.

The strong capabilities, experience and expertise of LH&J and our Team members are demonstrated through the resumes provided in Item K and project examples provided in Item L of the TEC Professional Services Questionnaire that is being submitted for each Team member.

This documentation clearly and conclusively demonstrates that LH&J and our Team members have proven prior successful experience with planning, designing and constructing Coastal Engineering projects. Table 1 on the following page summarizes the evaluation criteria from the Public Notice and indicates which projects demonstrate the various types of specialized experience and expertise.



TEC Professional Services Questionnaire

Specialized Experience	LH&J Project Nos.										ELOS Project Nos.									
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Coastal Planning	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓		✓		✓	
Permitting			✓	✓	✓	✓	✓		✓			✓		✓	✓	✓				
Design			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓					
Marsh and Ridge Restoration	✓		✓	✓						✓			✓		✓		✓		✓	
Shoreline Stabilization & Protection	✓	✓	✓	✓		✓	✓	✓	✓				✓		✓		✓		✓	
Beneficial Use of Dredge Material	✓		✓	✓	✓		✓			✓					✓		✓		✓	
Living Shoreline Design	✓	✓	✓	✓			✓						✓							
Hydrologic and Hydraulic Modeling			✓	✓			✓		✓	✓			✓							
Biological and Environmental Assessment of Wetlands												✓	✓	✓	✓	✓		✓	✓	
Design Analysis and Reports	✓		✓	✓	✓	✓	✓	✓	✓			✓	✓		✓		✓			
Technical Evaluations			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	
Cost Estimates			✓	✓	✓	✓	✓	✓	✓					✓			✓			
Field Investigations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	
Coastal Grant Writing									✓											
Outreach and Educational Support						✓														

Table 1 – Specialized Experience and Expertise

ELOS Environmental is well known throughout Southeast Louisiana. As demonstrated in their individual TEC Professional Services Questionnaire, they have assisted local Parishes with a significant amount of coastal restoration, mitigation, environmental and permitting efforts. These prior, as well as ongoing, efforts will help ensure that the projects assigned to our Team will be seamlessly integrated into the Parish's long term strategies and objectives.

TEC Professional Services Questionnaire

No other Geotechnical Engineering firm has more experience and expertise in the geological and geotechnical considerations that are unique to Southeast Louisiana than Eustis Engineering. In addition, Eustis and LH&J have a long and extensive history of collaborating together on all types of projects throughout the region. Our strong working relationships have identified many successful and cost effective solutions to the unique foundation challenges that we are faced with in our region.

A summary of Linfield, Hunter & Junius, Inc.'s professional training and experience in the areas of Coastal Engineering includes:

- ✓ Professional staff with well over 350 cumulative years of experience in engineering planning, design and construction (see Items K and L).
- ✓ Firm background of over 29 years providing successful project studies and designs to Jefferson Parish.
- ✓ A proven track record of completed Coastal Engineering projects from feasibility studies following through to completed construction.
- ✓ Recent completion of successful Coastal Engineering projects which are similar to the scope of work of your current project.
- ✓ A working knowledge of state-of-the-art computerized methods and procedures for studies and design.

Linfield, Hunter & Junius, Inc. (LH&J) employs **two (2) full time Registered Professional Land Surveyors** and maintains **four (4) fully staffed survey field crews** who are equipped with modern vehicles and state of the art survey equipment for both conventional and GPS surveying. Our crews have worked in difficult terrain conditions, including coastal marshes, and are equipped for and experienced at performing topographic, boundary, topographic bathymetric, right-of-way, control, and hydrographic surveys as well as performing bench leveling, construction layout surveys and settlement monitoring surveys. Our CADD Drafters are highly experienced in working with both Bentley MicroStation and Autodesk AutoCAD as required. LH&J also utilizes add in modules such as ArcView, Civilsoft and InRoads to enhance the efficiency of data processing and project deliverables. We are competent at working with any vertical and horizontal datum as specified by the Client's requirements. We utilize computer based survey data processing software to achieve maximum efficiency and ensure rapid and reliable deliverables for our Clients. Since placing an increased emphasis on land surveying services, the firm has completed over \$1,000,000 in land surveys for in-house designs and others.



TEC Professional Services Questionnaire

Public Survey Clients

- Jefferson Parish Department of Public Works
- LA Department of Transportation and Development
- Audubon Park, New Orleans
- U.S. Army Corps of Engineers
- City of New Orleans Department of Public Works
- Sewerage and Water Board of New Orleans
- Plaquemines Parish Government
- Pontchartrain Levee District
- St. Tammany School Board
- City of Hammond
- Tangipahoa Parish
- City of Baton Rouge
- University of New Orleans

Private Survey Clients

- CVS/Pharmacies – hundreds
- Dillard University
- Tulane University
- Children's Hospital
- Woodward Design+Build
- Friends of City Park, New Orleans, LA
- Dollar General Stores – over 50
- Exxon/Mobile Corporation
- New Orleans Park-N-Fly
- Multiple design consultants statewide

Registered Surveyors

Nathan J. Junius, P.E., P.L.S.

BSCE, MSCE

23 years experience

William J. Muller, P.L.S.

40 + years experience

Nathan J. Junius, P.E., P.L.S. is a licensed surveyor and heads up Linfield, Hunter & Junius, Inc. surveying. In addition to extensive experience as a civil engineer, Mr. Junius has extensive experience in all aspects of land surveying.

After Graduating in May of 2001, Junius attended the University of Texas at Austin where he graduated with a MS degree in Civil Engineering in August of 2002. During his time at the University of Texas, Junius became familiar with ESRI's ArcView GIS and its many applications. Surface modeling, raster technology, networks, features, and geodatabases were a few of the tools used in modeling systems. A project that Junius worked on was incorporating GIS through geodatabases to help improve fishing success in Plaquemines and St. Bernard Parishes.

William J. Muller, P.L.S. has extensive experience in all aspects of land surveying throughout Louisiana. He worked in the offshore industry spotting well locations, run field crews for numerous Louisiana Power and Light topographic and boundary surveys, analyzed thousands of boundary surveys, and supervised multiple field crews, draftsmen and land surveys.

Examination of the attached resumes and project descriptions in Items K and L demonstrates that the firm has the professional training and experience to provide complete land surveying services.

B.2 Size of Firm

Linfield, Hunter & Junius, Inc. employs forty-two (42) individuals, as shown in Item E above. The size of our firm is ideal for projects such as the proposed project because:

- ✓ The firm is large enough that it can rapidly absorb projects of the size of the proposed project and not become overburdened by them.
- ✓ The firm is small enough to be nimble and responsive to the client.
- ✓ The management structure is not multi-layered, which facilitates resolution of issues that could otherwise slow down a project.

TEC Professional Services Questionnaire

B.3 Capacity for Timely Completion of Newly Assigned Work

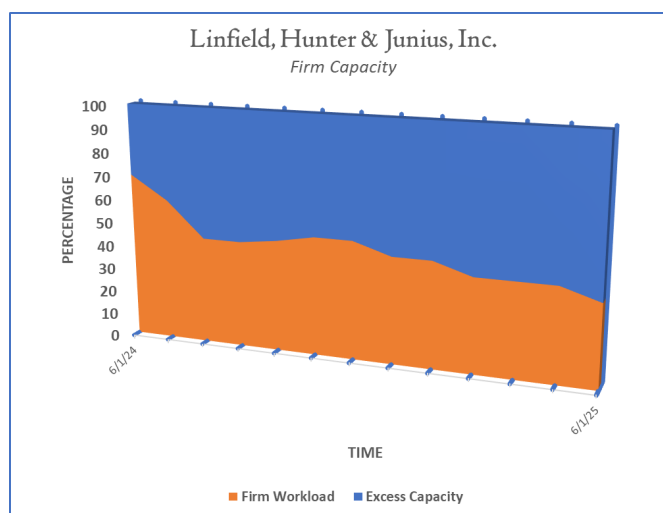
Linfield, Hunter & Junius, Inc. has a long demonstrated history of providing successful professional services to Jefferson Parish. We are very familiar with the Parish's departmental functions, governmental personnel and the unique cultural considerations of its citizens. We have assisted the Parish with the implementation of important public works construction projects throughout Jefferson Parish.

We and our sub-consultants are quite familiar with the requirements for projects funded by Federal sources, such as the Resources and Ecosystems Sustainability, Tourist Opportunities and Revived Economies of the Gulf Coast States Act of 2012 ("RESTORE Act") and the Gulf of Mexico Energy Security Act ("GOMESA Act") and we understand its focus on Ecosystem Restoration and the importance of consistency with the State's Coastal Master Plan and coordination with Louisiana's CPRA. Through our prior experience designing the Grand Bayou Vegetative Ridge Restoration project we have become knowledgeable in the physical and biological parameters that come into play with these unique Coastal Restoration projects.

We understand the hydrodynamic, geotechnical, constructability, cost and flora and fauna considerations that must be evaluated and accounted for in the design process. In conjunction with Team member Eustis Engineering, LH&J has developed a unique approach to estimate the magnitude of short term consolidation that will occur during construction so that a suitable allowance can be made in the construction cost estimates we prepared. We also evaluated the potential for intermediate and long term settlements to provide recommendations on overbuilding to maximize the long term benefits of the Ridge Restoration.

The designs of several large projects have been recently completed or are near completion. Therefore, we have a significant engineering team available to rapidly respond to the requirements of this "As-Needed" contract. This project can be easily absorbed by the firm, as we have substantial reserve production capacity to meet any reasonable project scheduling.

Our current and projected firm capacity shown below indicates that this contract can be easily absorbed by our current staffing and no additional personnel are anticipated to be needed for the duration of this "As-needed" contract. The additional workload anticipated for this project would be very welcome and needed to maintain our current staff levels.



Fast turnaround time is an excellent indication of our ability to respond to the needs of our clients.

TEC Professional Services Questionnaire

Linfield, Hunter & Junius, Inc. has a well-deserved reputation for completing public projects on time; in fact, our firm often completes designs awarded to several firms at the same time before other firms' designs have been completed. Recent examples of our fast turnaround include:

- **17th Street Canal Widening – Hoey's Canal to Airline Drive**
The schedule for this project was accelerated to accommodate aggressive grant funding deadlines. Linfield, Hunter & Junius, Inc. completed design sufficiently ahead of schedule such that the project was bid and construction begun several weeks before the grant deadline date for construction.
- **Hoey's Canal Bypass**
Linfield, Hunter & Junius, Inc. completed design of the first phase of this project ahead of schedule to meet aggressive grant funding deadlines.
- **Alcee Fortier/Pressburg Streets**
This project was designed by Linfield, Hunter & Junius, Inc. and constructed ahead of similarly-sized projects awarded to other firms at the same time.
- **Earhart Boulevard**
Five firms were awarded similarly-sized parts of this project; Linfield, Hunter & Junius, Inc. received the last of these awards yet completed its design first.
- **Leon C. Simon and Gentilly Road Bridges**
Of the eight bridge projects awarded to various firms, Linfield, Hunter & Junius, Inc.'s two bridge projects were the first designs completed, and construction of these bridges was completed first.
- **Hollygrove Area Drainage Project**
This may be the largest single SELA drainage project. The design was completed on time under a very aggressive schedule and the firm was given the **USACE's highest rating of "EXCELLENT" including an "OUTSTANDING" rating** for the "Management and Adherence to Schedules" category. Construction is complete.
- **17th St. Canal Levee Breach Repairs, Interim Closure Structure, and Interim Pumping System**
This was among the most visible and important public projects in New Orleans and Jefferson Parish subsequent to Hurricane Katrina. The design was completed under a very aggressive fast track schedule while the firm reestablished operations and restored its flooded offices in Metairie. More than \$200 Million dollars of improvements were designed within one year. Gates and temporary drainage pumps were in place and operational in time for the 2006 hurricane season less than one year after Hurricane Katrina. The Corps of Engineers issued a **Certificate of Appreciation to the firm for Outstanding Service** in providing engineering support in Southeast Louisiana subsequent to Hurricane Katrina. **The firm received a National Honor Award in 2009** from the American Council of Engineering Companies for design of the 17th St. Canal Interim Closure Structure.

B.4 Past Performance

The firm received its first Jefferson Parish contract in 1991 and has received over 100 contracts since then. Within the past 10 years alone we have received the following engineering projects from Jefferson Parish:

- Waterline Replacement – Shannon Lane E & W, Kendall Lane, Huntley Lane & Malvern Lane

TEC Professional Services Questionnaire

- Waterline Replacement – N. Causeway Blvd. & Ridgelake Blvd. (Veterans Blvd. – 14th St.) and 15th St. to Veterans Blvd. (N. Causeway Blvd. – Tolmas Dr.)
- Feasibility Study for Waterline Improvements along Lapalco Boulevard - COMPLETED
- Hope Haven Natatorium
- East Bank Drainage Master Plan
- Update of the Geisenheimer Drainage Basin Study - COMPLETED
- W. Napoleon Extension to Airport Access Road
- Loumor Outfall Ditch Improvements - COMPLETED
- Vulcan Street Drainage Improvements - COMPLETED
- Vintage Boulevard Walking Trail - COMPLETED
- Bike Path along Jefferson/Orleans Parish Line
- District 4 Covered Canals Study - COMPLETED
- Ames Boulevard Resurfacing - COMPLETED
- Drainage Improvements - N. Sibley St. at W. Napoleon - COMPLETED
- Veterans Blvd. Drainage Canal Development Study - COMPLETED
- N. Hullen and Veterans Force Main Extension / Edenborn and Veterans Force Main Extensions with Lift Station Improvements - COMPLETED
- Canal Street Corridor Improvements - COMPLETED
- 17th Street Canal Improvements – Hoey’s Canal to Airline Drive - COMPLETED

To the best of our knowledge, all public projects have been completed within the allotted design time and to the satisfaction of Jefferson Parish.

