

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 21-009 PROVIDE PROFESSIONAL MECHANICAL & ELECTRICAL ENGINEERING SERVICES
SOQ: 98362182

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



YKMH Consulting, LLC

3500 N. Causeway Blvd, Suite 1500,
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:

Chad Hadaway, P.E., Principal/Electrical Engineering
chadaway@ykmhconsulting.com
985.665.2983

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

Chad Hadaway, P.E., Principal/Electrical Engineering
chadaway@ykmhconsulting.com
985.665.2983

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

<u>1</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u> </u> Geologists	<u> </u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u> </u> Graduate Engineers
<u> </u> Civil Engineers	<u> </u> Interior Designers	<u> </u> Project Managers
<u>2</u> Construction Inspectors	<u> </u> Landscape Architects	<u> </u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u>2</u> Electrical Engineers	<u>3</u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u>2</u> Engineer Intern	<u> </u> Environmental Engineers	
<u> </u> Professional Land Surveyors	<u>9</u> Designers/Drafters	<u>19</u> TOTAL

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

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

TEC Professional Services Questionnaire

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

1. N/A

2.

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

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. LINFIELD, HUNTER & JUNIUS, INC. 3608 18th Street, Suite 200 Metairie, LA 70002	Surveying	Yes
2. Eustis Engineering 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

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:

Gene Yenari, P.E.
Principal/ Lead Mechanical

Project Assignment:

Project Manager, Mechanical Engineering

Name of Firm with which associated:



YKMH Consulting, LLC
3500 N Causeway Blvd Suite 1500
Metairie, LA 70002

Years' experience with this Firm:

12 years

Education: Degree(s)/Year/Specialization:

B.S. Mechanical Engineering, 1994
University of New Orleans
New Orleans, LA

Active registration: Year first registered/discipline:

Louisiana P.E. Mechanical (0028523) 1999
Florida P.E. Mechanical (77975) 2014
Texas P.E. Mechanical (127057) 2017

Other experience and qualifications relevant to the proposed Project:

PROJECTS IN JEFFERSON PARISH:

Jefferson Parish Beautification Project 2021
Dr. John Ochsner Discovery Health Sciences Academy
Harahan Elementary School Renovations
Jefferson Parish Gymnasium Facilities: AHU
Ochsner Main Campus Central Plant
Ochsner Cancer Center Metairie
NOLA Motor Sports, Avondale


ADDITIONAL PROJECTS:

Ochsner High Grove Central Plant, Baton Rouge
Bayou Country Sports Park - Public Soccer Field +
Parking Lighting
Ochsner Fitness Center - Renovations
Elmwood Sports Training Complex - Renovations and
Additions
Bayou Blue Splash Park - New Rec District Water Park

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Chad Hadaway, P.E. Principal/ Lead Electrical	
Project Assignment:	
Project Manager, Mechanical Engineering	
Name of Firm with which associated:	
 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> YKMH Consulting, LLC 3500 N Causeway Blvd Suite 1500 Metairie, LA 70002 </div>	
Years' experience with this Firm:	
9 years	
Education: Degree(s)/Year/Specialization:	
B.S. Electrical Engineering, 1999 Louisiana State University Baton Rouge, LA	
Active registration: Year first registered/discipline:	
Louisiana P.E. (0033606) 2007 Florida P.E. (77918) 2014 Louisiana Contractor's License (44310) 2005	
Other experience and qualifications relevant to the proposed Project:	
PROJECTS IN JEFFERSON PARISH: Jefferson Parish Beautification Project 2021 Dr. John Ochsner Discovery Health Sciences Academy Harahan Elementary School Renovations Jefferson Parish Gymnasium Facilities: AHU Ochsner Main Campus Central Plant Ochsner Cancer Center Metairie NOLA Motor Sports, Avondale	ADDITIONAL PROJECTS: Ochsner High Grove Central Plant, Baton Rouge Bayou Country Sports Park - Public Soccer Field + Parking Lighting Ochsner Fitness Center - Renovations Elmwood Sports Training Complex - Renovations and Additions Bayou Blue Splash Park - New Rec District Water Park

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Perry Hogan, P.E. Senior Electrical Engineer	
Project Assignment:	
Electrical Engineering	
Name of Firm with which associated:	
 YKMH Consulting, LLC 3500 N Causeway Blvd Suite 1500 Metairie, LA 70002	
Years' experience with this Firm:	
1 year	
Education: Degree(s)/Year/Specialization:	
B.S. Electrical Engineering, 1997 Tulane University New Orleans, LA	
Active registration: Year first registered/discipline:	
Louisiana P.E. (31042) 2004 Mississippi P.E. (17195) 2009 Alabama P.E. (30757) 2004 Florida P.E. (70426) 2009 Texas P.E. (104453) 2009	
Other experience and qualifications relevant to the proposed Project:	
PROJECTS IN JEFFERSON PARISH: Gretna Wastewater Treatment Plant New Generator Gretna Emergency Sewer Generator Lift Station # 1 Gretna Emergency Sewer Generator Lift Station #7 Bayou Signette Sports Complex Improvements and Generator Installations New Addition to Gretna Police Headquarters	ADDITIONAL PROJECTS: Northrop Grumman Shipbuilding, Inc. Emergency Power Backup for Substation ILC017 Willowridge Drainage Pumping Station, Luling, LA Jackson County Detention Center, Mississippi Ponchatoula Sewer Lift Station Generators

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

PROJECT NO. 1


Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Ochsner Jefferson Highway Beautification</p> <p>Project Owner: Ochsner Health Systems</p>	<p>YKMH Consulting provided provided electrical engineering services to coordinate the conversion of the overhead utility lines to underground, design DOTD approved street lighting, and DOTD pathway lighting.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
<p>Estimated Completion Date: 2023</p>	<p>Project Cost: \$7.5 million</p>	<p>Firm Fees: \$450,000</p>


PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Gymnasium Facilities: Air Handling Units (AHU) Parish-Wide</p> <p>Project Owner: Jefferson Parish 1221 Elmwood Park Blvd, New Orleans, LA 70123</p>	<p>YKMH Consulting provided HVAC engineering design for several large-scale air handling unit installations across Jefferson Parish gymnasium facilities including:</p> <p>Kennedy Heights Jesse Owens Gym Waggaman Gym Avondale Gym</p>	
<p>Completion Date (Actual or estimated):</p>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
<p>Completion Date: 2019</p>	<p>Project Cost: \$2 million</p>	<p>Firm Fees: \$45,000</p>





TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
<p>Harahan Elementary School Renovations</p> <p>Project Owner: Jefferson Parish School Board 501 Manhattan Blvd, Harvey, LA 70058</p>	<p>YKMH Consulting provided mechanical, electrical, and plumbing engineering design for a 17,000 square foot school-wide renovation to the main school building, a classroom addition, and library. Renovation consisted of 10 classrooms, offices, and support spaces.</p> <div style="text-align: right;">  </div>	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Completion Date: 2014	Project Cost: \$5 million	Firm Fees: \$15,000

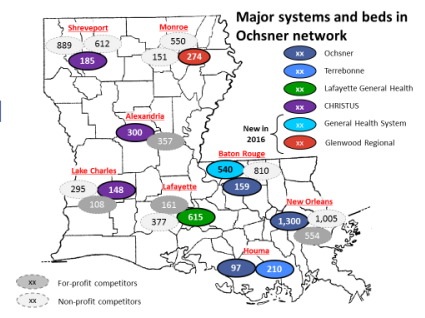
PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Ochsner Medical Complex - The Grove Central Plant - Baton Rouge, LA</p> <p>Project Owner: Michelle Austin, Ochsner Health, AVP Phone: 225.755.4975</p>	<p>YKMH Consulting, LLC provided design engineering services to construct the new central plant serving the two story ambulatory survey center and five story medical office building. The project included new 13.8 kV parallel gear, two 1,750 kW diesel power generators, medium voltage loop, and transfer switch fiber optic network.</p> <div style="text-align: right;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Completion Date: 2019	Project Cost: \$15 million	Firm Fees: 750,000

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Ochsner Medical Center - Main Campus Central Plant Expansion- New Orleans, LA</p> <p>Project Owner: Joshua Bordelon, Director - Facilities Management Ochsner Health Systems Phone: 504.842.3416</p>	<p>YKMH Consulting, LLC provided design engineering services to construct the central plant expansion. The project includes new 13.8 kV paralleling gear, four 3.25 MW diesel powered generators, 48 transfer switch replacements, and fiber optic control.</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Completion Date: 2018	Project Cost: \$20 million	Firm Fees: \$1 million


PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Terrebonne Parish Consolidated Government - Hanson Canal Pump Station Terrebonne Parish, LA</p> <p>Project Owner: Carl Ledet, Superintendent Terrebonne Parish Phone: 985.873.6717</p>	<p>YKMH Consulting, LLC provided design engineering services to construct a new pump station. Project included four 900HP electric motors, two 2,000kW diesel generators, and custom capacitor assisted across the line starting.</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Completion Date: 2020	Project Cost: \$15 million	Firm Fees: \$70,000

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>100 MW System Generator Annual Assessment - Ochsner Health</p> <p>Project Owner: James Britch, System VP Facilities Ochsner Health Systems Phone: 504.842.7378</p>	<p>YKMH Consulting, LLC is responsible for coordinating the continue planned use of over 110 generator units at over 40 sites in Louisiana and Mississippi. Project includes asset tracking, burn rates, planned diesel storage capacity, end of life, and areas served.</p> <div style="text-align: right;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Estimated Completion Date: 2021	Project Cost: \$20 million	Firm Fees: \$30,000

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Chacahoula-Gibson Drainage Project Terrebonne Parish</p> <p>Project Owner: Gordon Dove, Terrebonne Parish President (985) 873-6401 gdove@tpcg.org</p>	<p>YKMH Consulting provided design services to construct (3) 1000 cfs electric driven axial pump stations. Design included (4) 900HP electric pumps, capacitor assist starting, telemetry control, emergency generation, utility rate analysis, and peak shaving control resulting in \$500,000 year one cost and \$100,000 in yearly operating costs.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Project in construction.	Project Cost: \$33 million	Firm Fees: \$70,000

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Greater Lafourche Port Commission Connector Road and Bridge</p> <p>Project Owner: Davie Breaux, Deputy Port Director, (985) 632-6701 glpc@portfourchon.com</p>	<p>YKMH Consulting provided design services to construct new vertical lift span bridge and associated connector road linking South Lafourche Airport to LA HWY 3235. Project includes traffic control devices, traffic signaling devices, aid to navigation lighting, and emergency generation.</p> <div style="text-align: center;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Project in construction.	Project Cost: \$16 million	Firm Fees: \$170,000

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Chevron Airbase – Galliano</p> <p>Project Owner: Al Trevino, Chevron FE Team Lead (985) 773-6147 Trevino@chevron.com</p>	<p>YKMH Consulting provided MEP design services for a new thirty-two (32) acre airbase facility at the South Lafourche Leonard Miller Jr. Airport. Project included hanger, generator building, pads, taxiways, bunkhouse, terminal building, communications building, fuel system piping and instrumentation, custom control logic, and fire protection. Contact: .</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Completion Date: 2017	Project Cost: \$29 million	Firm Fees: \$350,000

TEC Professional Services Questionnaire

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

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

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

YKMH Consulting provides mechanical, electrical, plumbing and fire protection engineering services to commercial and municipal clients throughout the Gulf South. Today's building mechanical and electrical systems are a complex network of mechanical and electrical equipment and components, which provide comfort, convenience, and life safety to building occupants and exterior spaces. Our extensive design, investigative, forensic engineering, and construction administration experience has provided us with the solid background and experience necessary to understand these systems. Our areas of our technical expertise include:

- Heating, ventilating, air conditioning, and refrigeration system design

- Central plant design (chilled water, hot water, steam)
- Computer room and clean room design
- Energy management and control systems
- Feasibility studies, building surveys, audits
- Fire, humidity and smoke control/ Fire Alarm Systems
- Domestic hot and cold water and gas supply
- Plumbing and fire protection design
- Interior / Exterior Lighting Design and Control
- Power Distribution Systems
- Emergency Standby Power Generator Systems
- Uninterruptible Power Supply Systems
- P.A. Systems
- Data Distribution Systems
- Lightning Protection Systems
- Power Distribution Systems

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

Signature:  Print Name: Chad Hadaway, P.E.

