



JEFFERSON PARISH

SOQ 22-014 Resolution 138896

Professional Engineering and Supplemental Services for a Drainage Master Plan for the East Bank of Jefferson Parish



March 24
2022

in association with:
Principal Engineering, Inc
N-Y & Associates, Inc
All South Consulting Engineers, LLC
Linfield, Hunter & Junius
BFM Corporation, LLC



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OVER 100 YEARS OF SERVICE

Jefferson Parish Purchasing Department
Mr. Renny Simno, Director
Joseph S. Yenni Building
1221 Elmwood Park Blvd., Suite 404
Jefferson, LA 70123

RE:SOQ 22-014 Resolution 138896 Professional Engineering and Supplemental Services for a Drainage Master Plan for the East Bank of Jefferson Parish

Mr. Simno:

In response to your request for qualifications, **Burk-Kleinpeter, Inc., Principal Engineering, Inc, N-Y & Associates, Inc, All South Consulting Engineers, LLC Linfield, Hunter & Junius,** and **BFM Corporation, LLC** is pleased to submit our proposal for the above-referenced project.

BKI is a full-service consulting firm providing professional planning and engineering services to public and private clients for over 110 years, with offices in Louisiana and Alabama. We are fully capable of providing all Drainage Master Plans and hydrologic and hydraulic modeling. Our Metairie office will serve as the main project office for this assignment with David Boyd, PE, Vice President serving as project manager. We are committed to client satisfaction, and we hope to provide assistance to the Parish in the successful implementation of future projects. We have a long and successful history of completing similar scale projects on time, and we hope to have the opportunity to extend that history.

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

Sincerely,

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



ORGANIZATIONAL CHART



PRINCIPALS + PROJECT OVERSIGHT

Burk-Kleinpeter, Inc.

- Michael D. Chopin, PE
Principal, QA/QC
- Henry M. Picard, PE, PLS
Principal, QA/QC

PROJECT MANAGEMENT

David E. Boyd, PE
Project Manager

CIVIL, HYDRAULIC & MECHANICAL ENGINEERING *(INCLUDING H&H MODELING)*

Burk-Kleinpeter, Inc.

- Timothy J. Koenig, PE
- Rene Chopin, IV, PE
- Andrew R. Jensen, PE
- Robert Furlow, PE
- Danny S. Caluda
- Renee Poole, EI

N-Y & Associates

- Frank Nicoladis, PE
Project Oversight
- Michael Nicoladis, EI, MBA
Project Oversight
- Constantine Nicoladis, PE
Project Oversight
- Patricia R. Claverie, EI, MS
- Fred Mortali, PE

- W. Tully Rhodes, PE
- James Simmons, PE
- William Haensel, PE, PLS
- Neil Logan, PE
- Dennis Voss, NICET

Principal Engineering, Inc.

- Andre C. Monnot, PE
- Henry I. DiFranco, PE
- Dwayne Marlborough, P.E.
- Brien Croff, P.E.
- Donald M. Alette, PE
- Natalya Munger, PH, EI
- Michael Melendez
- Eric Glynn, EI
- Logan Richard

CADD - GIS

Burk-Kleinpeter, Inc.

- Galen Light, GISP
- Stephen Pederson
- Thomas Litchliter

N-Y & Associates

- Noah Jackson
- Chris LeMay

All SouthConsulting Engineers

- Jackson Sorrells

BFM Corporation, LLC

- Anthony Watson
- Shaun Clements
- Kevin A. Roberts
- Dawn Hoffman

SURVEYING & TESTING

BFM Corporation, LLC

- Chad M. Poché, PE
- Ralph P. Fontcuberta, Jr., PLS
- John Philip Thayer
- Gary J. Lambert, Jr., PLS
- Christopher Lemley
- Thomas O. Wright
- Curtis "Jay" Barrios
- Eric Gladney
- Jeff Patin

All SouthConsulting Engineers.

- Timothy P. Bonura, PE
Project Oversight
- John Teegarden, PLS

- Taylor Casteigne, LSI
- Lyle Langley
- William Lambert
- Austin Bowman

Linfield, Hunter & Junius, Inc.