We have had repeat assignments from all of our public sector clients demonstrating our capabilities to perform at a high level, regardless of the project scope. To the best of our knowledge, **all public projects have been completed within the allotted design time and to the clients’ satisfaction.** Fast turnaround time is an excellent indication of our ability to respond to the needs of our clients; **quality is attested to by the number of repeat public clients we have.** Throughout Linfield, Hunter & Junius, Inc.’s history we have maintained an excellent working relationship with each public client. This is a significant accomplishment of which we are very proud.

Below is a sampling of awards and commendations our projects have received:

- The New Orleans District of the Corps of Engineers gave Linfield, Hunter & Junius, Inc. a rating of “**Excellent**” for the \$38 million Hollygrove Area Drainage Improvements project (see attached rating).
- The Vicksburg District of the Corps of Engineers recently formally rated the firm’s performance as “**Highly Recommended**”.
- A City of New Orleans department director recently told us (and others) that **Linfield, Hunter & Junius, Inc. should be used as the example for other consulting engineering firms to emulate.**
- The Board of Commissioners of the Port of New Orleans recently commended the firm’s “**outstanding professional services**” in an emergency situation, which allowed the board “to receive bids and award a construction contract in record time” (see attached letters of recommendation).
- The Corps of Engineers issued a **Certificate of Appreciation to the firm for Outstanding Service** in providing engineering support in Southeast Louisiana subsequent to Hurricane Katrina (see attached letter and Certificate of Appreciation).

TEC Professional Services Questionnaire

- The firm received a **National Honor Award** from the American Council of Engineering Companies for design of the 17th St. Canal Interim Closure Structure in 2009.
- The firm received an **Award of Excellence** for the Harvey Floodwall Project in 2009.
- The **New Orleans Business Round Table commended the firm** for the Reconstruction of Tidewater Road in 2009;
- **ACI awarded an Engineering Excellence Award** to the firm for design of the Metairie Road Bridge Project in 2000.

B.5 Location of Principal Office Where Work Will Be Performed

Linfield, Hunter & Junius, Inc. is located in Jefferson Parish at **3608 18th Street, Metairie, LA 70002**. We are centrally located in the parish, and all work will be performed from this office.



B.6 Status of Current Litigation with Jefferson Parish

Linfield, Hunter & Junius, Inc. has no previous or on-going litigation with Jefferson Parish.

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

Linfield, Hunter & Junius, Inc. has a staff of engineers with significant experience providing the professional services required for this solicitation. **Examination of the Resumes in Item K and the Project Descriptions in Item L demonstrates the extensive experience of our staff** in providing the services required for this solicitation. Our team has a proven track record of completed major projects from feasibility studies following through to completed construction for Jefferson Parish and has recently completed a number of successful projects.

Closing Statement

In summary, we feel that the LH&J Team provides the following benefits to the Jefferson Parish Government.

- LH&J has a proven track record of providing high quality professional engineering services on time for numerous projects for the Jefferson Parish Government.
- LH&J meets all RFQ requirements and possesses the proven production capacity of a much larger firm.
- LH&J has selected a Team of the most highly qualified firms to demonstrate capability and specialized expertise for all of the required services defined in the RFQ plus provides the depth of capacity in all of the necessary disciplines and specialties. With these subcontractors the LH&J team exceeds all RFQ criteria.
- The LH&J Team is composed of a Prime Firm, with demonstrated ability to perform work at an accelerated pace, which is supplemented by a group of competent and qualified subcontractors that provide specialized expertise, local knowledge and additional depth of resources.
- The LH&J Team demonstrates they have the necessary personnel and resources already in place to immediately commence performing work under this contract at a very rapid pace. We do not need time to "Ramp Up".
- LH&J Team member firms are located within the New Orleans Region and have strong local knowledge of the cultural, geographical and geological considerations throughout the entire region.
- LH&J Team members have an extensive resume for providing services similar to those required in this solicitation throughout the New Orleans Region.
- Proven track record of delivering work on or ahead of schedule, even in the most demanding situations, i.e., post-Katrina and Rita recovery A-E service task orders.

We respectfully request the Jefferson Parish Government to award us this opportunity to significantly contribute to this important effort to enhance and restore Louisiana's critical coast.

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

Signature: _____

Printed Name: **Nathan J. Junius, P.E., P.L.S.**

Title: **President**

Date: **July 16, 2024**

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

Name: Public Address:
3608 18th Street, Suite 200
Linfield, Hunter & Junius, Inc.
Metairie, Louisiana 70002

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0000510	Active	05/23/1979	03/31/2025	Mr. Ralph William Junius Jr. # PE.0016053

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

Name:	Public Address:
Linfield, Hunter & Junius, Inc.	3608 18th Street, Suite 200 Metairie, Louisiana 70002

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
VF.0000532	Active	06/15/2004	09/30/2024	Mr. Nathan John Junius # PLS.0004958 - Active



PERFORMANCE EVALUATION (ARCHITECT-ENGINEER)

A-E CONTRACTOR I.D. NUMBER
(For ACASS use only) 101230
1. A-E CONTRACT NUMBER
DACW29-97-C-0048
2. CONSTRUCTION CONTRACT NUMBER

IMPORTANT: Be sure to complete Performance section on reverse. If additional space is necessary for any item, use Remarks section on reverse.

3. TYPE OF EVALUATION			4. PROJECT NUMBER	5. DELIVERY ORDER NUMBER(S) (If applicable)
3a. PHASE OF COMPLETION <input checked="" type="checkbox"/> INTERIM (84 %) <input type="checkbox"/> FINAL	3b. COMPLETION (Check one) <input checked="" type="checkbox"/> DESIGN <input type="checkbox"/> ENGINEERING SERVICES <input type="checkbox"/> CONSTRUCTION	3c. CHECK IF APPLICABLE <input type="checkbox"/> TERMINAL (Explain in REMARKS on reverse)		
6. NAME AND ADDRESS OF A-E CONTRACTOR Linfield, Hunter & Junius, Inc. 3500 N. Causeway Blvd., Suite 200 Metairie, LA 70002 OUT DATE CONTRACT			7a. PROJECT TITLE AND LOCATION Southeast Louisiana Project New Orleans, LA 7b. DESCRIPTION OF PROJECT IF NOT EXPLAINED BY TITLE Hollygrove Area Drainage Project	

8. NAME, ADDRESS AND PHONE NUMBER OF OFFICE RESPONSIBLE FOR:	
8a. SELECTION OF A-E CONTRACTOR Engineering Division New Orleans District New Orleans, LA (504) 862-2623	8b. NEGOTIATION/AWARD OF A-E CONTRACT Elois Evans CEMVN-CT-T
8c. ADMINISTRATION OF A-E CONTRACT Gary L. Hawkins CEMVN-ED-SR	8d. ADMINISTRATION OF CONSTRUCTION CONTRACT

9. A-E CONTRACT DATA (Items 9d thru 9g are not applicable during construction unless there are modifications to the A-E contract) -- "See Instructions"			
9a. TYPE OF WORK PERFORMED BY A-E (DESIGN, STUDY, ETC.) Design		9b. TYPE OF A-E CONTRACT <input checked="" type="checkbox"/> FIRM FIXED-PRICE <input type="checkbox"/> INDEFINITE DELIVERY/INDEFINITE QUANTITY <input type="checkbox"/> COST-REIMBURSEMENT <input type="checkbox"/> OTHER (Specify)	
9c. PROJECT COMPLEXITY C DIFFICULT <input checked="" type="checkbox"/> ROUTINE	9d. PROFESSIONAL SERVICES CONTRACT		
	INITIAL A-E FEE \$2,000,000.00	A-E CONTRACT MODIFICATIONS NO. 8 AMOUNT \$518,350.00	TOTAL A-E FEE \$2,518,350.00
9e. A-E CONTRACT AWARD DATE 6 May 97	9f. NEGOTIATED A-E CONTRACT COMPLETION DATE (OR NUMBER OF DAYS) (including extensions) 19 Feb 02	9g. ACTUAL A-E CONTRACT COMPLETION DATE (OR NUMBER OF DAYS) 19 Feb 02	
9h1. DELIVERY ORDER AWARD DATE	9h1. COMPLETION DATE	9h2. NUMBER OF DAYS	9h1. COMPLETION DATE 9h2. NUMBER OF DAYS

10. CONSTRUCTION CONTRACT DATA (Not applicable at completion of design or engineering services not involving construction)			
10a. CONSTRUCTION COSTS	10a(1). AUTHORIZED CONSTRUCTION COST \$	10a(2). A-E ESTIMATE FOR BID ITEMS AWARDED \$	10a(3). AWARD AMOUNT \$
10b. DATA AT TIME OF CONSTRUCTION COMPLETION (Completion date)	NUMBER		TOTAL COST
10b(1). CONSTRUCTION MODIFICATIONS			\$
10b(2). CONSTRUCTION MODIFICATIONS ARISING FROM DESIGN DEFICIENCIES			\$
11. A-E LIABILITY <input checked="" type="checkbox"/> NONE <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> PENDING \$ <input type="checkbox"/> SETTLEMENT \$			
12. OVERALL RATING <input checked="" type="checkbox"/> EXCELLENT <input type="checkbox"/> ABOVE AVERAGE <input type="checkbox"/> AVERAGE <input type="checkbox"/> BELOW AVERAGE <input type="checkbox"/> POOR		13. RECOMMENDED FOR FUTURE CONTRACTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> CONDITIONALLY <input type="checkbox"/> NO (Explain no or conditional in REMARKS on reverse)	
14a. NAME, TITLE AND OFFICE OF RATING OFFICIAL GARY L. HAWKINS Contracting Officer's Representative (504) 862-2077 PHONE NUMBER		15a. NAME, TITLE AND OFFICE OF REVIEWING OFFICIAL GERARD S. SATTERLEE, JR. Chief, Engineering Division (504) 862-2240 PHONE NUMBER	
14b. SIGNATURE <i>Gary L. Hawkins</i>	14c. DATE 11/12/99	15b. SIGNATURE <i>Gerard S. Satterlee</i>	15c. DATE (Original Report date) 11/15/99
AGENCY USE (Distribution, etc.)			

FOR OFFICIAL USE ONLY

6.

QUALITY OF A-E SERVICES BY DISCIPLINE

(Completion mandatory for both DESIGN and CONSTRUCTION phases evaluations and Engineering Services Evaluations)

6a. DISCIPLINES (if applicable)	DESIGN/SERVICES			CONSTRUCTION			16b. DISCIPLINE, NAME AND ADDRESS OF KEY CONSULTANT(S) (if applicable)
	OUT- STANDING	SATIS- FACTORY	UNSATIS- FACTORY	OUT- STANDING	SATIS- FACTORY	UNSATIS- FACTORY	
ARCHITECTURAL	X						
STRUCTURAL	X						
CIVIL	X						
MECHANICAL	X						
ELECTRICAL	X						
FIRE PROTECTION	N/A						
SURVEY AND MAPPING	X						
COST ESTIMATING		X					
VALUE ENGINEERING		X					
ENVIRONMENTAL ENGINEERING	N/A						
GEOTECHNICAL ENGINEERING	X						
MASTER PLANNING	N/A						
HYDROLOGY	N/A						
CHEMICAL ENGINEERING	N/A						
GEOLOGY	N/A						

17. DESIGN PHASE OR ENGINEERING SERVICES:
 (Quality of A-E Services Evaluation)

ATTRIBUTES	N/A	OUT- STANDING	SATIS- FACTORY	UNSATIS- FACTORY
THOROUGHNESS OF SITE INVESTIGATION		X		
QUALITY CONTROL PROCEDURES AND EXECUTION		X		
PLANS/SPECS ACCURATE AND COORDINATED		X		
PLANS CLEAR AND DETAILED SUFFICIENTLY		X		
MANAGEMENT AND ADHERENCE TO SCHEDULES		X		
MEETING COST LIMITATIONS		X		
SUITABILITY OF DESIGN OR STUDY RESULTS		X		
SOLUTION ENVIRONMENTALLY SUITABLE		X		
COOPERATIVENESS AND RESPONSIVENESS		X		
QUALITY OF BRIEFING AND PRESENTATIONS		X		

18. HOW MANY 100% FINAL RESUBMITTALS WERE REQUIRED BECAUSE OF POOR A-E PERFORMANCE? _____

19. CONSTRUCTION PHASE:
 (Quality of A-E Services Evaluation)

ATTRIBUTES	N/A	OUT- STANDING	SATIS- FACTORY	UNSATIS- FACTORY
PLANS CLEAR AND DETAILED SUFFICIENTLY				
DRAWINGS REFLECT TRUE CONDITIONS				
PLANS/SPECS ACCURATE AND COORDINATED				
DESIGN CONSTRUCTIBILITY				
COOPERATIVENESS AND RESPONSIVENESS				
TIMELINESS AND QUALITY OF PROCESSING SUBMITTALS				
PRODUCT AND EQUIPMENT SELECTIONS READILY AVAILABLE				
TIMELINESS OF ANSWERS TO DESIGN QUESTIONS				
FIELD CONSULTATION AND INVESTIGATIONS				
QUALITY OF CONSTRUCTION SUPPORT SERVICES				

20. REMARKS (Attach additional Sheet(s) or Documentation if necessary)

Concerning Value Engineering, the AE has not provided cost saving recommendations relative to design or construction costs that would justify an outstanding rating. Concerning Cost Estimating, the AE's cost estimates are conservative in some areas and as a result do not warrant an outstanding rating.