Title: Principal Date: 4/27/2021

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

Name:	Public Address:
YKMH Consulting, LLC	Mr. Gene Yenari 3500 North Causeway Boulevard, Suite 1240 Metairie,LA 70002

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0004498	ACTIVE	01/07/2010	03/31/2022	Mr. Chad Michael Hadaway # PE.0033606 - Active Mr. Gene Yenari # PE.0028523 - Active

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Professional Engineering Services to Provide Professional Mechanical and Electrical Engineering Services on an As-Needed Basis (SURVEY ONLY)
Resolution No. 137248

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., Vice 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., Vice 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>10</u> Civil Engineers (Licensed)	— Interior Designers	— Project Managers
<u>5</u> Construction Inspectors	— Landscape Architects	<u>1</u> Clerical
— Ecologists	<u>3</u> Land Surveyor	— Grant/Funding Specialist
— Electrical Engineers	— Mechanical Engineers	— Sanitary Engineers
<u>5</u> Engineer Intern	— Environmental Engineers	<u>3</u> CADD Drafters
<u>2</u> Professional Land Surveyors	<u>1</u> Architect Intern	<u>40</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.



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

TEC Professional Services Questionnaire

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

1. N/A

2.

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

YES ☐ NO ☐ N/A

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

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

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

9



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**



Professional Engineering Services to
Provide Professional Mechanical and
Electrical Engineering Services on an
As-Needed Basis
Resolution No. 137248



Prime Consultant

Subconsultant



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

Nathan J. Junius, P.E., P.L.S. (LH&J)
Project Manager / Surveying

Land Surveying

William J. Muller, P.L.S.
Senior Land Surveyor / Land Surveying
Team Leader

Wesley R. Eustis, P.E., P.L.S.
Survey Coordinator

Daniel D. Bindewald
Survey Party Chief

Paul H. Morales, IV
Survey Party Chief

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:

Nathan J. Junius, P.E., P.L.S., PTOE, Vice President, Senior Civil Engineer

Project Assignment:

Civil Engineer/ Professional Land Surveyor

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

19 Years

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 Resource.

Junius has over 18 years of project management, engineering design and construction management experience, with specialized expertise in the planning, permitting, design and construction management for a diverse range of public and private sector projects. Civil projects include major drainage canals, site developments, miles of streets, wastewater treatment plants, sewage collections systems, sewer force mains and waterline distribution projects. He has also served as an expert in disputes involving drainage and land surveying.

Mr. Junius also completed additional classes in the Nicholls State University Geomatics curriculum to further his land surveying knowledge. One of his largest surveying projects includes 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. Mr. 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. Mr. Junius has provided virtual reference



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

TEC Professional Services Questionnaire

Nathan J. Junius, P.E., P.L.S., PTOE, Vice President, Senior Civil Engineer
Project Assignment – Civil Engineer/ Professional Land Surveyor

Resume

station (VRS)/ real time kinematic (RTK) surveys and 3rd Order Levels for Control as well as hydrographic multibeam surveys. Mr. 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.

Junius has conducted numerous boundary, topographic, resubdivision surveys, route surveys, ALTA surveys, hydrographic surveys, utility surveys throughout Louisiana, Mississippi and Texas.

RELEVANT EXPERIENCE:

QA/QC of multibeam deliverables. Mr. Junius has provided virtual reference station (VRS)/ real time kinematic (RTK) surveys and 3rd Order Levels for Control as well as hydrographic multibeam surveys. Mr. 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.

Junius has conducted numerous boundary, topographic, resubdivision surveys, route surveys, ALTA surveys, hydrographic surveys, utility surveys throughout Louisiana, Mississippi and Texas.

Recent engineering and surveying projects include:

- Reserve Grain Elevator – St. John the Baptist Parish, LA
- Avondale Marine Facility – Jefferson Parish, LA
- Building 76 Reroof
- Pepsi CRC Roof Replacement
- MSY Airport Expansion – Kenner, LA
- PLD Administrative Complex – St. James Parish, LA
- Okonite Building – St. Charles Parish, LA
- Kenner 2030 Program – Kenner, LA
- MS. River to Lake Pontchartrain Bike Path and Bridge – JP, LA
- SLFPA-East Levee Lifts – Jefferson Parish, LA
- St. John Airport Hangar and Terminal Design – St. John Parish, LA
- Jesuit Bend Mitigation Bank – Plaquemines Parish, LA
- GIWW to Clovelly Hydrologic Restoration – Lafourche Parish, LA
- LPC 20.2 Foreshore Protection – Jefferson Parish, LA
- Grand About Vegetative Ridge Restoration – Plaquemines Parish, LA
- Saltwater Sill LaBranche Wetlands – 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 – 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

President, ACEC New Orleans Branch

Member of American Congress of Surveying and Mapping

Member of Louisiana Society of Professional Land Surveyors

Member of the New Orleans Chapter ASCE, Past President

Past President APWA

Member SAME

Member LES



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

Revised 07/24/2015

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

William J. Muller, P.L.S., Registered Land Surveyor

Project Assignment:

Senior Land Surveyor / Land Surveying Team Leader

Name of Firm with which associated:

LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

16 Years

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.

Following is a small sampling of Muller's experience:

- I-10 Metairie - Causeway to Orleans Parish Line - Topo & Right-of-Way
- I-10 Metairie - Clearview to Causeway - Topo
- I-10 Metairie - Veterans Memorial Blvd. to Clearview - Topo
- I-10 Kenner - Williams Blvd. Interchange - Topo & Right-of-Way
- US 190 - Mandeville - Causeway to State Park - Topo & Right-of-Way
- US 190 - Slidell - Fremaux Interchange - Topo & Right-of-Way
- US 190 - Slidell - Fremaux- 9th to I-10 - Topo & Right-of-Way
- I-10 Slidell - LA 433 to US 190 - Topo
- US 190 Slidell - US 11 to Thompson Rd. - Topo & Right-of-Way
- St. Tammany Parish East of Abita Springs - New Highway from LA 36 to LA 435 - Topo & Right-of-Way



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

TEC Professional Services Questionnaire

William J. Muller, P.L.S., Registered Land Surveyor

Resume

Project Assignment – Senior Land Surveyor / Land Surveying Team Leader

- LA 611 - Metairie Road - Topo & Right-of-Way
- I-10 New Orleans - S. Broad to St. Charles - Topo
- LA 3139 Earhart Blvd. - Jefferson/Orleans Parish Line to Clara St. - Topo & Right-of-Way
- Lakes Charles - McNeese/Airport - Right-of-Way



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

Revised 07/24/2015

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Wesley R. Eustis, P.E., P.L.S., Civil Engineer/Professional Land Surveyor

Project Assignment:

Survey Coordinator

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

16 Years

Education: Degree(s)/Year Specialization:

Louisiana State University / B.S. / 2004 / Civil Engineering

Active registration: Year first registered/discipline:

2010 / Civil / LA License No. PE.0035537
2019 / Land Surveying / LA License No. PLS.0005225

Other experience and qualifications relevant to the proposed Project:

Since joining the firm, Eustis has been used extensively in the firms survey efforts. He has served as survey coordinator, party chief, rodman and draftsman. He has also performed computations and analysis of boundaries.

RELEVANT EXPERIENCE:

- Club Deluxe Road Widening, Hammond, LA
- US 61 Realignment Layout, Baton Rouge, LA
- Canal St. Topographic Survey, Metairie, LA
- East and West Livingston Place Topographic Survey, Metairie, LA
- St. Charles Ave. Topographic Survey, New Orleans, LA
- Tract A-1 and Tract A-2 - Gonzales, LA - Boundary and Topo Survey
- Tract A-2 - Ascension Parish, LA - Boundary and Topo Survey -
- Parcel 6A-1 - New Orleans, LA - Boundary and Topo Survey
- Tract - Pineville, LA - Boundary and Topo Survey
- Parcels C-1 and C-2 - Slidell, LA - Boundary and Topo Survey
- Lots 11-16 - Ponchatoula, LA - Boundary and Topo Survey
- Lots 1-4, Sq. 77 and Lots 1-4, Sq. 78 - Donaldsonville, LA - Boundary and Topo Survey



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

TEC Professional Services Questionnaire

Wesley R. Eustis, P.E., P.L.S., Civil Engineer, Professional Land Surveyor Resume
Project Assignment –

- Shop Rite Tract1 & 2 and the Soileau Tract - Lake Charles, LA - Boundary and Topo Survey
- Tract - Sulphur, LA - Boundary and Topo Survey
- Lot 2, Lot 3, and the George Ledet, Jr. Tract - Galliano, LA - Boundary and Topo Survey
- Tracts 1-3 - Kaplan, LA - Boundary and Topo Survey
- Tracts 1, 2, 28-31 - Lake Charles, LA - Boundary and Topo Survey
- Lots 1-4 and 10-18 - Plaquemine, LA - Boundary and Topo Survey
- Pt No. 1-5 - Walker, LA - Boundary and Topo Survey
- Tracts 1-5 , Marksville, LA - Boundary and Topo Survey
- Parcel B - Baton Rouge, LA - Boundary and Topo Survey
- Square 307A, New Orleans, LA - Boundary and Topo Survey
- Mayet Tract and Lot 3 - Near Raceland, LA - Boundary and Topo Survey
- Lots 1, 2, 5&6 - Crowley, LA - Boundary and Topo Survey
- 20 Acres, Sec. 31, T55-R7E - Tangipahoa Parish, LA - Boundary Survey



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Daniel D. Bindewald, Survey Party Chief

Project Assignment:

Survey Party Chief

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

12 Years

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 crew member and more recently as a survey party chief on numerous projects.

Bindewald initially joined LH&J as a survey party crew member and began performing as the **crew chief** of LH&J's Survey Party Team 2 in 2009. Bindewald is proficient in the use of modern GPS/RTK survey instruments, as well as conventional total stations and levels. He is experienced in performing land surveys in all types of environments, including urban, forests and marshes. Bindewald has led survey crews conducting boundary, topographic and hydrographic surveys in Louisiana, Texas and Mississippi. He is knowledgeable of the USACE New Orleans District Minimum Survey Standards Edition 4.1, February 2015, (as well as prior editions) and has a high level of experience and expertise ensuring that all survey work performed by LH&J for the USACE New Orleans district is performed in strict compliance with these standards.

INNER HARBOR NAVIGATION CANAL SURGE PROTECTION BARRIER, ORLEANS PARISH, LOUISIANA

Provided surveying services including locating borings in the field and providing elevations with latitude and longitude coordinates. Located the USACE baselines and tied into the project control to provide station and offset data. Benchmarks were occupied and set for project control. Existing and final cross sections were taken providing cut/fill quantities, station and offset data for 36" diameter pipe piles were provided for QA/QC measures. Bindewald was the GPS survey party crew chief responsible for the accurate collection of all field survey data and reviewed the developed survey files and drawings for consistency with USACE New Orleans District Minimum Survey Standards. Construction cost was in excess of \$1.5 billion.



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

Daniel D. Bindewald, Survey Party Chief
Project Assignment – Survey Party Chief

Resume

STORM PROOFING ORLEANS PARISH DRAINAGE PUMP STATIONS, NEW ORLEANS, LA

Provided topographic surveys of 18 existing pump station sites for the project. Baselines and benchmarks were established to obtain elevations and latitude/longitude data. Utilities were located and related to the baselines using station/offset data, right-of-way maps were provided to the USACE for project design. Bindewald was the GPS Survey party crew chief responsible for the accurate collection of all field survey data and reviewed the developed survey files and drawings for consistency with USACE New Orleans District Minimum Survey Standards. Program Cost was approximately \$200 million.

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

During the design of this 8.3 mile levee and fronting protection project, Bindewald was the GPS survey party crew chief responsible for performing the supplemental surveys that were needed to complement the Government furnished survey information. Detailed topographic surveys were performed using GPS/RTK equipment at the Ollie Pump Station and at the interface with the adjacent WBV-09a floodwall. Hydrographic surveys were performed to collect bathymetric data for a number of canals and bodies of water that are immediately adjacent to the levee alignment. All elevation data was collected using the North American Vertical Datum (N.A.V.D. 88) (2004.65) and all X-Y coordinates were based upon the Louisiana State Plane Coordinate System, South Zone NAD 83, in U.S. survey feet. During the construction of the project, Bindewald was the GPS survey party chief responsible for field locating the locations for installing 30 temporary bench marks (TBMs) that were supported by 60-foot deep concrete filled boreholes. After construction of the TBMs he performed high precision ± 1.5 mm leveling surveys to tie the TBMs into the required vertical and horizontal datums. He also field located the installation locations for 34 geotechnical instrumentation clusters and monitoring panels that are used to measure settlement during the first stage of the levee construction and then surveyed the precise elevation and location for each instrument after they were installed. As part of the settlement monitoring program, every two weeks Bindewald leads a survey crew that performs high precision elevation surveys of each of the 34 settlement plates and monitoring panels so that surveyed data can be correlated to the remotely monitored settlement gauges. Construction cost of the project is approximately \$45 million.