August 13, 2007

Mr. Ralph Junius
Linfield, Hunter & Junius, Inc.
3608 18th Street, Suite 200
Metairie, Louisiana 70002

Dear Mr. Junius:

This is to express to you and your staff that it has been a pleasure to work with Mr. Tom Knight and Mr. Mark Annino on recent projects at the Port of New Orleans. Whether it has been a complicated repair of a wind or fire damage, or preliminary engineering for a potential major project, your senior engineers have provided outstanding service to us.

Both of these engineers not only excel in their civil engineering expertise and technical knowledge, but exhibit an aptitude for truly listening to the client and providing what is needed, the way it is needed, and when it is needed. Their responses are prompt and their deliverables are accurate, useful, and exceed our expectations.

I'm sure there are others in your firm that support the work assignments of Mark and Tom, so please share accolades and thanks to them, as well. It is truly refreshing to work with the LHJ team. Port staff has the utmost confidence in the engineering assignments performed and the quality of the work provided.

Thanks for finding time to accommodate us when we have an urgent task, as we are sure that your staff is already quite busy. Keep up the good work. We truly enjoy our working relationship with LHJ.

Sincerely,

Deborah D. Keller, P.E.
Director, Port Development Division

DDK:jeg

cc: Mr. Mark Annino
Mr. Tom Knight
O:\WPENG\Letter to LHJ.wpd



February 8, 1999

Linfield, Hunter and Junius, Inc.
3500 North Causeway Boulevard, Suite 200
Metairie, Louisiana 70002
Attention: Mr. Ralph Junius

**RE: PROFESSIONAL SERVICES PROVIDED
AT NASHVILLE AVENUE TERMINAL**

Dear Mr. Junius:

I wanted to commend you and your staff of engineers for the outstanding professional services provided to the Port of New Orleans in the aftermath of a major vessel allision at our Nashville Avenue Terminal.

Your team responded to our request for services immediately and was instrumental in assessing the extent of the damages. Plans and specification were prepared expeditiously so that we could receive bids and award a construction contract in record time.

Throughout construction your staff was available for consultation with the Board's engineering team and the contractor. Submittals were thoroughly yet quickly reviewed by your engineers.

The Nashville Avenue Terminal is one of our busiest facilities and contains the only Port of New Orleans wharves on the Mississippi with multipurpose gantry cranes. It was crucial to our customers to restore the facility as quickly as possible. Nearly \$200,000 of reconstruction was necessary.

It was a pleasure to work with Linfield, Hunter and Junius, Inc. under these most difficult circumstances and we could not have restored the wharf so quickly without your firm's assistance.

Sincerely,

Deborah D. Keller
Senior Manager, Operations

DDK/mal

BOARD OF COMMISSIONERS OF THE PORT OF NEW ORLEANS



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 80267
NEW ORLEANS, LOUISIANA 70180-0267

October 15, 2008

Engineering Division
Civil Branch

ACEC
American Council of Engineering Companies
Attn: Daisy Nappier
1015 15th Street, N.W.
8th Floor
Washington, D.C. 20005-2605

Re: 2009 Engineering Excellence Awards
17th Street Canal Interim Closure Structure

Dear Ms. Nappier:

After Hurricane Katrina, the U.S. Army Corps of Engineers was faced with the unprecedented challenge of quickly restoring hurricane protection in a region devastated by a storm of historic proportions. We called upon Linfield, Hunter & Junius, Inc. (LH&J) to assist in our hurricane recovery efforts.

Starting immediately after Hurricane Katrina struck, LH&J provided designs for repair of 17th Street Canal breaches. Over the coming months, they designed the gate structure and the first phase of pumps. Working closely with our Task Force Guardian LH&J provided construction drawings for the gate structure within just a few months of Katrina. LH&J continued to work with us diligently through completion of the project in 2007.

The 17th Street Canal Interim Closure Structure solved an important engineering challenge faced by our organization. The project was completed on a very aggressive schedule in a challenging environment exceeding what we expected. The U.S. Army Corps of Engineers awarded LH&J a Certificate of Appreciation for Support of Task Force Guardian in recognition of the outstanding contribution they provided in support of our efforts in rebuilding the Hurricane Protection System in Southeast Louisiana.

Yours very truly,

A handwritten signature in black ink, reading "Walter O. Baums, Jr.", is positioned above the typed name.

Walter O. Baums, Jr., P.E.
Chief, Engineering Division
U.S. Army Corps of Engineers
New Orleans District
7400 Leake Avenue
New Orleans, LA 70118



USACE - New Orleans District

Certificate of Appreciation

is presented to

Linfield Hunter & Junius, Inc.

For exceptional achievement in support of the Mississippi Valley Division's New Orleans District and the execution of the Hurricane and Storm Damage Risk Reduction System (HSDRRS) mission. The Linfield Hunter & Junius, Inc. contractors' professionalism, competence, and initiative were instrumental to the successful execution in surveying of multiple sites critical to the completion of both design and the construction of the HSDRRS project.

Linfield Hunter & Junius' outstanding achievement is in keeping with the finest traditions of public service and reflects great credit upon the Linfield Hunter & Junius, Inc. team, the U.S. Army Corps of Engineers, and the United States Army.

06 February 2012



**US Army Corps
of Engineers**®
New Orleans District

Edward R. Fleming
Colonel, US Army
Commander, New Orleans District
US Army Corps of Engineers



CERTIFICATE OF APPRECIATION

FOR

SUPPORT OF TASK FORCE GUARDIAN

AWARDED TO

Linfield Hunter & Junius, Inc.

in recognition of the outstanding contributions your company provided in support of Task Force Guardian and the U.S. Army Corps of Engineers in the rebuilding of the Hurricane Protection System of southeast Louisiana. The efforts of your company were integral to meeting the Corps' goal of restoring protection by the June 1 start of hurricane season. The willingness of your employees to work long hours under difficult conditions is a tribute to the professionalism of your company and demonstrates your commitment to rebuilding southeast Louisiana.

Bruce H. Hunt

WALTER O. BAUMY, JR.
DEPUTY PROGRAM MANAGER
TASK FORCE GUARDIAN



US Army Corps
of Engineers®
New Orleans District

Lewis F. Setliff III

LEWIS F. SETLIFF III
COLONEL, U.S. ARMY
COMMANDER, TASK FORCE GUARDIAN

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

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

B. Firm Name & Address:

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

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

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

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

None

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

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

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

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

TEC Professional Services Questionnaire

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

2.

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

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. NA	NA	NA
2.		
3.		

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

TEC Professional Services Questionnaire

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Lucas Watkins, Principal

Project Assignment:

Principal

Name of Firm with which associated:

ELOS Environmental, LLC

Years' experience with this Firm:

18 years

Education: Degree(s)/Year/Specialization:

MS / 2005 / Biological Sciences

BS / 2000 / Forest Management

Active registration: Year first registered/discipline:

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

Other experience and qualifications relevant to the proposed Project:

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Bucktown Wheel Wash Emergency Authorization Requests (EUA) Jefferson Parish, LA</p> <p>Michelle M. Gonzales, CFM Director Ecosystem and Coastal Management Jefferson Parish Government 1221 Elmwood Pk Blvd Suite 310 Jefferson, LA 70123 mgonzaless@jeffparish.net O: 504-736-6653 C: 225-223-2719</p>	<p>ELOS was contracted to prepare and submit emergency authorization requests and to prepare and submit formal permit applications requesting authorization from the U.S. Army Corps of Engineers (USACE) to conduct prop-washing at the mouth of Bucktown Marina basin near its confluence with Lake Pontchartrain on an approximately 1.50-acre site located in New Orleans, LA.</p> <p>ELOS obtained an emergency authorization requests and after-the-fact permit application from the USACE for identifying the possibility of impacting waters under federal jurisdiction, including wetlands and navigable waters. ELOS provided a clear documentation demonstrating the emergency nature of the situation, prompting USACE to swiftly evaluate the request and potentially issue authorization to proceed with necessary activities such as flood response or environmental remediation.</p> <p>The wheel wash system is positioned at exits of construction sites or quarries where vehicles are required to pass through before entering public roads to help in maintaining road safety by reducing the risk of accidents caused by slippery road conditions due to mud and debris from construction vehicles. Additionally, the wheel wash systems contributed to environmental protection by minimizing soil erosion and contamination of nearby water bodies with sediment-laden runoff from construction sites.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
April 2024	NA	\$30,000

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.		
Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. None	None	None
2.		
3.		
4.		
N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.		
See attached items below.		

TEC Professional Services Questionnaire



έλος (élos)
1. marsh, swamp, bog

Overview & History

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

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

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



541620, 541370GIS

www.elosenv.com
985.662.5501

TEC Professional Services Questionnaire

Our Services

Program & Project Management

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

Permitting Applications and Regulatory Compliance

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

Environmental Services

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

Coastal Restoration and Resilience Services

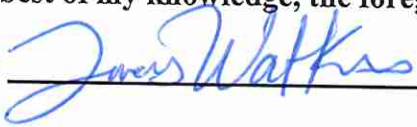
- Coastal Restoration Planning, Project Development, and Funding
- Coastal Resilience Planning
- Site Assessment and Analysis
- Ecosystem Restoration
- Climate Adaptation Strategies
- National Environmental Protection Act (NEPA) Compliance
- Coastal Use Permitting & Mitigation
- Construction Management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

Innovative Technologies

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

TEC Professional Services Questionnaire

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

Signature:  Print Name: Lucas Watkins

Title: Principal Date: 2-3-2024



City of Hammond, Louisiana

P.O. BOX 2788
HAMMOND, LA 70404
(985) 277-5616

2024 CITY LICENSE

DATE: 3/19/2024

LICENSE NUMBER: 20336

ACCOUNT#: 29490

LOCATION: 607 W. MORRIS AVE

OWNERS:

BUSINESS: ELOS ENVIRONMENTAL
607 W. MORRIS AVE
HAMMOND, LA 70403

LICENSES: 3597: PROFESSIONAL SERVICES

PERIOD: JANUARY 1, 2024 TO DECEMBER 31, 2024

POST IN A CONSPICUOUS PLACE

REVENUE & TAX COLLECTOR
CITY OF HAMMOND
KASEY DAIGLE

THIS LICENSE IS NOT TRANSFERRABLE.

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

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

B. Firm Name & Address:

Eustis Engineering L.L.C.
3011 28th Street, Metairie, Louisiana 70002

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

Gwendolyn P. Sanders, P.E. / President / 504-834-0157 / gsanders@eustiseng.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.

Gwendolyn P. Sanders, P.E. / President / 504-834-0157 / gsanders@eustiseng.com

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

<u>7</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u>2</u> Geologists	<u> </u> Structural Engineers
<u> </u> Chemical Engineers	<u>17</u> Geotechnical Engineers	<u>3</u> Graduate Engineers
<u> </u> Civil Engineers	<u> </u> Interior Designers	<u> </u> Project Managers
<u> </u> Construction Inspectors	<u> </u> Landscape Architects	<u>11</u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u> </u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u>5</u> Engineer Intern	<u> </u> Environmental Engineers	<u>47</u> Other
<u> </u> Professional Land Surveyors		<u>92</u> TOTAL

F. Is this submittal is 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. Not applicable.

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. Not Applicable.		
2.		
3.		

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

We estimate **16** individuals will be needed to complete the geotechnical services associated with projects under this advertisement. This includes a three-member drill crew as well as laboratory, clerical, and engineering staff. More employees can be added, as necessary, to complete any 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:

Gwendolyn P. Sanders, P.E. / President and Project Principal

Project Assignment:

Project Principal / Limited Liability Corporation Member

Name of Firm with which Associated:

Eustis Engineering L.L.C.

Years' Experience with This Firm:

31

Education: Degree(s)/Year/Specialization:

Master of Science / 1992 / Civil Engineering

Bachelor of Science / 1990 / Civil Engineering

Active Registration: Year First Registered/Discipline:

Louisiana: 1997 / Civil Engineering

Mississippi: 2003 / Engineering

Texas: 2020 / Civil Engineering

Other Experience and Qualifications Relevant to the Proposed Project:

Mrs. Sanders began her professional career with Eustis Engineering in 1993. Over the past 31 years, she has worked her way up through the ranks of the engineering department including Associate Engineer, Project Engineer, Project Manager, and Engineering Manager. She has been on Eustis Engineering's Board of Directors since 1997. In 2020, Mrs. Sanders became Eustis Engineering's first woman president after previously serving as a Vice President and Executive Vice President. As President, she is responsible for day-to-day business operations including quality, safety, marketing, and long-term strategic growth. She also actively participates in the engineering design and review processes.

Considering her experience with Eustis Engineering, a leading Gulf Coast geotechnical firm, Mrs. Sanders has extensive experience in soft soils and working on projects in coastal Louisiana. She has been directly and indirectly involved in numerous projects throughout the Gulf Coast area, particularly in the Greater New Orleans area. Mrs. Sanders has been involved in and managed every aspect of a geotechnical engineering project, namely developing appropriate scopes of work for projects, planning and coordinating field investigations, assigning laboratory testing, performing geotechnical engineering analyses, preparing detailed reports with engineering analyses and recommendations, reviewing reports prepared by other professionals, and consulting with clients. Much of her work experience has dealt with identifying soil properties, developing criteria for design of foundations, and determining an appropriate foundation to support the structure under consideration.

In 2017, Mrs. Sanders served as program advisor for the Deep Foundations Institute's 42nd annual conference. She has twice been named one of the 50 Women of the Year by New Orleans CityBusiness, first in 2017 and again in 2021. She is currently serving as an associate member of the ASCE Standards Committee for the Design of Foundations. She has a keen eye for detail and is a stickler for quality. Her work ethic, combined with her communication skills, translates to Mrs. Sanders' ability to deliver successful geotechnical engineering projects to her clients.

Over the years, Mrs. Sanders has been involved with more than 2,800 projects in some capacity, including the following contained within this submittal:

- State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Mid-Barataria Sediment Diversion Project, Mississippi River Mile 60.7 AHP, Vicinity of Ironton and Lafitte, Louisiana (23325.00-.11)

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:

Gwendolyn P. Sanders, P.E. / President and Project Principal

- State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Grande Cheniere Ridge Marsh Creation Area (BA-0240), Plaquemines Parish, Louisiana (24364)
- State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Grande Bayou Ridge and Marsh Restoration, Plaquemines Parish, Louisiana (24365)
- State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Maurepas Diversion and West Shore of Lake Pontchartrain, St. John the Baptist Parish, Louisiana (24384.-.02)
- State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Marsh Creation Projects in the Breton Sound, St. Bernard Parish, Louisiana (24431.00-.01 & 24762)
- State of Louisiana - Grand Isle State Park, Phase I and II Improvements, Jefferson Parish, Louisiana (24093.00-.01 and 25239)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
James J. Hance, P.E. / Senior Project Manager and Vice President (Finance)	
Project Assignment:	
Senior Project Manager / Limited Liability Corporation Member	
Name of Firm with which Associated:	
Eustis Engineering L.L.C.	
Years' Experience with This Firm:	
20	
Education: Degree(s)/Year/Specialization:	
Master of Business Administration / 2011 / Business Administration Master of Science / 2003 / Civil Engineering (Geotechnical) Bachelor of Science / 1998 / Civil Engineering	
Active Registration: Year First Registered/Discipline:	
Louisiana: 2004 / Civil Engineering Mississippi: 2012 / Engineering Texas: 2010 / Civil Engineering	
Other Experience and Qualifications Relevant to the Proposed Project:	
<p>For 3 years, Mr. Hance was a Staff Engineer and Assistant Project Manager on numerous design and construction phase projects in the Washington D.C. metropolitan area. His duties included management of field technicians who performed concrete, asphalt, and soils testing as well as foundation construction observations of spread footings, mats, drilled shafts, augercast piles, driven steel H-piles, tiebacks, and underpinning piers.</p> <p>After relocating to Austin, Texas, to eventually pursue graduate studies in engineering, Mr. Hance acted as an assistant project engineer for several design phase projects. These projects involved retention and stream bank stabilization applications. The types of systems designed included mechanically stabilized earth (MSE), single and multi-tiered walls and slopes utilizing geogrid reinforcement, and the use of geosynthetic materials in engineering applications such as erosion control solutions for open channel flow conditions.</p> <p>Mr. Hance was a graduate research assistant at the University of Texas at Austin where he published his Master's thesis in association with a Master of Science in Civil Engineering degree: <i>Assessment of Seafloor Slope Stability Based on a Database of Published Submarine Slope Failures</i>.</p> <p>Mr. Hance has spent the past 20 years with Eustis Engineering and has worked on many projects for Jefferson Parish. During his tenure at Eustis Engineering, he has earned four promotions: Project Engineer (July 2004), Project Manager (November 2007), Vice President (August 2011), and Chief Financial Officer (August 2012). Mr. Hance manages geotechnical services associated with commercial, industrial, environmental, and civil works projects. His responsibilities include managing a wide variety of design and construction phase projects (public and private sectors), management of staff engineers and development of their skill assets, developing scopes of work and appropriate fees for new projects with clients, participating in business development and marketing ventures, and negotiating contracts.</p> <p>Some of his experience relative to this submittal includes the following:</p> <ul style="list-style-type: none">• State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Bayou Dularge Ridge, Marsh, and Hydrologic Restoration Project, Terrebonne Parish, Louisiana (23970.00, .01)	

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
James J. Hance, P.E. / Senior Project Manager and Vice President (Finance)
<ul style="list-style-type: none">State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Mid-Barataria Sediment Diversion Project, Mississippi River Mile 60.7 AHP, Vicinity of Ironton and Lafitte, Plaquemines and Jefferson Parishes, Louisiana (23325.00-.11)Jefferson Parish - Upper Barataria Terracing Project, Jefferson Parish, Louisiana (25108)State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Grande Cheniere Ridge Marsh Creation Area, Plaquemines Parish, Louisiana (24364)State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Grand Bayou Ridge and Marsh Restoration, Plaquemines Parish, Louisiana (24365)State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Maurepas Diversion and West Shore of Lake Pontchartrain, St. John the Baptist Parish, Louisiana (24384.00 -.02)State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Marsh Creation Projects in the Breton Sound, St. Bernard Parish, Louisiana (24431.00-.01 & 24762)State of Louisiana - Grand Isle State Park, Phase I and II Improvements, Jefferson Parish, Louisiana (24093.00-.01 and 25239)State of Louisiana – Department of Wildlife and Fisheries, Marsh Island Refuge Water Control Structure Replacements, Belly Dam, Joe Aucoin, and Northeast Bird Island, Iberia Parish, Louisiana (24170.00- .01)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Sean G. Walsh, P.E. / Engineering Manager and Vice President (Engineering)
Project Assignment:
Project Manager
Name of Firm with which Associated:
Eustis Engineering L.L.C.
Years' Experience with This Firm:
11
Education: Degree(s)/Year/Specialization:
Master of Science / 2010 / Civil Engineering Bachelor of Science / 2007 / Civil Engineering
Active Registration: Year First Registered/Discipline:
Louisiana: 2013 / Civil Engineering
Other Experience and Qualifications Relevant to the Proposed Project:
<p>For his first 5 years after graduation, Mr. Sean G. Walsh, P.E., was a Project Engineer on numerous projects in New York and the New Orleans metropolitan area where he gained experience in civil, geotechnical, and geo-environmental engineering projects for a variety of public and private clients.</p> <p>Since joining Eustis Engineering in 2012 as a Project Engineer, Mr. Walsh has been responsible for developing and managing engineering package preparations (e.g., engineering design and analysis, reporting, developing construction and permit drawings, contract specifications, cost estimates, and design reporting) for a diverse range of design and analysis projects, including deep foundations, excavation support systems, utility foundations, slope stabilization, solid waste closure systems, levee inspection/safety, and seepage modeling.</p> <p>Mr. Walsh was promoted to Project Manager in 2017, Engineering Manager in 2019, and Vice President in 2020. Mr. Walsh is also a graduate of the 2017 New Orleans Regional Leadership Institute (NORLI), a 1-year training program designed to help shape community leaders.</p> <p>During his employment with Eustis Engineering, Mr. Walsh has provided engineering services on more than 650 projects. Mr. Walsh has risen to the level of Vice President and Engineering Manager, in which he is responsible for personnel resource allocation, the overall engineering schedule, and execution of engineering services. Mr. Walsh also functions as a mentor to the engineering staff.</p> <p>A large portion of Mr. Walsh's experience, before and after joining Eustis Engineering, involved development of design and construction recommendations associated with flood protection systems in southeastern Louisiana. Mr. Walsh has served as the project engineer and project manager responsible for the development and implementation of geotechnical exploration programs; development of soil testing laboratory programs; and interpretation of the results to evaluate strength, compressibility, and general soil characterization. Mr. Walsh used these data for geotechnical designs comprising pile capacity curves; bearing capacity analyses; cantilever retaining analyses; anchored retaining wall analyses; temporary retaining structure design; time-settlement projections for earthen levees with lift schedules; soil pressure profiles; structural and earthen levee under seepage analyses; levee and bank stability by Spencer's Method of Slices and Method of Planes; reinforced embankment design; stability analyses of flood protection walls (e.g., T-walls, I-walls, L-walls, and braced 'A-Frame' walls); downdrag and settlement analyses; settlement induced bending moments (SIBM) in foundation piles; piping analyses; uplift analyses; heave analyses; three-dimensional modeling of fill and structural load placements for predictions of time-rate settlements of foundation systems; and</p>

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Sean G. Walsh, P.E. / Engineering Manager and Vice President (Engineering)

numerical modeling of soil-structure interaction (SSI) of flood protection structures by the finite element method (FEM).

Mr. Walsh has also worked on many local government projects in towns and cities including New Orleans, Golden Meadow, and Kentwood; numerous projects in Jefferson, Orleans, St. Bernard, St. Charles, and Plaquemines Parishes; several Port Commissions (e.g., Baton Rouge, New Orleans, South Louisiana); the Sewerage & Water Board of New Orleans; etc.

Regardless of the types of projects engineered for these agencies, his responsibilities have remained the same, namely defining the project philosophy; developing and maintaining the schedule; providing status reports to clients; controlling expenditures; overseeing project personnel; and reviewing the project design for compliance with engineering principles, company standards, and client requirements. He is hands-on in coordinating activities concerned with technical developments and in resolving engineering design/test problems.

Mr. Walsh's skills over the past 16 years in the industry have developed exponentially with the variety of projects that have crossed his desk. Regarding this submittal, Mr. Walsh has been directly involved with the following projects:

- State of Louisiana – Coastal Protection and Restoration Authority, Bayou Dularge Ridge, Marsh, and Hydrologic Restoration Project, Terrebonne Parish, Louisiana (23970.00, .01)
- State of Louisiana – Coastal Protection and Restoration Authority, Mid-Barataria Sediment Diversion Project, Mississippi River Mile 60.7 AHP, Vicinity of Ironton and Lafitte (Plaquemines and Jefferson Parishes), Louisiana (23325.00 - .11)
- Jefferson Parish – Upper Barataria Terracing Project, Jefferson Parish, Louisiana (25108)
- State of Louisiana – Coastal Protection and Restoration Authority (CPRA), Grand Bayou Ridge and Marsh Restoration, Plaquemines Parish, Louisiana (24365)
- State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Maurepas Diversion and West Shore of Lake Pontchartrain, St. John the Baptist Parish, Louisiana (24384.00, .01)
- State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Marsh Creation Projects in the Breton Sound, St. Bernard Parish, Louisiana (24431.00-.01 & 24762)
- State of Louisiana - Grand Isle State Park, Phase I and II Improvements, Jefferson Parish, Louisiana (24093.00 - .01, 25239)
- State of Louisiana, Department of Wildlife and Fisheries - Marsh Island Refuge Water Control Structure Replacements, Belly Dam, Joe Aucoin, and Northeast Bird Island, Iberia Parish, Louisiana (24170.00 - .01)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
James M. Williams, P.E. / Geotechnical Project Engineer	
Project Assignment:	
Project Engineer	
Name of Firm with which Associated:	
Eustis Engineering L.L.C.	
Years' Experience with This Firm:	
6	
Education: Degree(s)/Year/Specialization:	
Master of Science / 2018 / Civil Engineering Bachelor of Science / 2016 / Civil Engineering	
Active Registration: Year First Registered/Discipline:	
Louisiana: 2021 / Civil Engineering	
Other Experience and Qualifications Relevant to the Proposed Project:	
<p>While an undergraduate at Mississippi State University, Mr. Williams worked as both an Undergraduate Research Assistant and a Soils Laboratory Assistant. As an Undergraduate Research Assistant, Mr. Williams created a database of historic test results related to off-road vehicular mobility. He completed a statistical analysis of the database results and developed empirical relations. As a Soils Laboratory Assistant, Mr. Williams organized and instructed undergraduate student teaching exercises. He also prepared test specimens for research and teaching practices.</p> <p>As a Graduate Research Assistant, Mr. Williams continued to work with a database of historic test results. He conducted laboratory exploration of soil and soil-biochar mixture properties through standard procedures including particle size, triaxial shear testing, consolidation testing, and permeability testing. He also employed microscopy and chemical techniques to determine qualitative information related to the mineralogy and microstructure of earthen material.</p> <p>As a Project Engineer for Eustis Engineering L.L.C., Mr. Williams coordinates site access, assigns laboratory tests, and performs geotechnical engineering analyses and evaluations. Engineering analyses may include estimates of allowable bearing values; estimates of allowable pile load capacity for various types and sizes of piles; pile response to vertical and lateral loading; slope stability analyses of riverbanks, levees, and earthen structures; sheetpile wall design; wick drainage design; and settlement estimates. Mr. Williams has developed a proficiency with engineering programs such as LPILE® and GROUP® by Ensoft, Inc.; SLOPE/W by GeoStudio; Settle3 by Rocscience Inc.; and PSDDF by Timothy Stark, PhD and Hangseok Choi, PhD. He also provides technical assistance to our laboratory manager for planning, processing, and review of advanced laboratory testing. Currently, Mr. Williams is also working with the Vice President of Testing on Eustis Engineering's OpenGround® and KeyLAB® implementation.</p> <p>Mr. Williams' skills and understanding of the soft soil behavior of coastal Louisiana have developed exponentially with the variety of projects that have crossed his desk. Regarding this submittal, Mr. Williams has been directly involved with the following projects:</p> <ul style="list-style-type: none">• State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Bayou Dularge Ridge, Marsh, and Hydrologic Restoration Project, Terrebonne Parish, Louisiana (23970.00, .01)• Grand Isle Independent Levee District - Preliminary Study, Fifi Island Rock and Restoration Project, Jefferson Parish, Louisiana (25128)	