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Paul H. Morales, IV, Survey Party Chief

Project Assignment:

Survey Party Chief

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

8 Years

Education: Degree(s)/Year Specialization:

University of New Orleans / B.S. / 2005 / Civil Engineering

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Morales has both civil engineering design experience 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. TWIC

RELEVANT EXPERIENCE:

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

Provided surveying services including locating borings in the field and providing elevations with latitude and longitude coordinates. The USACE baselines were located and tied into the project control to provide station and offset data. Benchmarks were occupied and set for project control. Existing and final cross sections were taken providing cut/fill quantities, station and offset data for 36-inch diameter pipe piles were provided for QA/QC measures. Morales performed as a survey party technician for the accurate collection of all field survey data and reviewed the developed survey files and drawings for consistency with New Orleans District Minimum Survey Standards. Construction cost >\$1.5B

HSDRRS Levee Profiles for Southeast Louisiana Flood Protection Authority – East – Lake Pontchartrain Levee System

Approximately 63 miles of earthen levee centerline profile surveys in Jefferson, Orleans and St. Bernard Parish using tilt rover and base stations. Project compared the existing profile elevations to the design profile elevations.

Southshore Harbor, New Orleans, LA

Hydrographic survey of approximately 150 acres in Southshore Harbor including portions of the navigation channel and Lake Pontchartrain. Included cross sections and profiles of approximately 10 acres of the north peninsula floodwall for a potential dredge spoil area.



LINFIELD, HUNTER & JUNIUS, INC.

PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS

TEC Professional Services Questionnaire

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

Avondale Shipyard Redevelopment, Avondale, LA

Hydrographic surveys for 2 miles of the Mississippi River in front of the existing docks. USACE Baseline profile surveys and cross sections. Included batture surveys and topographic surveys of existing lay down areas.

Magazine Street Topographic Survey, New Orleans, LA

LH&J provided topographic surveying services for the project that consisted of the 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, sewer lines and water mains. Role: Survey Party



TEC Professional Services Questionnaire

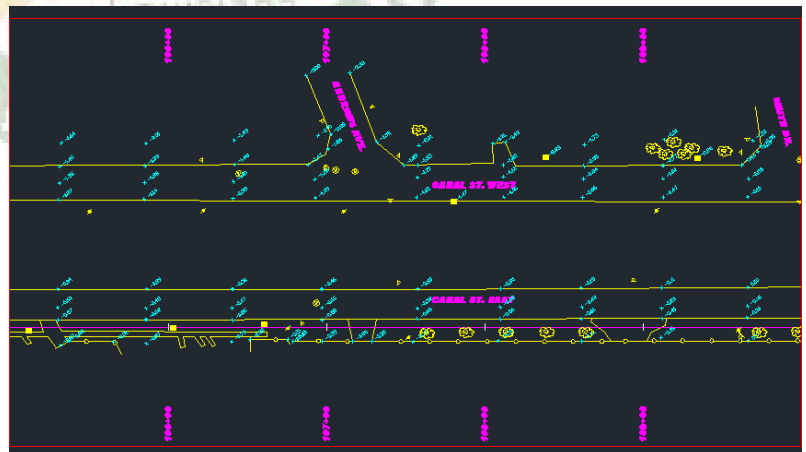
L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Canal Street Roadway Improvements Topographic Survey</p> <p>Jefferson Parish Department of Capital Projects 1221 Elmwood Park Blvd., Suite 906 Jefferson, LA 70123 Neil D. Schneider, CCM, P.E. (504) 736-6833</p>  	<p>Linfield, Hunter & Junius, Inc. provided topographic surveying for Canal St. Roadway Improvements between the I-10 Service Rd. and the 17th Street Canal. The survey was used as the basis for the roadway improvements design.</p>	
<p>Completion Date (Actual or estimated):</p>	<p>Estimated Cost:</p>	
<p>2019</p>	<p>Entire Project:</p> <p>\$54,500 (Topo Survey)</p>	<p>Work for which Firm was Responsible:</p> <p>\$54,500 (Topo Survey)</p>

Key Relevant Features

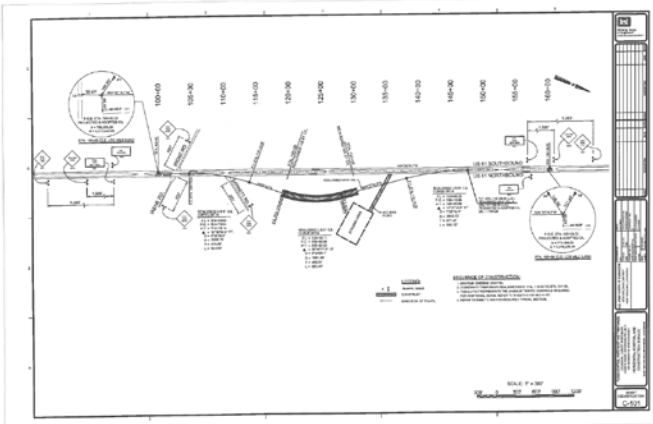

- ✓ **Jefferson Parish Project**
- ✓ **Topographic Survey**
- ✓ **Differential Level for Project Benchmarks**
- ✓ **Baseline Establishment**



TEC Professional Services Questionnaire


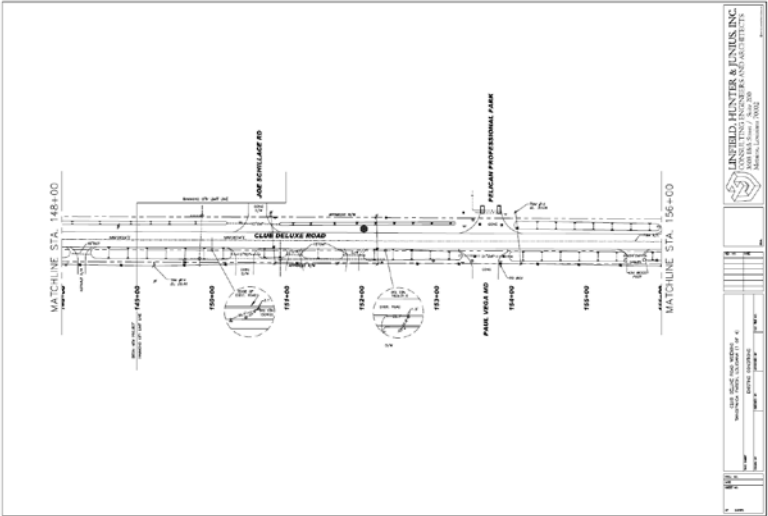

PROJECT NO. 2						
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:					
<p>Magazine Street Topographic Survey</p> <p>City of New Orleans Department of Public Works 1300 Perdido Street, Room 6W03 New Orleans, LA 70112 Alan Weber (504) 658-8209</p> <div style="text-align: center;">  </div>	<p>Linfield, Hunter & Junius, Inc. provided topographic surveying for Magazine Street Improvements between Broadway and Nashville. The survey was used as the basis for the roadway improvements design.</p> <div style="border: 1px solid gray; padding: 10px; margin: 10px 0; background-color: #f0f0f0;"> <p style="text-align: center;"><u>Key Relevant Features</u></p> <ul style="list-style-type: none"> ✓ Topographic Survey ✓ Differential Level for Project Benchmarks ✓ Baseline Establishment </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div>					
<p>Completion Date (Actual or estimated):</p>	<p style="text-align: center;">Estimated Cost:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #00a0e3; color: white;"> <th style="width: 35%; padding: 5px;">Entire Project:</th> <th style="width: 65%; padding: 5px;">Work for which Firm was Responsible:</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 20px;"> Ongoing </td> <td style="text-align: center; padding: 20px;"> <div> \$175,000 (Topo Survey) </div> <div> \$175,000 (Topo Survey) </div> </td> </tr> </tbody> </table>		Entire Project:	Work for which Firm was Responsible:	Ongoing	<div> \$175,000 (Topo Survey) </div> <div> \$175,000 (Topo Survey) </div>
Entire Project:	Work for which Firm was Responsible:					
Ongoing	<div> \$175,000 (Topo Survey) </div> <div> \$175,000 (Topo Survey) </div>					

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>US Highway 61 Bypass Road Construction Layout East Baton Rouge Parish, LA</p> <p>Shavers-Whittle Construction PO Box 1448 Mandeville, LA 70470 Chris Rayer (985) 626-7673</p>	<p>Linfield, Hunter & Junius, Inc. was a subcontractor to the General Contractor on the US Highway 61 Bypass Road in relation to the Amite River and Tributaries, La Comite River Basin, Comite River Diversion Project in Baton Rouge, LA. Linfield, Hunter & Junius, Inc. provided surveying services to the General Contractor which included Staking of the Project Baseline, Staking of the new roadway alignment as well as a benchmark loop for project control.</p> <div style="border: 1px solid black; background-color: #f0f0f0; padding: 10px; margin: 10px 0;"> <p style="text-align: center;"><u>Key Relevant Features</u></p> <ul style="list-style-type: none"> ✓ Staking of New Roadway Alignment ✓ Differential Level for Project Benchmarks </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div>	
Completion Date (Actual or estimated):	Estimated	
	Entire Project:	Work for which Firm was Responsible:
2018	\$9,000 (Topo Survey)	\$9,000 (Topo Survey)


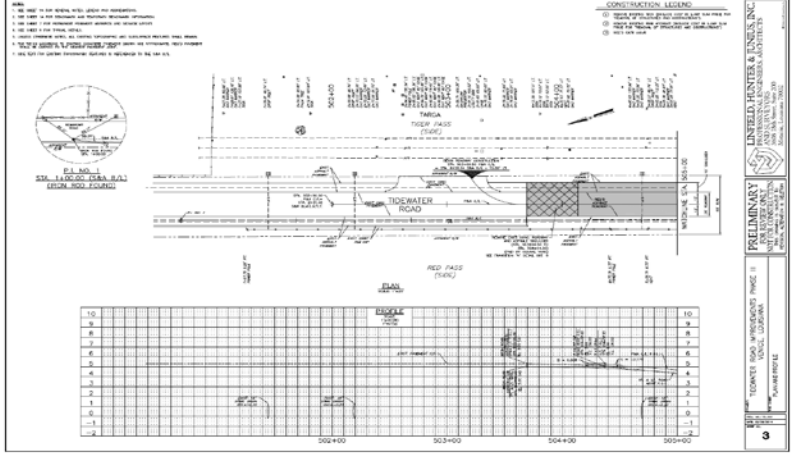
TEC Professional Services Questionnaire

PROJECT NO. 4

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Club Deluxe Road Right-of-Way and Topographic Survey</p> <p>Tangipahoa Parish P.O. Box 215 Amite, LA 70422 Wesley Danna (985) 340-9028</p> 	<p>Linfield, Hunter & Junius, Inc. prepared right-of-way maps and topographic surveying to Tangipahoa Parish for the widening of Club Deluxe Rd.</p>	<div style="border: 1px solid black; padding: 5px; background-color: #f0f0f0;"> <p>Key Relevant Features</p> <ul style="list-style-type: none"> ✓ Topographic Survey of Roadway ✓ Right of Way Survey ✓ Benchmark Loop </div>  
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
<p style="text-align: center;">06/2014</p>	<p style="text-align: center;">\$30,500 (Topo Survey)</p>	<p style="text-align: center;">\$30,500 (Topo Survey)</p>


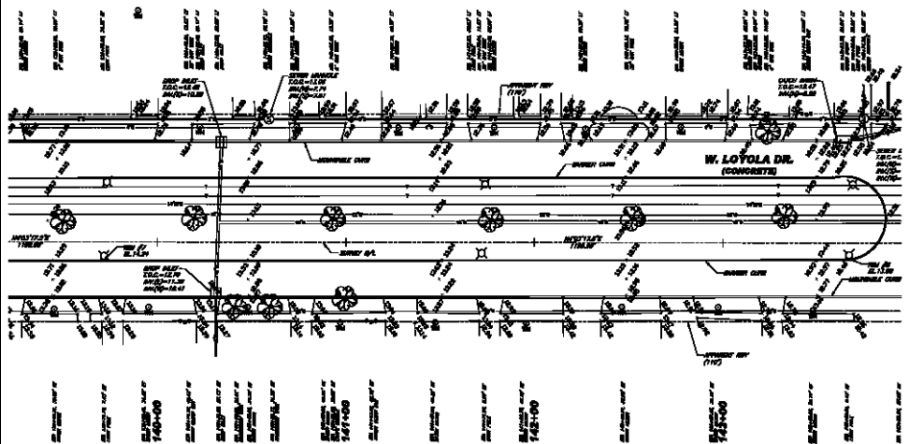
TEC Professional Services Questionnaire

PROJECT NO. 5

PROJECT NO. 5	
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
<p>Tidewater Road Topographic Survey</p> <p>Plaquemines Parish Government 333 F. Edward Hebert Blvd, Bldg 500 Belle Chasse, LA 70037 Ken Dugas (504) 934-6116</p> <div style="text-align: center;">  </div>	<p>Linfield, Hunter & Junius, Inc. provided topographic surveying for Tidewater Road Improvements in Plaquemines Parish. The survey was used as the basis for the roadway improvements design. Approximately 3 miles in total length.</p> <div style="text-align: center; margin: 20px 0;"> <div style="background-color: #cccccc; padding: 10px; border: 1px solid black;"> <p>Key Relevant Features</p> <ul style="list-style-type: none"> ✓ Topographic Survey ✓ Baseline Establishment ✓ Hydrographic Surveying </div> </div> <div style="text-align: center;">  </div>
Completion Date (Actual or estimated):	Estimated Cost:
	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Entire Project:</div> <div style="width: 70%;">Work for which Firm was Responsible:</div> </div>
2014	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">\$99,500 (Topo Survey)</div> <div style="width: 70%;">\$99,500 (Topo Survey)</div> </div>