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
James M. Williams, P.E. / Geotechnical Project Engineer
<ul style="list-style-type: none">• State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Mid-Barataria Sediment Diversion Project, Mississippi River Mile 60.7 AHP, Vicinity of Ironton and Lafitte, Plaquemines and Jefferson Parishes, Louisiana (23325.00-.11)• State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Grand Bayou Ridge and Marsh Restoration, Plaquemines Parish, Louisiana (24365)• State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Maurepas Diversion and West Shore of Lake Pontchartrain, St. John the Baptist Parish, Louisiana (24384.00 -.02)• State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Marsh Creation Projects in the Breton Sound, St. Bernard Parish, Louisiana (24431.00 - .01 & 24762)• State of Louisiana - Grand Isle State Park, Phase I and II Improvements, Jefferson Parish, Louisiana (24093.00-.01 & 25239)• State of Louisiana – Department of Wildlife and Fisheries, Marsh Island Refuge Water Control Structure Replacements, Belly Dam, Joe Aucoin, and Northeast Bird Island, Iberia Parish, Louisiana (24170.00 - .01)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Henry C. Worley, P.E. / Geotechnical Project Engineer	
Project Assignment:	
Project Engineer	
Name of Firm with which Associated:	
Eustis Engineering L.L.C.	
Years' Experience with This Firm:	
6	
Education: Degree(s)/Year/Specialization:	
Master of Science / 2022 / Engineering Bachelor of Science / 2016 / Civil Engineering 2019 / Coastal Engineering Certificate	
Active Registration: Year First Registered/Discipline:	
Louisiana: 2021 / Civil Engineering	
Other Experience and Qualifications Relevant to the Proposed Project:	
<p>Mr. Worley received his Master of Science degree in Engineering with a focus in geotechnical and coastal engineering in 2022. For this degree, he researched consolidation testing parameters and correlations typically implemented in local practice. Mr. Worley worked at Eustis Engineering in the summer of 2015 as a student intern and returned as an assistant engineer after working for the State of Louisiana, Coastal Protection and Restoration Authority (CPRA) and others after receiving his undergraduate degree. Over the past 7 years, he has worked on a number of coastal restoration and flood protection projects for CPRA, the U.S. Department of Agriculture's Natural Resources Conservation Service (USDA NRCS), and Ducks Unlimited.</p> <p>Engineering analyses associated with these coastal engineering projects include evaluation of global and local slope stability, estimating allowable soil bearing values, estimating the total and time-rate of settlement due to fill placement and structural loads, and shallow and deep foundation evaluations. He continues to hone his knowledge with computation software such as LPILE®, GROUP®, Settle3, SLOPE/W, PSDDF, and the U.S. Army Corps of Engineers' CWALSHT.</p> <p>Mr. Worley has direct involvement with the following projects relevant to this submittal:</p> <ul style="list-style-type: none">• State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Bayou Dularge Ridge, Marsh, and Hydrologic Restoration Project, Terrebonne Parish, Louisiana (23970.00, .01)• State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Mid-Barataria Sediment Diversion Project, Mississippi River Mile 60.7 AHP, Vicinity of Ironton and Lafitte, Plaquemines and Jefferson Parishes, Louisiana (23325.00-.11)• Jefferson Parish - Upper Barataria Terracing Project, Jefferson Parish, Louisiana (25108)• State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Grande Cheniere Ridge Marsh Creation Area, Plaquemines Parish, Louisiana (24364)• State of Louisiana - Coastal Protection and Restoration Authority (CPRA), Grand Bayou Ridge and Marsh Restoration, Plaquemines Parish, Louisiana (24365)	

PROJECT NO. 01	
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:
<p>State of Louisiana Coastal Protection and Restoration Authority (CPRA) Bayou DuLarge Ridge, Marsh, and Hydrologic Restoration Project Terrebonne Parish, Louisiana Eustis Engineering Project Nos. 23970.00 - .01</p> <p>Contact Information: USDA – NRCS Through Sigma Consulting Group, Inc. 10305 Airline Highway Baton Rouge, Louisiana 70816 Robert Lear, P.E. @ 225-298-0800 rlear@sigmacg.com</p>	<p>This restoration project in Terrebonne Parish is located on the lower end of Bayou DuLarge between Lake Merchant and Caillou Lake. The project will use borrow material from Lake Merchant to create and nourish marsh on the southern side of Bayou DuLarge, restore the ridge along the southern bank line of Bayou DuLarge, and reestablish historic hydrologic and salinity conditions by installing a structure that reduces the cross-section of Grand Pass and the intrusion of Gulf marine waters into the project area.</p> <p>Eustis Engineering's role in this project included obtaining 45 undisturbed soil borings and cone penetration tests (CPTs) using airboat-mounted equipment and truck-mounted equipment positioned on a jack-up barge. The borings and CPTs extended to depths of 40 to 50 feet below the mudline for the marsh and ridge locations and 120 to 150 feet below the mudline for the Grand Pass structure. The airboat was used whenever possible to minimize detrimental impacts to the marsh environment.</p> <p>Samples obtained from the soil borings were subjected to soil mechanics laboratory tests in accordance with ASTM standards. Testing consisted primarily of classification tests. Beyond these tests, bulk samples of soil dredged from the borrow source were used to conduct settling column tests and self-weight consolidation tests.</p> <p>Eustis Engineering published a geotechnical data report (GDR) on 17 March 2020. Based on the GDR, Eustis Engineering performed engineering design and analyses, published two geotechnical engineering reports, and contributed to the 30% and final designs considering the following project features.</p> <p>Grand Pass Closure: Eustis Engineering performed slope stability and settlement analyses to evaluate rock embankment closure concepts and evaluate alternatives using sheetpiles and driven piles for the closure.</p> <p>Earthen Containment Dikes: Eustis Engineering's team performed stability analyses for three marsh fill elevations to evaluate the geometry required for a stable dike configuration. Analyses included estimates of dike fill consolidation during and after construction, recommendations for setup time required for the newly placed material before dredged fill slurry was placed, sequencing recommendations, and bearing capacity recommendations.</p> <p>Marsh Creation Fill Area Design: Settlement analyses were performed for five marsh fill elevations projecting settlement over the 25-year project life. Eustis Engineering's analyses considered settlement during and after construction for scenarios of single-stage, two-stage, and three-stage dredging.</p>

PROJECT NO. 01		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	Earthen Ridge Design: Eustis Engineering performed slope stability and settlement analyses for the ridge configuration. Engineering analyses included consolidation estimates during construction. Analyses also included two configurations for a gap closure along the ridge alignments.	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
06/2023 (A)	Unknown	\$760,000

PROJECT NO. 02		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Grand Isle Independent Levee District Preliminary Study Fifi Island Rock and Restoration Project Jefferson Parish, Louisiana CPRA Project No. TE-0171 Eustis Engineering Project No. 25128</p> <p>Contact Information: Grand Isle Independent Levee District Through GIS Engineering, L.L.C. Suite 600 935 Gravier Street New Orleans, Louisiana 70112 Kyle Galloway, P.E. @ 504-265-3504 kgalloway@gisy.com</p>	<p>In a preliminary effort, Eustis Engineering provided geotechnical services for the Fifi Island Rock and Restoration Project. The objective of this project is to create, maintain, and nourish existing, deteriorating wetlands by placing hydraulically dredged material from an undetermined borrow source. Specifically, 281 acres of confined marsh will be placed in designated marsh creation areas (MCAs) formed by constructing earthen containment dikes (ECDs), rock dikes (RDs), and breakwaters around Fifi Island located northwest of Grand Isle.</p> <p>Eustis Engineering's geotechnical exploration included the performance of eight cone penetration tests (CPTs) to evaluate subsurface conditions and stratification. The CPTs were performed with an airboat-mounted rig using an electronic piezocone penetrometer with a 5-ton capacity.</p> <p>Utilizing the results of the geotechnical exploration, we performed engineering evaluations in general accordance with our proposal, furnished plans, and additional information from GIS.</p> <p>Our engineering analyses of the marsh creation cells included preliminary settlement estimates projecting settlement over the 20-year project life considering the effect of settlement of the subsurface soils. The settlement over time was estimated for 20 years after construction.</p> <p>Our scope for the ECDs, RDs, and breakwaters included slope stability analyses with and without marsh fill (as applicable) to evaluate the geometry required for stable dike/breakwater configuration, development of settlement estimates, and general construction recommendations.</p> <p>Design recommendations for the proposed project features were provided based on our findings from the CPT soundings and available historical data in the Grand Isle vicinity. Construction recommendations were also provided.</p> <p>Eustis Engineering plans to provide a new proposal comprising additional geotechnical field exploration and subsequent analyses to support final design of the project.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
05/2024 (A)	Unknown	\$85,000 (to date)

PROJECT NO. 03	
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:
<p> State of Louisiana Coastal Protection and Restoration Authority (CPRA) Mid-Barataria Sediment Diversion Project Mississippi River Mile 60.7 AHP Vicinity of Ironton and Lafitte (Plaquemines and Jefferson Parishes), Louisiana CPRA Project No. BA-53 CPRA Contract No. 4400013603 Eustis Engineering Project No. 23325.00-.11 </p> <p> Contact Information: State of Louisiana – CPRA Through AECOM 1515 Poydras Street, Suite 2700 New Orleans, Louisiana 70112 Mark Gonski @ 504-799-1332 Mark.gonski@aecom.com </p>	<p> The Mid-Barataria Sediment Diversion (MBSD) project is being designed to strategically reintroduce sediment and nutrients from the Mississippi River into the Barataria Basin. MBSD is an estimated \$1.3 billion project and the Coastal Protection and Restoration Authority's (CPRA) signature project of the 2017 and 2023 Coastal Master Plans. It is a Construction-Manager-At-Risk (CMAR) project delivery method where the engineering and design (E&D) team is co-located with the CMAR and CPRA throughout the E&D process. Eustis Engineering L.L.C. is the lead geotechnical engineer for the E&D team. The MBSD project will sustainably create approximately 15,000 acres of land in the Barataria Basin over the long term. The CPRA proposes to construct the diversion intake and control structure through the Mississippi River levee on the western side of the Mississippi River at approximate River Mile 60.7 AHP in Plaquemines Parish, Louisiana. The diversion outfall will be constructed through the future New Orleans to Venice (NOV) levee into the Barataria Basin, allowing sediment-laden water from the Mississippi River to flow into the Barataria Basin. Key project features include a river inlet and diversion control structure, a conveyance channel, an outfall transition feature, site forced drainage including siphon and sluice gate structures, LA Highway 23 bridge and approaches, and the New Orleans and Gulf Coast Railroad bridge and approaches. </p> <p> The 15% Basis of Design phase was completed in October 2018. The 30% Design phase was completed in November 2019 which included issuing a Design Documentation Report and a Geotechnical Engineering Report. After the 30% submittal, the CPRA initiated a Value Engineering phase that began in January 2020. The 60% and 90% designs were submitted in July 2021 and July 2022, respectively. The 100% design and Section 408 application was submitted in May 2023. Eustis Engineering's activities throughout these phases have included: serving as the permitting agent for the CPRA and obtaining a Coastal Use Permit and Section 10/404 Permits from the U.S. Army Corps of Engineers (USACE) for performing soil borings and cone penetration tests (CPTs); developing a detailed project design criteria document; participating in a semi-quantitative risk assessments (SQRA) and workshop with the design team, CMAR, the CPRA, and the USACE; writing a SQRA Risk Report; helping develop and update the project risk register; obtaining CPTs and borings; soil laboratory testing including advanced shear strength testing (direct simple shear); and engineering analyses/design of the various project features. Eustis Engineering obtained 162 borings (3-in. and 5-in. diameter) and 98 CPTs for the three exploration phases (15%, 30% and 60%) in the river, land, and Barataria Bay environments. The field program was performed safely over several years and with hundreds of thousands of man-hours, one of the most impressive field exploration programs completed in the firm's 78-year history. </p>

PROJECT NO. 03		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	<p>Eustis Engineering took a lead role in developing geotechnical testing, instrumentation plans, and specifications for two, full-scale levee wick drain test sections. These test sections were necessary to improve the understanding of levee settlement, gain-in-foundation shear strength, and levee staged-construction schedule. These test levees and the associated instrumentation and monitoring began in 2019 and were completed in 2021. With 100% design complete, the construction phase was originally scheduled to begin in fall 2023 but was delayed. Some construction operations are anticipated to begin later this year. Eustis Engineering will remain involved performing engineering during construction tasks that include data gathering and evaluation for the extensive pile load test program and geotechnical instrumentation program for the conveyance channel levees.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
Project is On Hold	Unknown	\$5,526,630

PROJECT NO. 04		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Upper Barataria Terracing Project Jefferson Parish, Louisiana FNI Project JPL22495 Eustis Engineering Project No. 25108</p> <p>Contact Information: Jefferson Parish Government Through Freese and Nichols, Inc. 900 Camp Street New Orleans, Louisiana 70130 Nina Reins @ 225-245-7202</p>	<p>The Upper Barataria Terracing project comprises construction of earthen terraces, using materials from adjacent borrow canals in open water to encourage the creation of emergent marsh in Barataria Bay near Bayou Dupre Cut and Bayou Dupont.</p> <p>Eustis Engineering L.L.C.'s scope of service for the geotechnical exploration comprised obtaining a Coastal Use Permit (CUP), executing a geotechnical exploration, and performing subsequent laboratory testing. Borings were performed at nine locations to depths of 50 feet below the mudline to evaluate subsurface conditions and stratification and to obtain samples of the various substrata. The soil test borings were drilled using a drill rig mounted onto a marsh buggy. Soil mechanics laboratory tests, performed on samples obtained from the soil borings, were used to evaluate the physical properties of the subsoils. The results from the soil borings and laboratory tests were transmitted through a geotechnical data report and later used to establish the recommendations we prepared in our geotechnical engineering report.</p> <p>Engineering analyses performed by Eustis Engineering for the proposed terraces included slope stability evaluation of the earthen terraces considering adjacent borrow canals; settlement analyses for immediate and long-term settlement due to the compression of subsurface soil consolidation; and general construction recommendations. We transmitted the findings and recommendations into a final geotechnical engineering report. Eustis Engineering provided additional consulting efforts with Freese and Nichols to establish constructability recommendations for use in the project plans and specifications. Our constructability recommendations are based on recent coastal engineering projects specific to earthen terraces and borrow canals.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
04/2024 (A)	Unknown	\$131,000 (to date)

PROJECT NO. 05	
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:
<p>State of Louisiana - Coastal Protection and Restoration Authority (CPRA) Grande Cheniere Ridge Marsh Creation Area Plaquemines Parish, Louisiana CPRA Contract No. 4400015385 CPRA Project No. BA-0240 CPRA Task No. 2 Eustis Engineering Project No. 24364</p> <p>Contact Information: State of Louisiana – CPRA The Water Campus 150 Terrace Avenue Baton Rouge, Louisiana 70802 Tye Fitzgerald, P.E. @ 225-342-7308 Tye.fitzgerald@la.gov</p>	<p>The purpose of the Grande Cheniere Ridge Marsh Creation Project (BA-0240) is to create 600 acres of marsh and 10,820 linear feet of coastal ridge habitat by hydraulically dredging material from the Mississippi River borrow source. Significant marsh loss has occurred in this area due to construction of numerous oil and gas canals, subsidence, and sediment deprivation. The hope is marsh creation areas will be formed with the construction of earthen containment dikes around the boundaries of each proposed area using material excavated from adjacent borrow canals.</p> <p>Five undisturbed soil borings and twelve cone penetration tests were performed within the marsh creation area (MCA). The soil borings extended to depths of 20 and 40 feet below the mudline. The CPTs were performed to depths of 36 to 40 feet below the mudline. Before our field operations, Eustis Engineering subcontracted T. Baker Smith, LLC, to perform a magnetometer survey at each boring and CPT location to ensure no pipelines or obstructions existed at the exploration points. Access for the MCA was via marsh buggy and air boat. Eustis Engineering also completed marine borings from a jack-up-barge within the Mississippi River (under a separate task order) to evaluate the proposed borrow source to be hydraulically dredged and pumped to the MCA. Once the field operations were completed, soil mechanics laboratory tests were performed on select, representative samples from the MCA. Testing included natural water content, unit weight, one-point unconsolidated undrained triaxial compression shear, Atterberg limits determinations, organic content tests, specific gravity, grain size analysis, percent passing the U.S. Standard No. 200 sieve, and consolidation tests. These results were transmitted as a Geotechnical Data Report.</p> <p>Our engineering scope of work included evaluation of the marsh creation fill cells, earthen containment dikes design, ridge design, estimates of settlement, and slope stability analyses. Engineering analyses were performed using soil boring and laboratory test data from the current and previous explorations [October 2007 (BA-0042) and December 2015 (BA-0173)]. We also provided recommendations regarding site preparation and general construction recommendations relevant to our geotechnical design assumptions.</p> <p>More specifically, our engineering analyses of the MCA have included settlement estimates and settlement curves for furnished marsh fill elevations which project settlement over a 20-year project life. Engineering analyses for the earthen containment dikes and the earthen ridge included slope stability analysis with and without marsh fill to evaluate the geometry required for stable configurations (construction elevation, acceptable side slopes, and acceptable crown width), geotextile requirements, estimates of dike fill consolidation during construction, construction sequencing recommendations, and</p>

PROJECT NO. 05		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	bearing capacity assessments. These recommendations were issued in a draft Geotechnical Engineering Report (GER). Comments from CPRA were incorporated in the final GER.	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
06/2021 (A)	Unknown	\$110,650

PROJECT NO. 06	
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:
<p>State of Louisiana – Coastal Protection and Restoration Authority (CPRA) Grande Bayou Ridge and Marsh Restoration Plaquemines Parish, Louisiana CPRA Contract No. 4400015385 CPRA Project No. BA-0217 Eustis Engineering Project No. 24365</p> <p>Contact Information: State of Louisiana – CPRA 150 Terrace Avenue Baton Rouge, Louisiana 70802 Tye Fitzgerald, P.E. at 225-342-7308 tye.fitzgerald@la.gov</p>	<p>The Grand Bayou Ridge and Marsh Restoration Project (BA-0217) will create approximately 344 acres of marsh; 25,000 linear feet of terraces; and 10,657 linear feet of coastal ridge habitat by hydraulically dredging material from a Mississippi River borrow source and utilizing in-situ materials from Grand Bayou. The marsh creation areas will be formed by constructing earthen containment dikes around the boundaries of each proposed area using material excavated from adjacent borrow canals. The project will adhere to CPRA's Geotechnical Standards, Marsh Creation and Coastal Restoration Projects (Version 1.0) engineering and design standards.</p> <p>Thirty-one locations were identified for drilling and testing in the project area. Six of the locations were designated as co-located soil borings and cone penetration tests (CPTs). These locations also correspond to those identified in a Coastal Use Permit obtained by CPRA. The borings and CPTs varied between 20 and 40 feet in depths. The borings were made using drilling equipment mounted onto a marsh buggy and the CPTs were made using an airboat. Mobilization for this task order was combined with the nearby BA-0240 project to provide economy. As part of our field investigation, Eustis Engineering's personnel coordinated with landowners, the U.S. Army Corps of Engineers, and appropriate levee boards. Eustis Engineering teamed with T. Baker Smith, LLC, to complete a hazard survey and provide locations and elevations for each boring/CPT. In the laboratory, samples were classified using the Unified Soil Classification System. Testing included moisture content, unit weight, one-point unconsolidated undrained triaxial compression shear, Atterberg limits determinations, organic content, sieve and hydrometer analyses, and consolidation tests. Field and laboratory test results were summarized in a Geotechnical Data Report (GDR). Note, samples of the Mississippi River borrow source were obtained and tested under a separate task order to provide soil characteristics for design.</p> <p>Our staff performed engineering analyses for the earthen containment dikes, earthen ridge feature, earthen terrace design, and marsh creation fill area. These analyses include stability analyses to evaluate the geometry required for stable configurations of the dike, ridge, and terrace designs; estimates of fill consolidation settlement during construction of these same features; settlement curves (including immediate and consolidation settlement) of the subsurface soils; and construction sequencing recommendations. Marsh creation fill area designs require engineering analyses associated with evaluation of both primary and secondary consolidation settlement of the subsurface soils due to placement of sand as well as the projected settlement during construction and up to 20 years after construction. All data were presented in accordance with the Louisiana Sand Resource Database's Standard Operating Procedures for Geo-Scientific</p>

PROJECT NO. 06		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	Data Management. Draft and final Geotechnical Engineering Reports (GER) were published to present the findings of the project.	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
07/2021 (A)	Unknown	\$165,350

PROJECT NO. 07	
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:
<p>State of Louisiana - Coastal Protection and Restoration Authority (CPRA) Maurepas Diversion and West Shore of Lake Pontchartrain St. John the Baptist Parish, Louisiana Eustis Engineering Project Nos. 24384.00-.02</p> <p>Contact Information: State of Louisiana – CPRA Through AECOM Technical Services, Inc. 59100 Industrial Boulevard Building 3502 Plaquemine, Louisiana 70764 Clay Loyless, P.E. @ 504-799-1324</p>	<p>Eustis Engineering L.L.C.'s scope of service for the 15% design included review of existing geotechnical data, development of a geotechnical data collection plan, collection of new geotechnical data, laboratory analyses, development of geotechnical soil design reaches, and preparation of geotechnical design recommendations for the future flood protection and freshwater diversion. Our services focused on the freshwater diversion and the flood protection features associated with the U.S. Army Corps of Engineers' (USACE's) West Shore of Lake Pontchartrain (WSP) alignment. The WSP geotechnical exploration and analyses need to meet requirements for a 1% storm. Thus, all designs will be performed in accordance with the interim <u>Hurricane and Storm Damage Risk Reduction System Design Guidelines</u> (HSDRRSDG) as modified by WSP project specific post-summit memoranda developed by the USACE, New Orleans District. The geotechnical exploration work to date was completed to define soil and foundation conditions along the future WSP levee alignment as well as information for the diversion beyond the area of the WSP.</p> <p>AECOM Technical Services, Inc. furnished available historical data, analyses, and reports to Eustis Engineering for review. In addition to the furnished data, Eustis Engineering performed additional field exploration to provide current soil conditions at the site to meet HSDRRSDG for the future levee and structural foundations. The field exploration comprised twelve, 5-in. diameter soil borings and eight cone penetration tests (CPTs). The 4-ft undisturbed sample tubes were extruded in the laboratory, divided, and tested in general accordance with standards followed by the USACE for the other portions of the WSP alignments. Our soil mechanics laboratory tests comprised unconfined compression shear, one and three-point unconsolidated undrained triaxial compression shear, direct simple shear, consolidation, Atterberg limits determinations, organic content determinations, and sieve and hydrometer analyses.</p> <p>Using these data, the Maurepas Diversion was separated into three soil design reaches by our engineering staff. Subsurface conditions and design parameters were included in the initial draft report. Ongoing efforts will comprise deep-seated global stability analyses; unbalanced force determinations for T-walls; piping cutoff designs; uplift analyses; allowable pile load capacity estimates per the HSDRRSDG for T-wall structures; allowable pile load capacity estimates per the State of Louisiana, Department of Transportation and Development (LaDOTD) for Airline Highway; development of lateral load soil design parameters for foundation piles (e.g., subgrade moduli, LPILE® parameters, etc.) subject to unbalanced loading; preparation of Geotechnical Design Reports and supporting information for the Design Documentation Report; levee stability analyses with estimates of strength gain during and after construction; reinforcing geotextile strength and width based on the 2070 design elevations; settlement curves to year 2070;</p>

PROJECT NO. 07		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	<p>estimates of settlement induced bending moments at multiple future tie-in locations along with recommendations for mitigating such effects; ground improvement programs by use of wick drain fields and preload/surcharge embankments at multiple sites; conceptual temporary retaining structure designs at each future structure location; utility relocation design recommendations pertaining to geotechnical requirements; Maurepas Diversion channel stability designs; LaDOTD standard pavement designs; and development and coordination of submittals for 35%, 95%, and 100% design stages including comment review and resolution. The Geotechnical Engineering Report to support the 35% level design was issued in December 2022. Some advancement of a 65% design alternative was made in 2023.</p> <p>We have recently completed a Geotechnical Data Report for a borrow area study. We conducted a supplemental geotechnical exploration that included the performance of ten soil borings to assess the diversion site as a potential borrow source for the proposed levees.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
Ongoing	Unknown	\$581,000 (to date)

PROJECT NO. 08		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>State of Louisiana - Coastal Protection and Restoration Authority (CPRA) Marsh Creation Projects in the Breton Sound (BS-0037 and BS-0041) St. Bernard Parish, Louisiana Eustis Engineering Project Nos. 24431.00, .01, and 24762</p> <p>Contact Information: State of Louisiana – Coastal Protection and Restoration Authority (CPRA) 150 Terrace Avenue Baton Rouge, Louisiana 70802 Jessica Diez @ 225-342-1477</p>	<p>Eustis Engineering L.L.C. has provided geotechnical services for adjacent projects in the Breton Sound as part of the Coastal Protection and Restoration Authority (CPRA) Coastal Master Plan. These projects are BS-0037 and BS-0041 and involve the creation of more than 1,200 acres of confined marsh areas in the Breton Sound.</p> <p>Project No. BS-0037 will occur at the East Delacroix Marsh. The scope calls for 406 acres of confined marsh created by hydraulically dredging material from a borrow source in nearby Lake Lery. The marsh creation areas will be formed by constructing earthen containment dikes (ECDs) around the open perimeter. The existing tidal levee will be utilized to provide approximately 12,950 feet of terraces. Eustis Engineering drilled soil borings to depths of 15 feet in the Lake Lery borrow area, one boring and six cone penetration tests (CPTs) to 40 feet at the Delacroix Tidal Levee, and six soil borings and twelve CPTs to depths of 30 feet in the marsh creation area and terrace field. The borrow borings were made using a drill rig mounted onto pontoons. The marsh creation and terrace field borings and CPTs were made using airboat-mounted equipment.</p> <p>Project No. BS-0041 is planned in the North Delacroix area. The goal is to create and nourish approximately 389 acres of marsh while consulting approximately 8,550 linear feet of earthen terraces. The 389 acres of marsh will comprise 322 acres of marsh creation and 67 acres of marsh nourishment by hydraulically dredging material from a borrow source in nearby Lake Amedee. Two creation cells allowing channel drainage, tidal levees, and earthen containment dikes (ECDs) will be created, and the cells will be dewatered to attain necessary sediment. The ECDs will be formed by constructing temporary earthen terraces around the open perimeter.</p> <p>For both of these projects, Eustis Engineering performed engineering analyses and reporting services once our review of the existing and obtained geotechnical data was completed. These design analyses include ECD design, marsh creation area design, and canal closure features. Final geotechnical engineering reports have been published for both projects.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
06/2023 (A)	Unknown	\$398,270