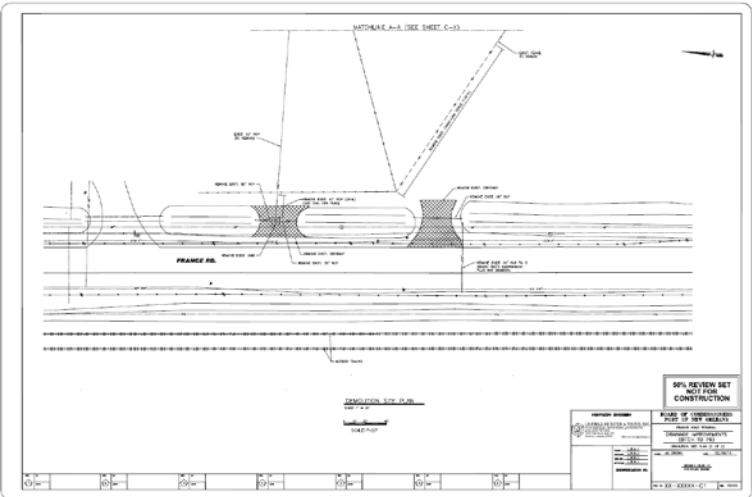

TEC Professional Services Questionnaire

PROJECT NO. 6

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>West Stanford and West Loyola Force Main Topographic and Right of Way Survey Kenner, LA</p> <p>City of Kenner Department of Public Works 1610 Rev. Richard Wilson Dr-Bldg D Kenner, LA 70062 Christine Calamari (504) 468-7515</p> <div style="text-align: center; margin-top: 20px;">  </div>	<p>Linfield, Hunter & Junius, Inc. provided topographic and right of way surveying to City of Kenner for the West Stanford and West Loyola Force Main rehabilitation.</p> <div style="text-align: center; margin-top: 20px;">  </div> <div style="margin-top: 20px; background-color: #e6f2ff; padding: 10px; border: 1px solid #add8e6;"> <p style="text-align: center;"><u>Key Relevant Features</u></p> <ul style="list-style-type: none"> ✓ Topographic and Right-of-way Surveys ✓ Baseline Establishment ✓ Differential Level for Project Benchmarks ✓ Apparent ROW </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2012	\$48,000 (Topo Survey)	\$48,000 (Topo Survey)

TEC Professional Services Questionnaire

PROJECT NO. 7

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>France Road Rehabilitation</p> <p>Port of New Orleans 1350 Port of New Orleans Place New Orleans, LA 70130 Michael Sulser (504) 528-3390</p> <div style="text-align: center; margin-top: 20px;">  <p>PORT NOLA THE PORT OF NEW ORLEANS</p> </div>	<p>Linfield, Hunter & Junius, Inc. provided topographic surveying for the France Road Rehabilitation for the Port of New Orleans Facility. The survey was used as the basis for rehabilitation design.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px; background-color: #f0f0f0;"> <p style="text-align: center;">Key Relevant Features</p> <p>✓ Topographic Survey</p> </div> <div style="text-align: center; margin-top: 20px;">  </div> <div style="text-align: center; margin-top: 20px;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2010	\$15,000 (Topo Survey)	\$15,000 (Topo Survey)

TEC Professional Services Questionnaire

PROJECT NO. 8						
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:					
<p>Livingston Place Roadway Improvements Topographic Survey Metairie, LA</p> <p>Jefferson Parish Department of Capital Projects 1221 Elmwood Park Blvd, Suite 906 Jefferson, LA 70123 Neil D. Schneider, CCM, P.E. (504) 736-6833</p> <div style="text-align: center; margin-top: 20px;">  </div>	<p>Linfield, Hunter & Junius, Inc. provided topographic surveying for East & West Livingston Street Improvements. The survey was used as the basis for the roadway improvements design.</p> <div style="float: right; background-color: #D3D3D3; padding: 10px; border: 1px solid #000; margin-top: 10px;"> <p style="text-align: center; margin: 0;">Key Relevant Features</p> <ul style="list-style-type: none"> ✓ Jefferson Parish Project ✓ Topographic Survey ✓ Differential Level for Project Benchmarks ✓ Baseline Establishment </div> <div style="text-align: center; margin-top: 20px;">  </div> <div style="text-align: center; margin-top: 20px;">  </div>					
<p>Completion Date (Actual or estimated):</p>	<p style="text-align: center;">Estimated Cost:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #0070C0; color: white;"> <th style="width: 35%; padding: 5px;">Entire Project:</th> <th style="width: 35%; padding: 5px;">Work for which Firm was Responsible:</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 10px;"> <p>2008</p> <p>\$38,000 (Topo Survey)</p> </td> <td style="text-align: center; padding: 10px;"> <p>\$38,000 (Topo Survey)</p> </td> </tr> </tbody> </table>		Entire Project:	Work for which Firm was Responsible:	<p>2008</p> <p>\$38,000 (Topo Survey)</p>	<p>\$38,000 (Topo Survey)</p>
Entire Project:	Work for which Firm was Responsible:					
<p>2008</p> <p>\$38,000 (Topo Survey)</p>	<p>\$38,000 (Topo Survey)</p>					

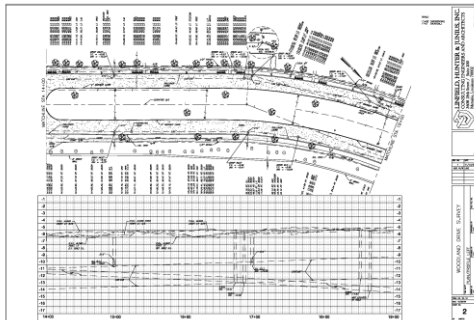
TEC Professional Services Questionnaire

PROJECT NO. 9

Project Name, Location and Owner's contact information:

Woodland Highway Right-of-Way and Topographic Survey

City of New Orleans
Department of Public Works
1300 Perdido Street, Room 6W03
New Orleans, LA 70112
Nguyen Phan
(504) 658-8000

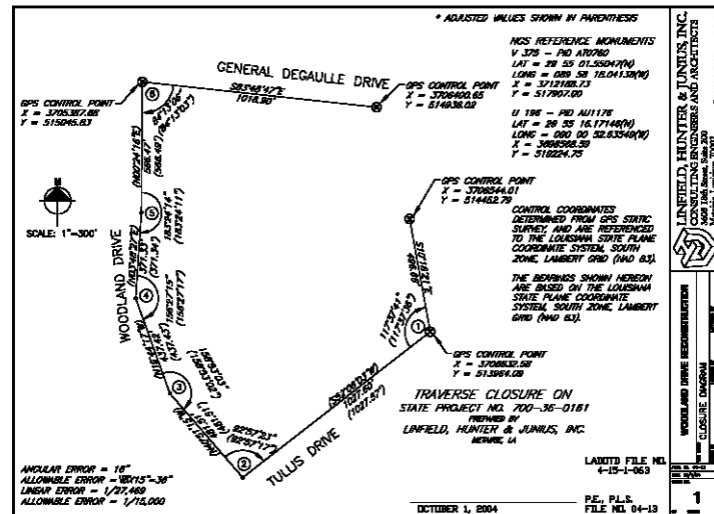
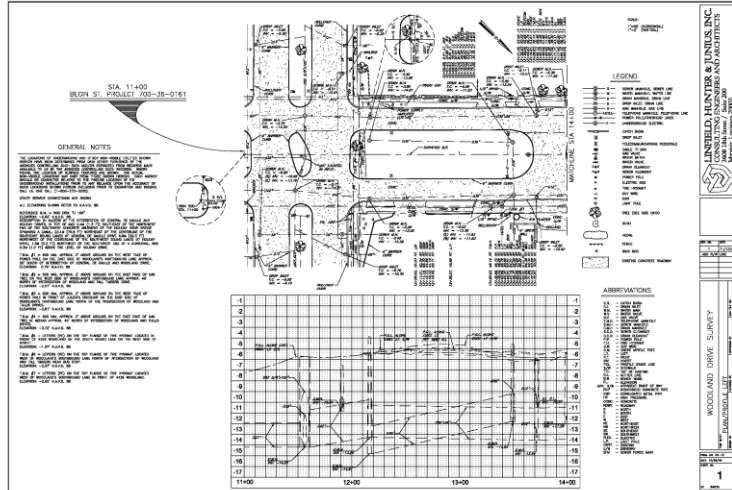


Nature of Firm's Responsibility:

Linfield, Hunter & Junius, Inc. prepared right-of-way maps and topographic surveying to LADOTD for the reconstruction of Woodland Highway. Approximately 1,700 feet in length.

Key Relevant Features

- ✓ Topographic Survey
- ✓ Traverse Closure
- ✓ Benchmark Loop



Completion Date (Actual or estimated):

2008

Estimated Cost:

Entire Project:


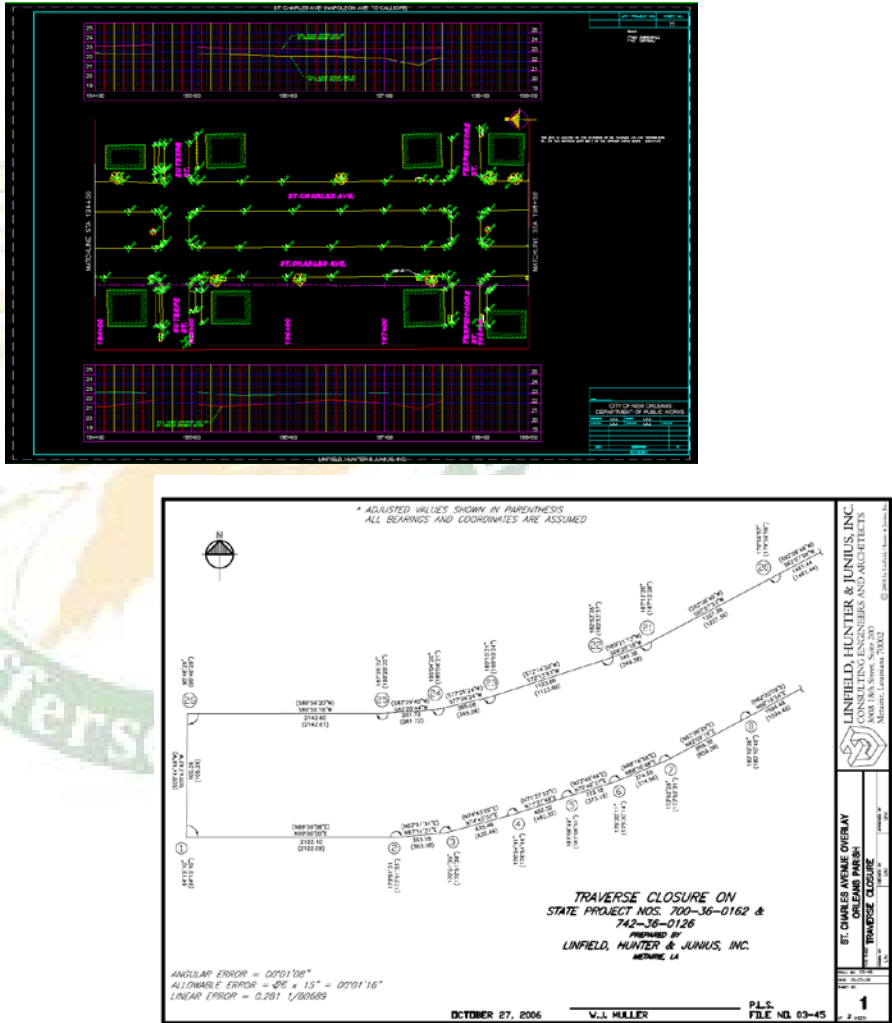
\$100,000
(Topo Survey)

Work for which Firm was Responsible:

\$100,000
(Topo Survey)

TEC Professional Services Questionnaire

PROJECT NO. 10

PROJECT NO. 10	
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
<p>St. Charles Avenue Overlay Napoleon Avenue to Calliope Street Topographic Survey</p> <p>City of New Orleans Department of Public Works 1300 Perdido Street, Room 6W03 New Orleans, LA 70112 Alan Weber (504) 658-8209</p> <div style="text-align: center; margin-top: 20px;">  </div>	<p>Linfield, Hunter & Junius, Inc. provided topographic surveying for the overlay at St. Charles Avenue between Napoleon Avenue and Calliope Street. The survey was used as the basis for the roadway improvements design.</p> <div style="text-align: center; margin-top: 20px;"> <div style="background-color: #d3d3d3; padding: 10px; border: 1px solid black;"> <p>Key Relevant Features</p> <ul style="list-style-type: none"> ✓ Topographic Survey ✓ Traverse Closure ✓ Baseline Establishment </div> </div> <div style="text-align: center; margin-top: 20px;">  </div>
Completion Date (Actual or estimated):	Estimated Cost:
	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">Entire Project:</div> <div style="width: 45%;">Work for which Firm was Responsible:</div> </div>
2006	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">\$46,000 (Topo Survey)</div> <div style="width: 45%;">\$46,000 (Topo Survey)</div> </div>

TEC Professional Services Questionnaire

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

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

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. has more than (60) years experience providing quality design professional services to public and private clients in New Orleans and the surrounding area. The firm has been performing full topographic surveys for over twenty (20) years. The following is a list of some of our major Clients which we have provided land surveying services:

Public

- Jefferson Parish Department of Public Works
- LA Department of Transportation and Development
- 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

- 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



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

SCOPE OF CONTRACT SERVICES

LH&J has been providing surveying services as a prime consultant for many years, successfully completing hundreds of projects for public agency clients such as the Jefferson Parish, Sewerage & Water Board of New Orleans, the U. S. Army Corps of Engineers, the Port of New Orleans, the City of New Orleans, Plaquemines Parish Government, LA DOTD and many others. The key management staff of Linfield, Hunter & Junius, Inc. have been recognized by their peers for their professionalism, expertise and leadership. Our land surveying department has the full capacity to perform **topographic**, boundary, ALTA and hydraulic surveys of any size.

LH&J employs **three full time Registered Professional Land Surveyors** and maintains **six 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 boundary, **topographic**, bathymetric, right-of-way, control, and hydrographic 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.

See attached for a copy of our Certificate of Insurance which shows proof of our professional liability insurance with the limits as required by the RFP. Also attached is a copy of our current professional licenses.

MINIMUM PERSONNEL REQUIREMENTS

- 1. The persons or firms under consideration shall have at least one (1) principal who is a licensed, registered professional engineer in the State of Louisiana**
This requirement will be fulfilled by the Prime Consultant.
- 2. The persons or firms under consideration shall have a professional in charge of the Project who is a licensed, registered professional mechanical or electrical engineer in the State of Louisiana with a minimum of five (5) years' experience**
This requirement will be fulfilled by the Prime Consultant.
- 3. The persons or firms under consideration shall have one (1) employee who is a licensed, registered professional mechanical or electrical 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**
This requirement will be fulfilled by the Prime Consultant.

Supplemental Services – Surveying

Linfield, Hunter & Junius, Inc. (LH&J) employs **three full time Registered Professional Land Surveyors** and maintains **six 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



TEC Professional Services Questionnaire

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.

The following list highlights this experience:

- Nathan J. Junius, P.E., P.L.S., PTOE/Professional Land Surveyor – 198 years of land surveying experience

LAND SURVEYING

William J. Muller, P.L.S./Land Surveyor – Over 40 years of surveying experience

Nathan J. Junius, P.E., P.L.S., PTOE/Land Surveyor – 19 years of surveying experience

Wesley R. Eustis, P.E., P.L.S. – 16 years of land surveying experience

Resumes for the above personnel are included in Section L of this TEC Questionnaire.

Capabilities include the following and more:

- **Topographic Surveying** (determine relative positions & elevations of natural & man-made features)
- **Drone Surveying** (detailed & expedient multi-acre data-capturing surveying)
- **Property, Boundary, and Right-of-Way Surveys** (preparation of Legal Descriptions, property, **Maps, Cross-Sections, and Data Sets** (plan drawings, maps, diagrams, and data sets)
- **3D Laser Scanning** (unify raw data & model)
- **Benchmarks** (establishment of permanent, temporary, and construction benchmarks)
- **Construction-Related Surveying** (all types)
- **Bathymetric / Hydrographic Surveys** (determine shoreline and depths of bodies of water)
- **Builder's Package** (includes *Boundary Survey & Construction Benchmark, Form Board Certificate, Top of Slab Certificate, & Final FEMA Elevation Certificate*)
- **ALTA Surveys** (American Land Title Association-compliant surveys) and ROW maps to define project boundaries and for acquisition of property)

EVALUATION CRITERIA

1. Professional Training and Experience

Linfield, Hunter & Junius, Inc. (LH&J) has been a provider of quality professional engineering and architectural services for over 60 years and **full land surveying services** for over 20 years. LH&J has been providing services as a prime consultant for many years, successfully completing thousands of projects for clients such as Jefferson Parish, LA DOTD, the Corps of Engineers, the Port of New Orleans, the City of New Orleans, Sewerage and Water Board of New Orleans, Plaquemines Parish Government, and many others. LH&J provides CADD Drafting (**AutoCADD** and **MicroStation**) and Quality Assurance Services for all its land surveying services.



TEC Professional Services Questionnaire

We have been providing very complicated survey services to the U.S. Army Corps of Engineers that conform to all Government requirements for over ten years for many flood protection projects. 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.

2. Size of Firm

The size of our firm is ideal for projects such as the proposed project because:

- The firm has a vast amount of experience in land surveying
- The firm is large enough that it can 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
- The firm has a total annual land surveying **capacity of \$2,000,000.**

Within the past five (5) years the firm has designed, administered, and managed over \$5 Million in land surveying. Depending on the scope of work required by Jefferson Parish, LH&J will assemble a team that will be able to commit to the project

3. Capacity for Timely Completion of the Project

Linfield, Hunter & Junius, Inc. (LH&J) currently employs forty-six (46) highly qualified design professionals, and has been providing quality engineering services in Southeast Louisiana for over thirty (30) years.

4. Past and Current Professional Accomplishments

Since placing an increased emphasis on land surveying services, Nathan Junius has completed over \$17,000,000 in land surveys for in-house designs and others. Services to date have included **property surveys, right of way maps, property taking**, bench leveling, topographic surveys, construction layout surveys and settlement monitoring surveys. A sampling of work to date includes bench leveling for calibration of pumping station gages for Jefferson Parish, topographic surveys for Canal Street Reconstruction in Jefferson Parish, East and West Livingston Drive Reconstruction, Russell Street Reconstruction, Woodvine and Cuddihy Streets Reconstruction, Magazine Street Reconstruction, Geisenheimer Canal Improvements, Labarre Business Park Drainage Improvements, Sewerage Extensions - West Pointe a la Hache to Bohemia, Lake Hermitage Waterline, Metairie Small Animal Hospital, Waterline Extension - Russell Drive to Cedar Grove, Sewage Force Main Replacement Lift Station No. 8 to Belle Chasse Sewage Treatment Plant, and Sewage Force Main Extension - Lift Station No. 7 to Lift Station No. 8 Belle Chasse, Slidell Vo-Tech Site Plan, Metairie Road Bridge Control Survey, Hoey's Bypass Canal Alignment Study, Right of Way Study Metairie Road Bridge, Right of Way Study Hoey's Cut, Vertical Response of Nashville Dock Repair to Crane Loading, Right of Way Survey Maple Ridge Drive Detour, Topographic Right of Way and Boundary Survey Metairie Road Drain Line Relocation, Lexus of New Orleans Topographic Survey, , Children's Hospital Parking Lot Survey, Louisville and Catina Streets Topographic Survey, and Woodlawn Avenue Topographic Survey.



TEC Professional Services Questionnaire

LH&J has been providing quality surveying services to Jefferson Parish, LA DOTD, the City of New Orleans, U.S. Army Corps of Engineers and many more for over 10 years and we have performed engineering projects for LA DOTD for over the last 30 years. We have an excellent track record of providing Government with high quality surveying services which are cost effective and completed in a timely manner. We have also prepared surveys throughout the Southeast U.S. for CVS/Pharmacies with over 500 potential building sites investigated since 2004. These and other long-term client relationships are a testament to LH&J's dedication to providing high quality services for reasonable prices in a timely manner that meets or exceeds all customer expectations.

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.



6. Adversarial Legal Proceedings

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

7. Prior Successful Completion of Projects of the Type and Nature of the Engineering Services, as defined, for Which Firm Has Provided Verifiable References

Linfield, Hunter & Junius, Inc. has a staff of engineers with significant experience providing the professional services required for this project. **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 project. Our team has a proven track record of completed major projects from feasibility studies following through to completed construction, and has recently completed a number of successful drainage projects which are similar to the scope of work of this project and in the same geographical area.

- Full Topographic Survey, Canal Street – Client: Jefferson Parish Government
- Full Topographic Survey, East and West Livingston Drive – Client: Jefferson Parish Government
- Full Topographic Survey, Russell Street – Client: Jefferson Parish Government
- Full Topographic Survey, Woodvine and Cuddihy Streets – Client: Jefferson Parish Government



TEC Professional Services Questionnaire

- Full Topographic Survey, Magazine Street, New Orleans – Client: City of New Orleans, Dept. of Public Works
- Full Topographic Survey, Woodland Highway Survey (LA407) – Client: LA Dept. of Transportation and Development
- Full Topographic Survey, 17th Street Canal Survey (LA 611), Jefferson/Orleans Parish, LA – Client: U.S. Army Corps of Engineers
- Full Topographic Survey, Club Deluxe Road Widening Survey (LA Hwy 51), Tangipahoa Parish, LA – Client: Tangipahoa Parish
- Full Topographic Survey, W. Stanford, W. Loyola Force Main Survey, Kenner, LA – Client: City of Kenner, Dept. of Public Works
- Full Topographic Survey, St. Charles Avenue Overlay (State Project 700-36-0162) – Client: City of New Orleans, Dept. of Public Works
- Full Topographic Survey, Magazine Street Reconstruction (State Project 742-36-137 and 742-36-0139) – Client: City of New Orleans, Dept. of Public Works

Closing Statement

We are extremely interested in this solicitation.

- **Linfield, Hunter & Junius, Inc. has extensive experience in providing land surveying services including property surveys, ROW Maps and Title Take-Off on projects in the State of Louisiana and particularly the Southeastern portion of the state.**
- **Linfield, Hunter & Junius, Inc. has the capacity to easily absorb the survey services included in this project assignment.**

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., PTOE

Title: Vice President

Date: April 21, 2021



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

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:		
Professional Mechanical and Electrical Engineering Services on an As-needed Basis for Projects Located Throughout the Parish		
B. Firm Name & Address where Project Work Will be Performed:		
Eustis Engineering L.L.C. 3011 28 th 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:		
<div style="display: flex; flex-direction: column; align-items: flex-start;"> <div><u>7</u> Administrative</div> <div><u> </u> Architects (Licensed)</div> <div><u> </u> Chemical Engineers</div> <div><u> </u> Civil Engineers</div> <div><u> </u> Construction Inspectors</div> <div><u> </u> Ecologists</div> <div><u> </u> Electrical Engineers</div> <div><u>4</u> Engineer Intern</div> <div><u> </u> Professional Land Surveyors</div> </div>	<div style="display: flex; flex-direction: column; align-items: flex-start;"> <div><u> </u> Estimators</div> <div><u>1</u> Geologists</div> <div><u>13</u> Geotechnical Engineers</div> <div><u> </u> Interior Designers</div> <div><u> </u> Landscape Architects</div> <div><u> </u> Land Surveyor</div> <div><u> </u> Mechanical Engineers</div> <div><u> </u> Environmental Engineers</div> </div>	<div style="display: flex; flex-direction: column; align-items: flex-start;"> <div><u> </u> Specification Writers</div> <div><u> </u> Structural Engineers</div> <div><u>1</u> Graduate Engineers</div> <div><u> </u> Project Managers</div> <div><u>7</u> Clerical</div> <div><u> </u> Grant/Funding Specialist</div> <div><u> </u> Sanitary Engineers</div> <div><u>48</u> Other</div> <div><u>81</u> TOTAL</div> </div>
F. Is this submittal is a JOINT-VENTURE? Please check: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
If marked "No," skip to Section I. If marked "Yes," complete Sections G-H.		

TEC Professional Services Questionnaire

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

1.