PROJECT NO. 09	
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:
<p>State of Louisiana Grand Isle State Park Phase I and II Improvements Jefferson Parish, Louisiana Eustis Engineering Project Nos. 24093.00-.01 & 25239</p> <p>Contact Information: State of Louisiana – CPRA Through GIS Engineering, L.L.C. Post Office Box 820 Galliano, Louisiana 70354 Laura L. Barnes, P.E. @ 985-219-1048</p>	<p>This project consists of repairs and upgrades to existing roads and parking lots damaged by repeated flooding. For the existing three-mile park roadway system, the repairs would include milling, overlaying, and full depth patching of pavement areas where sections had failed. In the three parking areas, repairs would include pulverizing the existing asphalt parking areas, and adding base course and an asphalt overlay to raise the parking area grades to above normal tide elevations.</p> <p>Eustis Engineering L.L.C.'s field investigation for Phase I included the performance of seven direct-push type borings and two pavement cores using one of our Geoprobe® rigs to identify the subsurface soils, stratifications, and pavement conditions at the site, and to obtain samples of the various strata encountered. The borings were performed to depths varying between 8.5 and 9.0 feet below the asphalt surface, and the pavement cores were performed to depths of 2.5 and 3.3 feet. Laboratory testing services included the performance of visual classification and natural water content determinations to aid in the classification of the soil samples.</p> <p>Engineering analyses were performed and recommendations developed for groundwater management including temporary and permanent drainage; site preparation including demolition and removal of existing slabs or pavements; subgrade preparation; structural fill and its compaction; and flexible pavement components and thicknesses meeting Section 502 of the <u>Louisiana Standard Specifications for Roads and Bridges</u>.</p> <p>Phase II of the project focused on the proposed reconstruction of a rock jetty and deep foundation design for the planned extension of a fishing pier at the Grand Isle Park. Eustis Engineering's field exploration for this phase comprised two marine-based soil borings to obtain samples of the various strata encountered at the rock jetty and fishing pier. The borings extended to depths of 50 and 100 feet below the mudline.</p> <p>Soil mechanics laboratory tests included natural water content, unit weight, unconfined compression shear, unconsolidated undrained triaxial compression shear, Atterberg limits determinations, and grain size distributions.</p> <p>Proposed fishing pier upgrades comprise an extension of the existing pier into the Gulf of Mexico by approximately 400 feet. Eustis Engineering developed estimates of allowable axial and lateral pile load capacity to support the new pier foundations. We also provided estimates of allowable soil bearing capacity, deep-seated stability assessments, and general construction recommendations for the reconstruction of a rock jetty at the site.</p> <p>In November 2023, further improvements to Grand Isle State Park's fishing pier were proposed, featuring a new structure of approximately 1,300 feet in the Gulf of Mexico. Eustis Engineering was asked to perform geotechnical services for this effort. We are utilizing data from Boring B-1 of the geotechnical exploration conducted during Phase II at the fishing pier under</p>

PROJECT NO. 09		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	Eustis Engineering Project No. 24093.01 to supplement our engineering analyses. We have also recently completed drilling one undisturbed soil boring to a depth of 120 feet using a track-mounted drill rig to supplement the available data. Our team applied for and acquired a Coastal Use Permit through the Louisiana Department of Energy and Natural Resources, Office of Coastal Management, to allow for these exploration operations. The existing data, new soil boring, and laboratory tests are being utilized to prepare an updated design report of our findings and recommendations for the revised project scope. With the supplemental field exploration completed, the design analyses are underway and the report will be published in July 2024.	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
07/2024 (E)	Unknown	\$44,000 (to date)

PROJECT NO. 10	
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:
<p> State of Louisiana Department of Wildlife and Fisheries Marsh Island Refuge Water Control Structure Replacements Belly Dam, Joe Aucoin, and Northeast Bird Island Iberia Parish, Louisiana Ducks Unlimited Project No. DU-LA-198-1 Eustis Engineering Project Nos. 24170.00, .01 </p> <p> Contact Information: State of Louisiana Through Ducks Unlimited, Inc. 915 Front Street Richmond, Texas 77469 John Hetherwick @ 832-595-0063 jhetherwick@ducks.org </p>	<p>The project consists of the construction of three new flood control structures within the existing Marsh Island Refuge in Iberia Parish, Louisiana. The exact site was positioned on the northern side of Marsh Island, just south of the New Iberia, Louisiana coast. The Joe Aucoin West Weir and Belly Dam Weir flood control structures will replace existing structures with reported scour areas, and the Northeast (NE) Unit Structure on the Northeast Bird Island Unit will comprise new construction. Eustis Engineering L.L.C. was contracted to perform a geotechnical exploration and subsequent analyses, based on specific hydraulic design criteria, for the proposed design features.</p> <p>Three borings were drilled to depths of 50 feet below the existing mudline in open water channels and bayous. These borings were completed with the use of a drill rig mounted onto a pontoon boat owned and operated by Specialized Environmental Resources, Inc. as subcontracted through Eustis Engineering. We provided the soil technician to log the boreholes and retain the samples. Once the field/marine operations were completed, we selected samples to be subjected to soil mechanics laboratory tests in our in-house facilities. Testing performed included natural water content, total unit weight, and unconsolidated undrained triaxial compression shear. Additionally, Atterberg limits determinations were performed on selected samples.</p> <p>Engineering analyses performed and evaluations made, based on the soil borings and laboratory tests, consisted of:</p> <ul style="list-style-type: none"> • site preparation recommendations regarding the demolition of the existing structures; • sheetpile wall (PVC, vinyl, or steel) foundation recommendations for the Joe Aucoin West Weir, NE Unit Structure, and Belly Dam Weir; • results of local and global slope stability analyses and respective factors of safety; • flood control structure analyses and recommendations; • deep foundation recommendations including allowable load capacity for treated ASTM D25 timber piles and pile group capacity and spacing considerations; • settlement estimates due to structural loads of deep foundations; and • deep foundation installation and testing recommendations for driven piles.

PROJECT NO. 10		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	<p>After issuing our report, Eustis Engineering was requested to perform supplemental engineering analyses for the project. Specifically, additional local stability analyses were requested to be performed for each of the proposed water control structures. The purpose of these additional analyses was to verify the amount of sheetpile length saved if an anchored sheetpile wall was designed at each of the project locations in lieu of a cantilevered sheetpile wall.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
12/2021 (A)	Unknown	\$38,000

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. None at this time.		
2.		
3.		
4.		

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

EVALUATION CRITERIA

Professional Training and Experience. Our staff includes eight project managers and senior project managers with a supporting staff of project engineers, engineering interns, engineering technicians, and geologists. This staff has worked on field investigations for Jefferson Parish projects as well as the geotechnical design of marsh and ridge restoration, shoreline stabilization, and living shorelines across the Gulf Coast during their tenure with Eustis Engineering. Eustis Engineering currently has 17 professional engineers registered in the State of Louisiana.

Capacity for Timely Completion. Our geotechnical engineering staff has extensive experience in a wide range of projects to meet the needs of the team to support projects for Jefferson Parish. Our staff size allows diversification and appointment of teams to meet our commitments on projects in a timely and professional manner. We believe Eustis Engineering has demonstrated that we have sufficient capability and capacity to provide geotechnical services under this SOQ.

Location of the Principal Office Where Work will be Performed. Work under this advertisement will be performed out of Eustis Engineering's headquarters in Metairie, Louisiana. This office is conveniently located just off the I-10 Service Road and Causeway Boulevard in the heart of Jefferson Parish.

Adversarial Legal Proceedings with the Parish. Currently, Jefferson Parish and Eustis Engineering have no ongoing adversarial legal proceeding between our entities.

Prior Successful Completion of Projects Requiring Soils Investigation Services for Which Firm has Provided Verifiable References. Eustis Engineering has provided geotechnical services for more than 4,000 projects in Jefferson Parish during our nearly 80 years in business. Some of these projects include:

- Mid-Barataria Sediment Diversion Project, Mississippi River Mile 60.7 AHP, Plaquemines and Jefferson Parishes, Louisiana;
- Lafitte Area Independent Levee District, Lafitte Tidal Protection, Rosethorn Basin – Phase I Frontal Levee Along Bayou Barataria;
- Lafitte Area Independent Levee District, Fisher School Basin – Tidal Protection Along Bayou Barataria;
- National Park Service, Jean Lafitte National Historical Park and Preserve, Barataria Preserve Unit;

- Coalition to Restore Coastal Louisiana and Pontchartrain Levee District – Salinity Barrier, Interstate 10 at Interstate 310, Jefferson Parish – St. Charles Parish line;
- Veterans Boulevard Drainage Pump Stations;
- Hoey’s Canal Drainage Improvements;
- 17th Street Canal Drainage Improvements, Airline Highway to Hoey’s Canal;
- Instrumentation Installation and Monitoring, Lapalco Boulevard Overpass at Bayou Segnette; and
- Grand Isle State Park, Phase I and II Improvements.

References:

Kevin DeZarn, P.E. GIS Engineering, L.L.C. 197 Elysian Drive Houma, Louisiana PN 985-219-1048	Randy M. Perrin, E.I. U.S. Army Corps of Engineers Post Office Box 60267 New Orleans, Louisiana 70160 PN 504-862-1121
Anthony Goodgion, P.E. Linfield, Hunter & Junius, Inc. 3608 18 th Street Metairie, Louisiana 70002 PN 504-833-5300	Mark Gonski, P.E. AECOM 1515 Poydras Street Suite 2700 New Orleans, Louisiana 70112 PN 504-799-1332
Joe Fifer, P.E. Ducks Unlimited, Inc. 806 Bayou Black Houma, Louisiana 70360 PN 985-853-3005	Bruce Adams, P.E. Volkert Inc. 3801 Canal Street Suite 210 New Orleans, Louisiana 701189 PN 504-865-0456

When Eustis Engineering L.L.C. opened its first office in Vicksburg, Mississippi, in 1946, it housed its entire operation in less than 500 square feet of space. ***Seventy-eight years later***, our personnel and equipment occupy 40,000+ square feet of space in five locations.

Eustis Engineering is the third oldest, continually operating geotechnical firm in the United States. From a single two-man office to approximately 115 individuals in five offices, the firm has grown to house accounting, administrative, quality control, safety, drilling, engineering, laboratory, and construction materials testing departments. These departments work together to provide our clients with the quality work desired in a cost efficient and timely manner.

Eustis Engineering is headquartered in Metairie, Louisiana, in the heart of Jefferson Parish. We also operate branch offices in Baton Rouge and Lafayette, Louisiana, Gulfport, Mississippi, and Houston, Texas. Our offices and staff collaborate seamlessly using Microsoft Teams and other virtual platforms.

Eustis Engineering's services encompass many disciplines including the performance of:

- subsurface exploration (drilling of soil borings, cone penetration testing, downhole vane, and Geoprobe®);
- soil mechanics laboratory tests;
- field instrumentation and monitoring;
- non-destructive testing of piles and shafts including dynamic pile testing, crosshole sonic logging, single-hole sonic logging, low strain pile integrity testing, and thermal integrity profiling;
- geotechnical engineering design;
- special inspections; and
- construction quality control and materials testing services.

Eustis Engineering L.L.C. Important Numbers	
Item	Number
Unique Entity Identifier (UEI)	R83MG9NLTMS4
CAGE Code	4MOP2
Firm License - Louisiana	EF.0003558
Firm License - Mississippi	2078
Firm Registration – Texas	13895

Eustis Engineering has worked on over 850 geotechnical and construction materials testing projects for Jefferson Parish Government entities. We have also worked on over 4,000 projects of all types throughout the east and west banks of Jefferson Parish alone, not considering similar projects in the surrounding parishes. This work history gives our engineering staff unparalleled familiarity with the foundation conditions in the Gulf Coast and the challenges that may arise for projects associated with this contract.

ENGINEERING SERVICES

Eustis Engineering has geotechnical engineering capabilities to fulfill the requirements of nearly any project. As evidenced by the included write-ups in this package, our experience with various marsh creation, ridge restoration, and other coastal engineering projects is varied and extensive. We evaluate local and deep-seated global stability of earthen containment dikes, ridges, and terraces; levee embankments and shoreline; and waterway slopes. We provide assessments of seepage and erosion control measures.

We have developed pile capacity and bearing capacity analyses for projects throughout the coastal areas of the United States. Eustis Engineering's evaluation of piles includes estimates of vertical capacity for groups. We also perform lateral analyses of individual piles and pile groups using LPILE® and GROUP® software. We evaluate floodwalls, including I-walls, L-walls, T-walls and gates.

We perform settlement studies including estimates of settlement and time-rate of settlement with and without wick drains to enhance consolidation. These settlement studies include estimates and recommendations for lift construction affecting a gain-in-strength of foundation soils associated with subsoil consolidation. Preload/surcharge operations are also a component of our settlement evaluations.

In our practice, Eustis Engineering has developed methodologies associated with the estimates of negative skin friction on pile foundations. The methods are the current state of practice. The extension of these methods is an evaluation of settlement induced bending moments. Eustis Engineering is also utilizing a numerical model program, SIGMA/W, in association with the rigorous settlement program Settle3.

Engineering Staffing

Our engineering staff has 16 master's degrees in Civil Engineering, Engineering, Engineering Management, Geology, and Business Administration. Participation in post-Bachelor of Science curricula, as well as continuing education and professional registration that emphasizes engineering management and technical issues, is very important to Eustis Engineering. Our engineers also regularly present at technical conferences. We encourage and fund our staff for these activities and programs.