2.

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

YES ☐ NO ☐

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

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. None.		
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, administrative, and engineering staff. More employees can be added, as necessary, to complete any project.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Gwendolyn P. Sanders, P.E. / President	
Project Assignment:	
Principal Engineer	
Name of Firm with which Associated:	
Eustis Engineering L.L.C.	
Years' Experience with This Firm:	
28	
Education: Degree(s)/Year/Specialization:	
Bachelor of Science/1990/Civil Engineering Master of Science/1992/Civil Engineering	
Active Registration: Year First Registered/Discipline:	
Louisiana: 1997/Civil Engineering Mississippi: 2003/Civil Engineering Texas: 2020/Civil Engineering	
Other Experience and Qualifications Relevant to the Proposed Project:	
<p>Mrs. Sanders began her professional career with Eustis Engineering in 1993. Over the past 28 years, she has worked her way up through the ranks of the engineering department as an Associate Engineer, Project Engineer, Project Manager, and Engineering Manager. In 2020, Mrs. Sanders became Eustis Engineering's first woman president. As president, she is responsible for day-to-day business operations of the corporation. These include quality, safety, marketing, and long-term strategic growth. She also still actively participates in the engineering design and review processes.</p> <p>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 region, 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 the field investigation, 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. A majority 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.</p> <p>In 2017, Mrs. Sanders served as program advisor for the Deep Foundations Institute's 42nd annual conference. That same year, she was named one of the 50 Women of the Year by New Orleans' City Business. Mrs. Sanders is currently serving as an associate member of the American Society of Civil Engineer's Standards Committee for the Design and Construction of Foundations. She has a keen eye for detail and is a stickler for quality. Her work ethic and quality, combined with her communication skills, translate to Mrs. Sanders' ability to deliver successful geotechnical engineering projects to her clients.</p>	

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Gwendolyn P. Sanders, P.E. / President

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

- Jefferson Parish Sheriff's Office, First District Station, 3620 Hessmer Avenue, Metairie, Louisiana
- St. John The Baptist Parish, Proposed Generator Installations at Seven Sites, St. John The Baptist Parish, Louisiana
- St. John the Baptist Parish, Ruddock Booster Station Nos. 1 and 3, Ruddock, Louisiana
- Jefferson Parish, Lift Station G8-2, Tolmas Drive and West Esplanade Avenue, Metairie, Louisiana
- Hancock County, Emergency Operations Center, MS Highway 603, Hancock County, Mississippi
- Jefferson Parish, Veterans Boulevard, North and South Pump Stations, Jefferson Parish, Louisiana



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Sean G. Walsh, P.E. / Engineering Manager
Project Assignment:
Engineering Manager/ Project Manager
Name of Firm with which Associated:
Eustis Engineering L.L.C.
Years' Experience with This Firm:
9
Education: Degree(s)/Year/Specialization:
Bachelor of Science/2007/Civil Engineering Master of Science/2010/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 five years after graduation, Sean G. Walsh, P.E., was a Project Engineer on numerous projects in the New York and New Orleans metropolitan areas 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, development of 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. Mr. Walsh is also a graduate of the 2017 New Orleans Regional Leadership Institute (NORLI), a one-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 400 projects. Mr. Walsh has risen to the level of 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 the Spencer's Method and the Method of Planes; reinforced embankment design; stability analyses of flood protection walls</p>

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Sean G. Walsh, P.E. / Engineering Manager

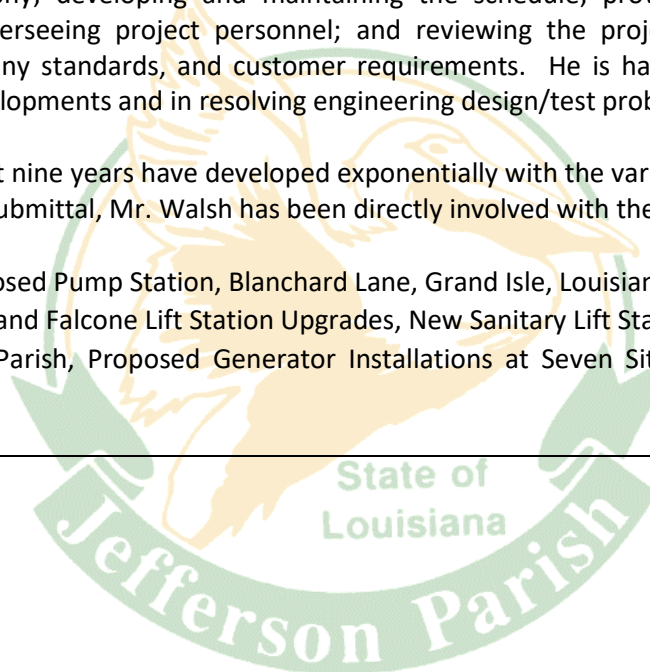
(e.g., T-wall, I-wall, L-wall, and braced 'A-Frame' walls); downdrag and settlement analyses; settlement induced bending moments (SIBM) in foundation piles; piping analyses; uplift analyses; heave analyses; three dimensional modeling of fill and structural load placements for predictions of time-rate settlements of foundation systems; and 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 (Baton Rouge, New Orleans, South Louisiana, etc.); 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 customer requirements. He is hands-on in coordinating activities concerned with technical developments and in resolving engineering design/test problems.

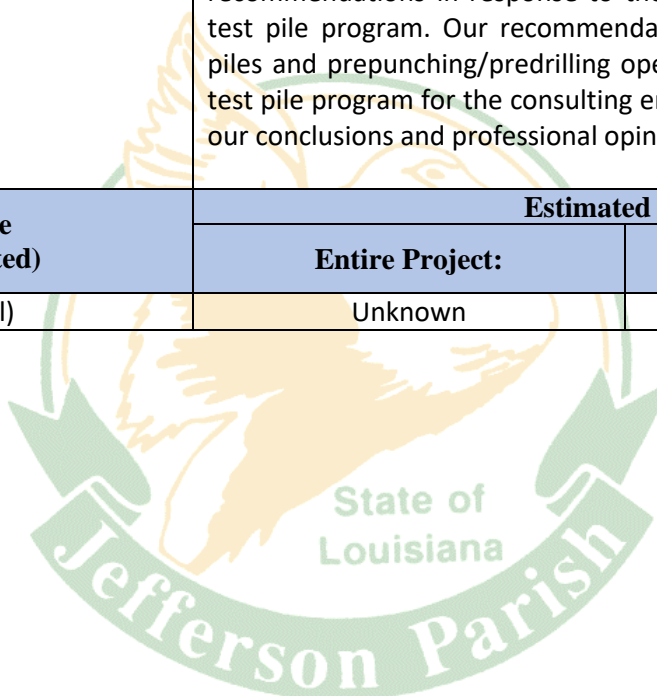
Mr. Walsh's skills over the past nine years have developed exponentially with the variety of projects that have crossed his desk. With regard to this submittal, Mr. Walsh has been directly involved with the following projects:

- Jefferson Parish, Proposed Pump Station, Blanchard Lane, Grand Isle, Louisiana;
- Jefferson Parish, Jung and Falcone Lift Station Upgrades, New Sanitary Lift Station, Marrero, Louisiana; and
- St. John The Baptist Parish, Proposed Generator Installations at Seven Sites, St. John The Baptist Parish, Louisiana.



PROJECT NO. 1	
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:
<p>Jefferson Parish West Bank Central Warehouse Facility LA Highway 18 Bridge City, Louisiana Eustis Engineering Project Nos. 22720 (.01)</p> <p>Jefferson Parish Through ECM Consultants, Inc. Suite 200 4409 Utica Street Metairie, Louisiana 70006 Chris Maniscalco @ 504-885-4080</p>	<p>As part of our geotechnical exploration, Eustis Engineering provided foundation analyses and recommendations for the proposed West Bank Central Warehouse Facility to be located north of LA Highway 18 in Bridge City, Louisiana.</p> <p>The project was to consist of two major structures: a warehouse and a poles/fixtures building, along with 21 parking spaces. The warehouse would have plan dimensions of 168' x 216'. The poles/fixtures building would have approximate plan dimensions of 50' x 110'. Approximately 3 feet of structural fill was anticipated to raise the site's grade to construction levels beneath the proposed structures. As an alternative to the structural fill, expanded polystyrene foam (EPS) blocks were being considered to raise the grade of the building footprints. Other project components included a new fenced laydown yard, parking areas and driveways, a loading dock on the northeastern corner of the warehouse, and underground drainage pipes (a maximum of 24 inches in diameter with an estimated maximum bearing depth of 4 feet).</p> <p>At the time of our field activities, the site was observed to be a generally level, open lot with an existing fence, fuel storage tanks, a fueling island, and minimal vegetation. Eustis Engineering drilled three undisturbed sample type soil test borings to depths of 60 to 100 feet and two auger borings to depths of 10 feet. Subsoil samples were obtained in the field using a 3-in. diameter thinwall Shelby tube sampling barrel. The samples were then tested in our laboratory to evaluate subsurface conditions and stratifications. Soil mechanics laboratory tests consisted of natural water content, unit weight, unconfined compression shear, and Atterberg liquid and plastic limits tests.</p> <p>Our engineering analyses and recommendations included:</p> <ul style="list-style-type: none"> • site preparation recommendations addressing the need for adequate drainage during and after construction; • appropriate clearing and stripping operations complying with Louisiana Standard Specifications; • subgrade preparation; • recommended structural fill and its compaction; • estimated fill settlement; • areal subsidence; • excavation bracing requirements in accordance with OSHA; • lateral earth pressure on buried structures and at the truck wells associated with the loading dock; • recommendations for the installation of new 6-in. to 24-in. diameter sewer and drain lines including bedding materials, the use of geotextile separation fabric, and backfill materials;

PROJECT NO. 1		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	<ul style="list-style-type: none"> allowable load capacities, in compression and tension, for various sizes of treated timber piles, timber composite piles, and square, precast concrete piles; estimated settlement due to structural loads; estimated settlement of piles due to fill placement; recommendations for flexible and rigid pavements; and recommended truck well designs and construction at the loading dock. <p>Although Eustis Engineering was not selected to conduct the test pile program, as the geotechnical engineer of record, we provided recommendations in response to the contractor's RFI regarding the test pile program. Our recommendations centered on the reaction piles and prepunching/predrilling operations. We also reviewed the test pile program for the consulting engineer on the project providing our conclusions and professional opinions regarding the results.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
May 2015 (Actual)	Unknown	\$11,500



PROJECT NO. 2		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Sheriff's Office First District Station 3620 Hessmer Avenue Metairie, Louisiana Eustis Engineering Project No. 23114</p> <p>Jefferson Parish Sheriff's Office Through N-Y Associates, Inc. 2750 Lake Villa Drive Metairie, Louisiana 70002 Jonathan O'Rear @ 504-885-0500</p>	<p>The Jefferson Parish Sheriff's Office planned a new station on Hessmer Avenue in Metairie, Louisiana. The station would be approximately 7,000 square feet in plan size with a main floor comprising an entrance lobby, retail space, and storage space with the second floor serving as the JPSO's First District office. The main floor and pavements would be constructed between existing grade up to an elevation of 4 feet.</p> <p>Eustis Engineering drilled one soil boring to a depth of 100 feet below the existing ground surface. The boring depth was required to identify the surface of the Pleistocene formation, and to evaluate settlement and downdrag due to the placement of fill. Eustis Engineering also drilled five auger borings to depths of 10 feet for the pavement areas.</p> <p>After completing the field investigation, our laboratory personnel performed a variety of soil mechanics laboratory tests including natural water content, unit weight, unconfined compression shear, and unconsolidated undrained triaxial compression shear. These tests were used to classify the soils, determine their shear strength, and determine their relative compressibility.</p> <p>Our engineering staff performed engineering analyses for the project. These analyses included:</p> <ul style="list-style-type: none"> • recommendations for site preparation, • recommendations for placement and compaction of fill, • estimates of allowable pile load capacities, • effects of downdrag on piles due to fill placement, • estimates of settlement, • components and thicknesses for rigid and flexible pavements, and • general foundation construction procedures. <p>Eustis Engineering later provided engineering analyses and recommendations comprising settlement estimates for closely spaced pile groups under the effects of final site grading and structural loads, a discussion on the use of job piles for pile load tests, and a discussion of pile downdrag settlement estimates based on site settlements as contrasted with settlements based on estimated pile adhesional forces.</p> <p>Finally, we were brought in to consult on the test pile program. Services performed in this capacity included reviewing pile driving records, witnessing pile load tests, evaluating pile group effects, and providing general consultation regarding obstructions and conflicts.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
May 2018 (Actual)	Unknown	\$11,400