Employee	Education	Experience	
		Years with Eustis Engineering	Total Years
Professional Engineers (P.E.)			
Benjamin M. Cody	M.S. / Civil Engineering	22	26
Brian A. Deschamp	B.A. / Business Administration	12	12
	M.S. / Civil Engineering – Geotechnical		
P. Tennant Duckworth	M.S. / Civil Engineering	3	3
James J. Hance	M.S. / Civil Engineering	20	24
	M.B.A. / Business Administration		
Chad L. Held	M.S. / Civil Engineering	33	33
Matthew K. Morales	B.S. / Civil Engineering	15	15
Tomas K. Morales	B.S. / Civil Engineering	10	10
Travis R. Richards	M.S. / Engineering	17	24
	M.S. / Engineering Management		
	Coastal Engineering Certificate		
Chad D. Roe	M.S. / Civil Engineering	1	11
Gwendolyn P. Sanders	M.S. / Engineering	31	31
Sanjay S. Shahji	M.S. / Civil Engineering	1	18
Shaun R. Simon	M.S. / Civil Engineering	24	24
Alice E. Stark	B.S. / Civil and Environmental Engineering	<1	8
Patrick A. Thurmond	M.S. Engineering Management	9	9
	M.S. / Civil Engineering		
	Coastal Engineering Certificate		
Sean G. Walsh	M.S. / Civil Engineering	11	16
James M. Williams	M.S. / Civil Engineering	6	6
Henry C. Worley	M.S. / Engineering	6	7
	Coastal Engineering Certificate		
Engineering Interns (E.I.)			
Adam K. Abdulbagi	B.S. / Civil Engineering	1	1
Naba Almofraji	B.S. / Civil Engineering	<1	6
Alvaro E. Carvajal	B.S. / Civil Engineering	1	1
Joseph P. DiGiovanni	B.S. / Civil Engineering	1	1

Steven B. Tidwell	B.S. / Geological Engineering	<1	13
Engineering Graduates			
Alexander Soriano Doninelli	B.S. / Civil Engineering	<1	4
Lesley L. Reitmeyer	B.S. / Civil Engineering	15	15
Xia (Bruce) Xialong	PhD / Geotechnical Engineering	<1	10
	M.S. / Geotechnical Engineering		
Geologists			
Matthew J. Blasini, G.I.T.	B.S. / Geology	5	6
Nathan A. Quick, P.G.	M.S. / Geology	2	7
Total Years of Experience		246	322

Reviewing our table, the majority of Eustis Engineering's professional engineers have at least ten years of experience in geotechnical engineering.

Cone Penetration Testing Capabilities

Eustis Engineering owns two dedicated track-mounted cone penetration test (CPT) rigs and operates four other multi-purpose rigs capable of performing CPTs. Operators are either specifically trained engineering technicians or engineers who perform field operations utilizing the CPT equipment. Engineers with specialized knowledge and experience operating the rigs evaluate the sounds and produce the CPT logs. Five of our rigs can be placed on a cargo buggy, shallow draft barge, or airboat to access coastal marsh or open water. We have sounded to depths of 180 feet and have the ability to perform dissipation and seismic testing. Field testing is performed according to ASTM D5778 and common industry practices. Eustis Engineering has been performing CPTs and using CPT technology since the early 2000s.

A CPT can be accomplished rapidly with four or five being performed in the same time frame as a standard geotechnical boring; therefore, CPTs are typically cost-effective in providing enhanced subsurface exploration and better delineation of subsurface conditions at a project site.

Dynamic Pile Testing Capabilities

Eustis Engineering was the first private consulting firm to own and operate dynamic pile testing equipment in the States of Louisiana and Mississippi. The pile types tested include timber piles; small size pipe piles; square, precast concrete piles and large (60 to 72-in. diameter) spun-cast, prestressed concrete piles; open-end and closed-end steel pipe piles; and steel H-piles.

We often upgrade our data collectors and operate four Pile Driving Analyzers® (PDAs): one PAX unit and three PDA-8G units. These units can be battery operated and use wireless gauge transmitters to eliminate the need for a main cable to connect directly to the units. We also stock and use underwater gauges to monitor pile driving in marine environments when the pile head descends below the water surface. To support our four PDA units, Eustis Engineering maintains an extensive inventory of calibrated gauges and accessories. To provide quality assurance and rapid responses to issues in the field, all PDAs have wireless communication, enabling our engineers direct oversight of the dynamic pile testing process in real time.

We also use this PDA equipment to maintain the calibrations of our automatic Standard Penetration Test (SPT) hammers on our drill rigs.

Other Non-Destructive Testing Capabilities

Our engineering staff at Eustis Engineering performs other non-destructive testing services to verify the structural integrity of drilled shafts, augercast piles, and precast concrete piles. Some of these processes include crosshole/single-hole sonic logging (CSL or SSL), low strain pile integrity testing (PIT), and thermal integrity profiling (TIP™). We also perform parallel seismic testing to evaluate existing foundation depths.

INSTRUMENTATION

Eustis Engineering has installed geotechnical instrumentation for decades. Our instrumentation programs have resulted in substantial cost savings to our clients by reducing preload durations, providing refinement of geotechnical design parameters through full-scale testing, and verifying the performance of cutting-edge designs. Our services go beyond the construction phase, as long-term monitoring programs enable owners to maximize utilization of their facilities throughout the design life by verifying if soil behavior is within acceptable limits.

Eustis Engineering provides the following instrumentation services:

- Vibrating wire devices including piezometers, extensometers, settlement gauges, and strain gauges
- Data loggers to enable periodic collection of data for vibrating wire devices
- Data links for remote web access to data loggers in near real time
- Settlement plates
- Conventional slope inclinometers or MEM sensor array inclinometers
- Monitoring services of all instrumentation devices with geotechnical interpretation

Instrumentation is a natural complement to our design services, providing data to verify or modify recommendations based on the observational method. Ongoing monitoring enables us to provide continuing services from project inception to the end of a project's design life.

DRILLING/FIELD EXPLORATION

Eustis Engineering possesses licenses and credentials to perform geotechnical drilling in Louisiana and Mississippi (no license is needed in Texas). With our licenses and credentials, Eustis Engineering drills soil borings and performs sampling operations for our clients' projects in all types of environments including land, marsh, swamp, and marine. Our personnel have the capability and experience to provide these services from trucks, barges, pontoons, and swamp or marsh buggies. We also have portable units that can be used inside structures planned for retrofit/renovations.

Field Exploration Personnel

We can provide up to nine drillers and drill rigs capable of obtaining standard 3-in. diameter Shelby tube samples and 5-in. diameter fixed piston samples, sounding CPT, advancing Geoprobe samplers, and installing

geotechnical instrumentation on land, in water, and in marsh environments as indicated in the following table.

Capabilities of Eustis Engineering's Field Exploration Staff	Blair Armant	Scott Bombard	James Cordes	Tevin Crawford	Rene Davidson	Eric Held	James Lubben	George Reitmeyer	Lawrence Rome
Hand Auger Borings	X	X	X	X	X	X	X	X	X
General Type (3-in. Diameter Borings)	X	X	X	X	X	X	X		X
General Type (3-in. Diameter Borings) in Hard Access Locations (Marsh, Swamp, Heavily Forested)	X	X	X	X	X	X	X		X
Undisturbed Type (5-in. Diameter Borings)	X	X	X	X	X	X	X		X
Undisturbed Type (5-in. Diameter Borings) in Hard Access Locations (Marsh, Swamp, Heavily Forested)	X	X	X	X	X	X	X		X
Location Information (Latitude, Longitude)	X	X	X	X	X	X	X		X
Set Permanent Benchmarks	X	X	X	X	X	X	X		X
Install Instrumentation	X	X	X	X	X	X	X		X
Cone Penetration Tests		X				X		X	X
Geoprobe Sampling		X	X		X	X	X		X

Field Exploration Equipment

Eustis Engineering owns and operates seven wet rotary drill rigs. These include truck, track, and skid-mounted rigs. This equipment includes one Diedrich truck-mounted D-50 turbo drill rig (with an automatic SPT hammer); one truck-mounted CME-55 rig; one track-mounted CME-850X rig with an automatic hammer; one track-mounted CME-850XR rig with an automatic hammer; one truck-mounted CME-55 rig with a detachable CME-55 skid unit and automatic hammer; and two track mounted Geoprobe 3230 DT. We also own two track-mounted cone penetrometer systems capable of providing up to 15 tons of reaction. Our CME track rigs provide low ground pressure and are designed to traverse soft ground surfaces, steep slopes, and lightly wooded areas. Eustis Engineering also owns two direct push Geoprobe units: the 6620DT, and the 540M. Eustis Engineering's 6620DT Geoprobe with its 12-in. tracks allow this equipment to be used on pavement as well as off road and in rugged terrain. The 6620DT and 3230DT rigs also can be placed on specialized equipment. This includes a jack-up barge and a cargo buggy for operations over marsh/water. These units can install shallow monitoring wells and other instrumentation. We also have the capability to perform CPTs and downhole vanes using the 3230DT rigs. Our 540M Geoprobe can fit into confined spaces as narrow as 32 inches. The 540M can also be utilized on an airboat for coastal terrains.

Other Specialized Soil Sampling Equipment

In addition to our drill rigs, Eustis Engineering owns and operates an Acker Vane Shear to perform down hole in-situ testing. We also have hand augers to obtain samples at various depths for use in classification and stratification of soil deposits. This equipment can be used in association with handheld piston samplers to obtain small diameter samples. Finally, we operate dynamic cone penetration tests (DCPTs) to assess the in-situ strength of undisturbed soils and compacted materials in accordance with ASTM D6951.

Drone Capabilities

Eustis Engineering utilizes small Unmanned Aerial Systems (sUAS), more commonly known as “drones,” to enhance our services. We use drones to perform site inspections, field reconnaissance, pre/post-construction condition surveys, construction inspections, and other forms of visual monitoring. We currently operate a DJI Mavic Air 2S Drone piloted by a Part 107 Certified Remote Pilot.

LABORATORY SERVICES

Eustis Engineering’s laboratories are constantly evolving with the purchase of new equipment on a yearly basis. Our gINT® data management software from Bentley allows for maximum efficiency in the production of boring logs and data entry.

Eustis Engineering has also acquired OpenGround®, Bentley’s Cloud platform, which interfaces with a collection of geotechnical applications. OpenGround provides a comprehensive solution for collecting, reporting, managing, visualizing, analyzing, and accessing data. Its advanced digital workflows combine both subsurface and surface data into one cohesive design. This software provides Eustis Engineering’s team members access to a data source via connected applications or a web portal, increasing both collaboration and efficiency. Improved access and reliability will save time and money in the planning, design, analysis, construction, and operation of infrastructure projects.

Eustis Engineering has also acquired KeyLAB® from Bentley. KeyLAB is the leading laboratory management system built specifically for geotechnical and construction materials testing laboratories. It improves our laboratory efficiency at every stage of the geotechnical and construction testing process, including sample and storeroom management, as well as electronic scheduling, testing, and reporting. It integrates with Microsoft Excel®, allowing for the efficient development of customized worksheets and reports.

Technical testing common to our laboratories includes ASTM; American Concrete Institute (ACI); State of Louisiana, Department of Transportation and Development (LaDOTD); AASHTO; FAA; and the U.S. Army Corps of Engineers (USACE). Our laboratories hold accreditations from AASHTO, LaDOTD, and the USACE.

Laboratory Staffing

Eustis Engineering currently has qualified technicians to sample construction materials and perform soil mechanics laboratory testing. These technicians are versed in the latest standards from ASTM, LaDOTD, MDOT, AASHTO, FAA, and the USACE. Many of our technicians have earned certifications with the National Institute for Certification in Engineering Technologies (NICET) in the area of geotechnical engineering technology and in the subfields of construction, exploration, generalist, and laboratory.

Laboratory Quality Control

In our effort to ensure the quality of our laboratory and materials testing, our programs are regularly inspected by outside agencies such as the USACE, the AMRL Group of the American Association of State Highway and Transportation Officials, and the CCRL Group of AASHTO. Eustis Engineering is also accredited by the Mississippi Department of Transportation.

Eustis Engineering has three soil mechanics laboratories where our laboratory practices and quality management system meet the requirements of AASHTO R 18 and ASTM E329. These offices are located in Metairie, Baton Rouge, and Gulfport. Individual offices may comply with ASTM quality system specifications including ASTM C1077, ASTM D366, and ASTM D3740. Accreditations in the various areas are shown below.

Metairie	Baton Rouge	Gulfport
Aggregate	Aggregate	Aggregate
Concrete	Soil	Asphalt
Masonry	Concrete	Concrete
Soil	Spray Fire-Resistive Material	Soil
		Spray Fire-Resistive Material

To further show quality is paramount to Eustis Engineering, we have two individuals in charge of maintaining quality in our testing. Travis R. Richards, P.E., is the Engineer-In-Charge. Timmy Holleman, dedicated Quality Control Manager, oversees the calibration of our equipment and maintenance of our quality system. The biggest reward of our quality system is knowing our clients are confident our testing laboratories produce the highest quality results and conform to state and national standards.

CONSTRUCTION MATERIALS TESTING

Eustis Engineering has been involved in construction materials testing (CMT) and inspection on a regular basis since the mid-1980s. Over the past 30+ years, Eustis Engineering has accumulated a wealth of experienced technicians in these areas. Whether 20 feet down in an excavation or 20 stories up in a high rise, our CMT technicians are there providing the inspection services needed on individual projects.

Staffing

Eustis Engineering currently has nearly 30 technicians on staff to provide construction inspection services on a daily basis. These services encompass the areas of soils, piling, asphalt, concrete, steel, and others.

Services

Soils testing in the field is performed by means of density tests, fill placement inspection, and depth checks. These services are performed by technicians who have attended courses by Troxler or Humboldt in the use of nuclear density devices.


Piling services include the inspection of various types of piles, logging these piles, and performance of pile load tests with calibrated equipment. Load test results are, in turn, interpreted and reported by a registered engineer on our staff.

Our realm of concrete inspection includes the formulation and review of mix designs, quality control at the plant and in the field, materials testing and sampling, precast piling inspection, post tension inspection, floor flatness, and mortar and grout inspection. These services are performed by our ACI and NICET certified technicians.

Steel inspection may include the visual inspection of structural steel at the site or in the shop, steel and pipe coating sampling, post tension and welder certification witnessing, and the performance of ultrasonic and x-ray testing. These services are performed by members of our staff currently certified with AWS, ASNT, and/or ASME.

Other CMT services provided by Eustis Engineering personnel include fireproofing inspection, vibration and acoustical monitoring, paint inspection, and more.

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

Signature: 
Title: President

Print Name: Gwendolyn P. Sanders, P.E.
Date: 21 June 2024