PROJECT NO. 3		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Proposed Pump Station Blanchard Lane Grand Isle, Louisiana Eustis Engineering Project No. 24160</p> <p>Jefferson Parish Through GIS Engineering, L.L.C. 197 Elysian Drive Houma, Louisiana 70363 Kyle Galloway @ 985-219-1000</p>	<p>Plans called for the pump station to be supported on timber or concrete piles. Three reinforced concrete inlet pipes were planned, and two 24-in. diameter discharge pipes would be connected to the pump station. Each of the discharge pipes would be connected to a vertical pump with an electric motor housed on an elevated platform above the pump station. The pump station would have approximate plan dimensions of 14' x 16.33'. A design alternative, consisting of a grade supported pump station (without pile support), was also evaluated as part of our investigation.</p> <p>In the field, one undisturbed boring was drilled for the project extending to a depth of 150 feet below the existing ground surface. In the laboratory, soil mechanics laboratory tests included visual classification, natural water content, unit weight, unconfined compression shear, and unconsolidated undrained triaxial compression shear tests.</p> <p>Engineering analyses included the following:</p> <ul style="list-style-type: none"> • recommendations for ground water management; • site preparation recommendations including excavation preparation and development of a working platform/bedding as well as a sealant slab; • recommended construction materials including geotextile fabric as well as structural fills and their compaction; • temporary retaining structures; • dewatering and pressure relief associated with a working platform; • allowable soil bearing values for the pump station, net applied soil pressure, and settlement of the mat/slab supported pump station; • consideration of hydrostatic uplift pressures; • lateral earth pressures; • estimated allowable load capacities for various sizes of treated ASTM D25 quality timber piles and square precast concrete piles; • estimated pile settlement due to sustained structural loads; and • pile installation recommendations. 	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
August 2019 (Actual)	Unknown	\$14,500

PROJECT NO. 4		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Jung and Falcone Lift Station Upgrades New Sanitary Lift Station Marrero, Louisiana Eustis Engineering Project No. 23819</p> <p>Jefferson Parish Through Principal Engineering, Inc. Suite 19 1011 North Causeway Boulevard Mandeville, Louisiana 70471 Jeneva Hinojosa, E.I. @ 985-624-5001</p>	<p>The new lift station was to consist of a fiberglass wet well and a fiberglass valve pit. The wet well was to be approximately 6 feet in diameter and 18 feet in depth. The valve pit was to be approximately 6 feet in diameter and 8 feet in depth. Site improvements were to include a gravity sewer line installed approximately 12 feet below grade and a force main approximately 4 feet below grade.</p> <p>Our field investigation included the drilling of one soil boring to a depth of 80 feet below the existing ground surface drilled with truck mounted equipment. Once in the laboratory, samples collected in the field were subjected to soil mechanics laboratory tests including visual classification, natural water content, unit weight, unconfined compression shear, and one-point unconsolidated undrained triaxial compression shear.</p> <p>Using these data, our staff performed engineering analyses and developed recommendations for the project. Engineering analyses included:</p> <ul style="list-style-type: none"> • site preparation encompassing temporary and permanent drainage and excavation recommendations; • dewatering and pressure relief, lateral movement, and excavation base preparation associated with the sanitary gravity sewer line, wet well, and valve box; • lateral earth pressures; • base preparation, pipe bedding, and backfill for the force main and sanitary sewer line; • allowable soil bearing value recommendations for the wet well and valve box; • allowable pile load capacities, in compression and tension, for treated ASTM D25 quality timber; and • settlement estimates for both ground supported and pile supported project features. 	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
June 2018	Unknown	\$4,900

PROJECT NO. 5**Project Name, Location, and
Owner's Contact Information:****Nature of Firm's Responsibility:**

Generator platforms were to be installed at seven locations including two pump stations, a lift station, three wastewater treatment plants, and a sewerage plant in St. John the Baptist Parish.

LOCATION	GENERATOR WEIGHT IN POUNDS	PROPOSED PLATFORM	PLATFORM DIMENSIONS
LaPlace Park Pump Station	47,500	Elevated	31'8" x 16'
Belle Grove Pump Station	10,000	Elevated	19' x 12'
Percy Hebert Lift Station	18,000	Grade Supported	20' x 10'
Garyville Wastewater Plant	10,000	Grade Supported	16' x 10'
Tigerville Wastewater Plant	10,000	Grade Supported	18' x 10'
Central Wastewater Plant	10,000	Grade Supported	19' x 14'
Wallace Sewerage Plant	10,000	Grade Supported	18' x 10'

**St. John The Baptist Parish
Proposed Generator Installations
at Seven Sites
St. John The Baptist Parish, Louisiana
Eustis Engineering Project No. 22398**

St. John The Baptist Parish Through
G.E.C., Inc.
8282 Goodwood Boulevard
Baton Rouge, Louisiana 70806
Robert P. Dugas Jr. @ 225-612-3000

Using available subsurface and geologic data, Eustis Engineering performed analyses to estimate the allowable load capacities for treated timber piles at the LaPlace Park Pump Station and to estimate the allowable soil bearing values for lightly loaded mat foundations at four additional sites.

Geotechnical investigations were performed at two of the seven sites (Central Wastewater Plant and Belle Grove Pump Station). These explorations included the drilling of one soil boring at each site to a depth of 50 feet below the existing ground surface. Available subsurface and geologic data were used for the remaining locations. Soil mechanics laboratory tests were performed on the samples collected in the field to evaluate the substrata at each location.

Engineering analyses for these locations were performed to estimate allowable soil bearing values for lightly loaded, grade supported mat foundations; and allowable pile load capacities for treated timber pile foundations. General site preparation and construction

PROJECT NO. 5		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	recommendations, as well as estimates of settlement and differential settlement, were provided in our geotechnical report.	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
July 2014 (Actual)	Unknown	\$8,900



PROJECT NO. 6		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>St. John the Baptist Parish Ruddock Booster Station Nos. 1 and 3 Ruddock, Louisiana Eustis Engineering Project No. 22804</p> <p>St. John The Baptist Parish Through C. J. Savoie Consulting Engineers, Inc. Post Office Drawer R Paincourtville, Louisiana 70391 Joseph Savoie @ 985-369-2341</p>	<p>The new electrical buildings at Booster Station No. 1 and Booster Station No. 3 would each be raised 15 feet above existing grade to meet the FEMA flood elevation requirements. Timber piles were proposed to support the new platforms. The piles would be driven to existing grade and capped with a concrete slab. Columns would then be utilized to raise the building grade.</p> <p>The field exploration included one soil boring drilled to a depth of 100 feet below existing grade at each site using truck mounted equipment. Our staff coordinated site access with the station operators to minimize disruptions. Once our field operations were completed, the soil samples were transported to our laboratory where they were subjected to a series of soil mechanics laboratory tests to classify the subsoils and to determine their relative strength and compressibility characteristics.</p> <p>Foundation analyses for both locations included:</p> <ul style="list-style-type: none"> • site preparation recommendations; • effects of areal subsidence on the project; • allowable load capacities, in compression and tension, for various sizes and embedments of treated ASTM D25 quality timber piles; • estimated settlement of piles due to structural loads; • differential settlement considerations between pile supported and grade supported features; • pile installation recommendations; and • the effects of vibrations on nearby structures. <p>Separate geotechnical reports were prepared by engineering staff for each site.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
April 2015	Unknown	\$9,600

PROJECT NO. 7		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Lift Station G8-2 Tolmas Drive and West Esplanade Avenue Metairie, Louisiana Eustis Engineering Project No. 22583</p> <p>Jefferson Parish Through Barowka & Bonura Engineers & Consultants, LLC 209 Canal Street Metairie, Louisiana 70005 Jeffrey Bonura @ 504-828-0030</p>	<p>Jefferson Parish planned to improve Lift Station G8-2 by installing a 12' x 12' valve pit 10 feet below the existing ground surface. To determine subsoil conditions and stratifications at the site, Eustis Engineering drilled one undisturbed soil boring to a depth of 80 feet below the existing ground surface using a truck mounted rotary type drill rig. Cohesive or semi-cohesive subsoils were sampled at close intervals or changes in stratum using a 3-in. thinwall Shelby tube sampling barrel. Once the samples had been extracted from the bore hole, pocket penetrometer tests were performed on the trimmed ends of the extruded samples to provide a general indication of the soil's shear strength or consistency.</p> <p>Our laboratory technicians performed soil mechanics laboratory tests consisting of natural water content, unit weight, and unconfined compression shear on undisturbed samples obtained from the boring.</p> <p>Based on the soil boring and soil mechanics laboratory tests, Eustis Engineering developed recommendations for site preparation, excavation and dewatering, lateral earthen pressures, bedding and backfill, estimated allowable soil bearing values for mat foundations, estimates of allowable pile load capacities, estimates of settlement, and general foundation construction procedures.</p> <p>More specifically, engineering analyses included:</p> <ul style="list-style-type: none"> • use of at-rest pressures to determine the structural requirements for any buried structures; • recommendations regarding stability of the structure against hydrostatic uplift; • base preparation recommendations for the valve pit foundation including the use of geotextiles, bedding requirements, and structural fill requirements; • allowable soil bearing values for the valve pit's mat foundation; • allowable load capacities, in compression and tension, for various sizes of treated ASTM D25 quality timber piles to support the proposed valve pit; • estimates of settlement and differential settlement for both mat and timber pile foundations; • excavation and dewatering recommendations associated with construction; and • effects of areal subsidence on the project. 	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
August 2014 (Actual)	Unknown	\$4,100

PROJECT NO. 8		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Sheriff's Office Lafitte Rathburn Tower Lafitte, Louisiana Eustis Engineering Project No. L0415</p> <p>Jefferson Parish Sheriff's Office Through M S Benbow and Associates Professional Engineering Corporation Suite 400 2450 Severn Avenue Metairie, Louisiana 70001 504-836-8925</p>	<p>A communications tower and associated guyed wire supports were to be constructed for the Jefferson Parish Sheriff's Office. Steel H-piles were proposed for support of the tower and guyed wires. The specific tower dimensions and anticipated loads were not available for the exploration.</p> <p>The site was located approximately 2,000 feet east of the intersection of LA Highway 3257 and Forges Street in Lafitte, Louisiana. The tower location was in a generally level lot with existing vegetation and a limestone driveway. Extensive standing water was observed at the site during drilling operations.</p> <p>One soil boring was made at the site to a depth of 125 with an all-terrain mounted, rotary type drill rig. This was to evaluate subsoil conditions and stratification, and to obtain samples of the various substrata.</p> <p>Soil mechanics laboratory tests, performed on samples obtained from the boring, were used to evaluate the physical properties of the subsoils. These tests included natural water content, unit weight, and either unconfined compression shear or unconsolidated undrained triaxial compression shear. In addition, Atterberg liquid and plastic limits tests were performed on selected representative samples.</p> <p>Engineering analyses, based on the soil boring and laboratory test results, were made to determine recommendations regarding site preparation, estimates of allowable vertical load capacities for steel H-piles, estimates of settlement, and general construction recommendations.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
June 2015 (Actual)	Unknown	\$8,600

PROJECT NO. 9	
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:
<p>Hancock County Emergency Operations Center MS Highway 603 Hancock County, Mississippi Eustis Engineering Project Nos. G0086 (.01) and G0097</p> <p>Hancock County Through Beta Testing and Inspection, LLC 2107 Nicholson Avenue Waveland, Mississippi 39576 Leo Rose @ 228-466-2556</p>	<p>A geotechnical investigation was performed for the proposed Emergency Operations Center on the corner of MS Highway 603 and County Road 416 in Kiln, Mississippi. The Center would include:</p> <ul style="list-style-type: none"> • an Emergency Operations Center building with a footprint of 130' x 170', • a Storm Preparedness Facility with a footprint of 70' x 140', • an entry lawn which would be used for emergency helicopter landings, and • a paved driveway with an aggregate surface parking lot. <p>The buildings were to be supported on either shallow or deep foundations. The column and tilt wall panels would have loads ranging from 50 to 250 kips. Less than 1 foot of fill would be required to raise the site to design grade.</p> <p>Four undisturbed soil borings and six auger borings were drilled at the project site. Two of the undisturbed borings extended to depths of 40 feet and the other two extended to 15 feet below the existing ground surface in the building areas. The auger borings were made to depths of 10 feet below the existing ground surface in the pavement areas. The borings were made at locations accessible to our truck mounted, rotary type drill rig.</p> <p>Once the field operations were completed, soil mechanics tests were performed on samples taken from the borings. Testing generally consisted of natural water content, unit weight, and unconfined compression shear.</p> <p>Foundation analyses and recommendations were based on data obtained from the soil borings and laboratory tests. Our recommendations included:</p> <ul style="list-style-type: none"> • the design of the structure to meet the minimum standards outlined in ASCE 7-05 and ASCE/SEI 24-05, and other applicable codes; • ground water management during and after construction; • site preparation including subgrade preparation; • recommendations for the composition, placement, and compaction of structural fill; • allowable soil bearing values for continuous grade beam footings and isolated square footings; • allowable load capacities, in both compression and tension, for treated ASTM D25 quality timber, square precast concrete piles, and augercast piles;

PROJECT NO. 9		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	<ul style="list-style-type: none"> estimates of settlement and differential settlement; and recommendations for both flexible and rigid pavements. <p>To minimize post-construction settlement and allow some features to be supported at grade, Eustis Engineering recommended an earthen surcharge be implemented at the site. We provided an engineering technician to survey eight settlement plates and read six vibrating wire piezometers to evaluate the progress of the surcharge operations. The readings were performed twice per week for a period of two months. At the completion of the two-month period, Eustis Engineering transmitted the results of the instrumentation readings to the client.</p> <p>Our services during construction also included the performance of dynamic pile load tests, single-hole sonic logging, and pile integrity testing to evaluate the capacity and integrity of the job piles.</p> <p>The new \$2 million Emergency Operations Center was constructed through the FEMA Hazard Mitigation Grant Program with Hancock County matching \$500,000 in non-federal funding.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
December 2013 (Actual)	Unknown	\$37,190

PROJECT NO. 10		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Veterans Boulevard North and South Pump Stations Jefferson Parish, Louisiana Eustis Engineering Project Nos. 23396 (.01) and 24426</p> <p>Jefferson Parish Through ECM Consultants, Inc. Suite 200 1301 Clearview Parkway Metairie, Louisiana 70001 Sunina Shrestha, P.E. @ 504-885-4080</p>	<p>Two new drainage pump stations are proposed on the northern and southern sides of Veterans Memorial Boulevard at the 17th Street Canal. Each of these pump stations will discharge into the 17th Street Canal. Because of a planned bike path along the hurricane protection floodwall, these discharge pipes will need to penetrate the flood protection. As a result, plans called for the replacement of portions of the existing West 17th Street Canal I-walls (which cannot be penetrated and still comply with the U.S. Army Corps of Engineers' guidelines) with T-walls. Both pump stations would require demolition of approximately 20 feet of existing concrete I-wall for installation of the new T-wall to accommodate a discharge pipe through each wall. Access gates will also be provided as part of the floodwall modifications.</p> <p>Because of these modifications to the flood protection, a safety assurance review (SAR) was conducted by an independent reviewer. The SAR included a review of the plans and specifications, and design reports and calculations. Comments from the SAR were incorporated into the permit package submitted to the review agencies. The project plans have civil, structural, mechanical, and electrical components.</p> <p>For additional data at the site, Eustis Engineering used soil boring and laboratory test data contained in our own files from prior explorations as well as data obtained through a Freedom of Information of Act request to the U.S. Army Corps of Engineers (USACE).</p> <p>Engineering analyses for the evaluation of the proposed T-wall will follow the USACE's <u>Hurricane and Storm Damage Risk Reduction System Design Guidelines</u> dated June 2012. Global and local stability analyses will be performed to evaluate the design and construction of the T-wall, including temporary flood protection and temporary retaining structures. Stability analyses will also be performed to address construction dewatering requirements for the pump station excavation with respect to the existing and proposed flood protection.</p> <p>Our work will also include estimates of allowable axial pile load capacities for piles supporting the T-wall foundations as well as the pump station and discharge pipes. We will also perform analyses to evaluate the potential for seepage and heave during and after construction for the propose features. New generator pads will be located adjacent to each pump station to house controls outside the new intake excavation.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
May 2021 (Estimated)	Unknown	\$53,440

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 at this time.		
2.		
3.		
4.		



TEC Professional Services Questionnaire

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

When Eustis Engineering opened its first office in Vicksburg, Mississippi, in 1946, it housed its entire operation in less than 500 square feet of space. *Seventy-five 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 two-man office to approximately 100 individuals, the firm has grown to house accounting, administrative, 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, at the heart of Jefferson Parish. We also operate branch offices in Lafayette and Baton Rouge, Louisiana; in Gulfport, Mississippi; and in 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:

- exploration (drilling of soil borings and cone penetration testing),
- soil mechanics laboratory tests,
- field instrumentation and monitoring,
- dynamic pile testing and non-destructive testing of piles/shafts,
- geotechnical engineering design, and
- construction quality control and materials testing services.

Eustis Engineering has worked on more than 25,000 projects since its inception. This work history gives our engineering staff unparalleled familiarity with the foundation conditions in the Gulf Coast. Our engineers have provided geotechnical services at various levels in 22 states and one dozen foreign countries throughout the years.

ENGINEERING

Eustis Engineering has engineering capabilities to fulfill the requirements of nearly any project. We have developed pile capacity and bearing capacity analyses for projects throughout the coastal areas of the United States and more importantly through the east and west banks of Jefferson Parish. 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.

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. We also evaluate the use of alternative fill materials to minimize post-construction settlement.

Our capabilities extend to performance of deep-seated global stability analyses for structures levees, reinforced embankments, revetments, channel/canal slopes, and open excavations. We can also provide local and global stability analyses for temporary retaining structures implemented by the construction contractor. Our staff can also evaluate seepage and heave potential during and after construction.

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

Our staff coordinates well with local, state and federal agencies and is familiar with design requirements that may need to be implemented for certain project sites where other project stakeholders are involved, (e.g., USACE, LaDOTD, etc).

Staffing

Our engineering staff has 14 Master's degrees in Civil Engineering, Engineering, Engineering Management, 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, are very important to Eustis Engineering. Our engineers also regularly present in 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	20	24
Brian A. Deschamp	B.S. / Civil & Environmental Engineering	9	9
	B.A.A. / Business Administration		
James J. Hance	M.S. / Civil Engineering	18	22
	M.B.A. / Business Administration		
Chad L. Held	M.S. / Civil Engineering	30	30
David J. Indest	M.S. / Civil Engineering	20	20
Matthew K. Morales	B.S. / Civil Engineering	12	12
Travis R. Richards	M.S. / Engineering	15	22
	M.S. / Engineering Management		
	Coastal Engineering Certificate		
Gwendolyn P. Sanders	M.S. / Civil Engineering	28	28
Shaun R. Simon	M.S. / Civil Engineering	21	21
Patrick A. Thurmond	M.S. / Engineering Management & Civil Engineering	6	6
	Coastal Engineering Certificate		
Sean G. Walsh	M.S. / Civil Engineering	9	14
Benjamin G. Weinberg ⁽¹⁾	B.S. / Civil & Environmental Engineering	1	8
	M.B.A. / Business Administration		
Henry C. Worley	B.S. / Civil Engineering	3	5
	Coastal Engineering Certificate		
Engineering Interns (E.I.)			
Patrick T. Duckworth	M.S. / Civil Engineering	1	1
Lars A. Erickson	B.S. / Civil & Environmental Engineering	5	5
	Coastal Engineering Certificate		
Tomas K. Morales ⁽³⁾	B.S. / Civil Engineering	8	8
Joel R. Smith	B.S. / Civil Engineering	1	5

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

Employee	Education	Experience	
		Years with Eustis Engineering	Total Years
James M. Williams ⁽²⁾	M.S. / Civil Engineering	3	3
Engineering Graduates			
Lesley L. Reitmeyer	B.S. / Civil Engineering	12	12
Sean T. Smith ⁽³⁾	B.S. / Civil Engineering	5	5
Geologists			
Matthew J. Blasini	B.S. / Geology	1	2
Total Years of Experience		228	262

(1) P.E. registration outside Louisiana.

(2) Passed P.E. Exam, licensure pending one more year of experience.

(3) Long Term Subcontractor

Cone Penetration Testing Capabilities

Eustis Engineering maintains an inventory of 2.5, 5, and 10-ton digital Vertek cones pushed by two dedicated track mounted rigs capable of providing up to 20 tons of reaction or using the four Geoprobe rigs and anchors or other platforms to provide reaction. Five of our CPT rigs can be placed on a cargo buggy, airboat or shallow draft barge to access coastal marsh in open water with or without their typical platform, depending on capacity limits. Specifically, our equipment was designed with south Louisiana soil conditions in mind by having the capability to either install casing or use larger diameter rods to reduce the potential for rod buckling during operation. Our pushing platforms have been mounted to marsh buggy equipment to enable soundings in areas not accessible by conventional truck or track mounted vehicles. We have sounded to depths of 180 feet and can perform dissipation and seismic testing. Field testing is performed according to ASTM D5778 and common industry practices. Eustis Engineering has been performing and using CPT technology for more than 20 years.

Dynamic Pile Testing Capabilities

Eustis Engineering was the first private consulting firm to own and operate DPT 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 and closed end steel pipe piles, and steel H-piles.

We recently upgraded our data collectors and now operate four Pile Driving Analyzers® (two PAX units and two 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 have used underwater gauges to monitor piles 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 response to issues in the field, all PDAs have wireless communication enabling our engineers direct oversight of the dynamic pile testing process in real time.

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

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, 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 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 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

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.

Personnel

We can provide up to eight drillers and drill rigs capable of obtaining standard 3-in. diameter Shelby tube samples and 5-in. diameter fixed piston samples on land, and in water and marsh environments as indicated in the following table.

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

Capabilities of Eustis Engineering's Drill Staff	Scott Bombard	Jordon Brightwell	James Cordes	Rene Davidson	Eric Held	Julius Ivery	James Lubben	George Reitmeyer	Lawrence Rome
Hand Auger Borings	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
Boring Location Information (Elevation, Latitude, Longitude, Station, Offset)		X	X	X	X	X	X		X
Set Permanent Benchmarks		X	X	X	X	X	X		X
Install Instrumentation		X	X	X	X	X	X		X
Cone Penetration Tests					X			X	
Geoprobe® Sampling	X		X		X		X		X

Equipment

Eustis Engineering owns and operates six wet rotary drill rigs, both truck and skid mounted. This equipment includes one Diedrich truck mounted D-50 turbo drill rig (with an automatic SPT hammer); one Failing skid only 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; and one truck mounted CME-55 rig with a detachable CME-55 skid unit and automatic hammer. 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 four direct push Geoprobe® units, two 3230DTs, the 6620DT, and the 540M. Eustis Engineering's 6620DT/3230DT Geoprobe with their 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 can also 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 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.

LABORATORY

Eustis Engineering's laboratory is constantly evolving with the purchase of new equipment on a yearly basis. Our glINT® data management software allows for maximum efficiency in production of boring and cone penetration test logs and data entry.

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

Eustis Engineering recently 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 will provide Eustis Engineering's team members access to a data source via connected applications or a web portal, increasing collaboration and efficiency. The 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 will improve our laboratory's 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 easily customized worksheets and reports.

Technical testing common to our laboratory includes ASTM, ACI, LaDOTD, AASHTO, FAA, and U.S. Army Corps of Engineers. Our laboratory is accredited by AASHTO, LaDOTD, and the U.S. Army Corps of Engineers.

Staffing

Eustis Engineering currently has more than a dozen technicians to perform soil mechanics laboratory testing. These technicians are versed in the latest standards from ASTM, LaDOTD, MDOT, AASHTO, FAA, and U.S. Army Corps of Engineers. 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 U.S. Army Corps of Engineers, the AMRL Group of AASHTO, and the CCRL Group of AASHTO. Eustis Engineering is also accredited by the Mississippi Department of Transportation. Eustis Engineering's laboratory is accredited with the AASHTO Materials Reference Laboratory (AMRL) in the areas of soil, aggregate, and Portland Cement Concrete.

Eustis Engineering has three soil mechanics laboratories where our laboratory practices and quality management system meet the requirements of AASHTO R18 and ASTM E329. These offices are in Metairie and Baton Rouge, Louisiana and Gulfport, Mississippi. 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
Asphalt	Aggregate	Asphalt
Concrete	Soil	Concrete
Masonry	Spray Fire-Resistive Material	Soil
Soil		Spray Fire-Resistive Material

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

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

Signature:  Print Name: Gwendolyn P. Sanders, P.E.
Title: President Date: 16 April 2021



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

Name:	Public Address:
Eustis Engineering L.L.C.	Ms. Kathy D. LeRouge 3011 28th Street Metairie,LA 70002

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0003558	ACTIVE	09/13/2006	03/31/2023	Mr. Benjamin Mcmillan Cody # PE.0030292 - Active
				Mr. Chad Lloyd Held # PE.0030257 - Active
				Mr. David Jacob Indest # PE.0034306 - Active
				Mr. James Johnathan Hance # PE.0031270 - Active
				Mr. Travis Russell Richards # PE.0030992 - Active
				Ms. Gwendolyn Philips Sanders # PE.0027104 - Active