- Nathan J Junius, PE, PLS
Project Oversight
- William J Muller, PLS
- Daniel D. Bindewald
- Paul H. Morales, IV
- Vincent J. Leco, III, EI
- Cooper G. Ashworth, EI

Burk-Kleinpeter, Inc.
TEC Questionnaire



TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 22-014 Resolution 138896

Professional Engineering and Supplemental Services for a Drainage Master Plan for the East Bank of Jefferson Parish

B. Firm Name & Address:



3240 South I-10 Service Road West
Room 300
Metairie, LA 70001

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

Michael D. Chopin, PE - Principal - CEO- Civil Engineer - (504)343-6254, *mchopin@bkiusa.com*

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

David E. Boyd, PE - Project Manager - (504)975-7735, *dboyd@bkiusa.com*
Rene A Chopin, IV, PE - Civil Engineer - (504)275-9463, *rchopin4@bkiusa.com*
Timothy J. Koenig, PE - Civil Engineer - (504)717-6072, *tkoenig@bkiusa.com*

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

<u>14</u> Administrative	<u>0</u> Estimators	<u>0</u> Specification Writers
<u>0</u> Architects (Licensed)	<u>0</u> Geologists	<u>4</u> Structural Engineers
<u>0</u> Chemical Engineers	<u>0</u> Geotechnical Engineers	<u>0</u> Graduate Engineers
<u>12</u> Civil Engineers	<u>0</u> Interior Designers	<u>1</u> Project Managers
<u>9</u> Construction Inspectors	<u>0</u> Landscape Architects	<u>0</u> Clerical
<u>0</u> Ecologists	<u>0</u> Land Surveyor	<u>0</u> Grant/Funding Specialist
<u>0</u> Electrical Engineers	<u>1</u> Mechanical Engineers	<u>0</u> Sanitary Engineers
<u>4</u> Engineer Intern	<u>0</u> Environmental Engineers	<u>3</u> Planners
<u>0</u> Professional Land Surveyors	<u>7</u> CADD/GIS	<u>1</u> Designers
<u>56</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. N/A

H. Has the 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. Principal Engineering 1011 N Causeway Blvd STE 19 Mandeville, LA 70471	Engineering	Yes
2. N-Y & Associates 2750 Lake Villa Dr STE 100, Metairie, LA 70002	Engineering	Yes
3. BFM Corporation, LLC 15 Veterans Memorial Blvd, Kenner, LA 70062	Surveying	Yes
4. All South Consulting Engineers, LLC 652 Papworth Avenue, Metairie, Louisiana 70005	Survey	Yes

TEC Professional Services Questionnaire

5. Linfield, Hunter & Junius 3608 18th St # 200, Metairie, LA 70002	Survey	Yes
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J. Please specify the total number of support personnel that may assist in the completion of this Project:

BKI: 12

Total Team: 63

- *All South: 7*
- *BFM: 13*
- *N-Y: 12*
- *Linfield, Hunter & Junius: 10*
- *Principal: 9*



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Michael D. Chopin, PE (Minimum Qualifications - 1) <i>Principal/CEO</i>
Project Assignment
Principal / QA/QC
Name of Firm with which associated

Years' experience with this Firm:
30
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 1991 / Civil Engineering
Active registration: Year first registered/discipline
1996 / Professional Engineer State of LA No. 26797
Other experience and qualifications relevant to the proposed project:
<p>Mr. Chopin is Principal/President at BKI in charge of personnel, including schedules, staff, budgets, technical review, and account management. He has over 26 years of professional engineering experience providing professional consulting focused on a wide range of public works projects as Principal, Project Manager, or Project Engineer projects and have included hydrologic and hydraulic modeling and master drainage planning. Projects have included design, construction administration and related supplemental services. As a principal and project manager, Mr. Chopin has a keen awareness of typical funding constraints and has proven successful in producing deliverables which comprehensively benefit both the community and environment. Mr. Chopin is a member of the American Society of Civil Engineers and the Society of American Military Engineers.</p> <p><i>Mr. Chopin's applicable projects are listed on the following page.</i></p>

Mr. Chopin has worked on the following applicable projects:

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

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

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

St. Charles Westbank Levee Interior Drainage - *St. Charles Parish, LA* - Project manager for the development of computer hydrological and hydraulic model using HEC-HMS and HEC-RAS for the West Bank of St. Charles Parish to determine necessary interior drainage improvements and proposed pump station capacities as the result of the implementation of a new hurricane protection levee.

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

St James Parish Eastbank Master Drainage Plan - *St. James Parish, LA* - Project oversight for the development of a master drainage plan for the east bank of St. James Parish. The master plan identified necessary drainage improvements which included both channel widening/deepening and culvert replacements.

Bellemeade Area Drainage - *Jefferson Parish, LA* - Provided project oversight and quality control for the development of construction drawings and specifications for the installation of 6,000 linear feet of stormwater culverts and 14 junction boxes.

Drainage Consultant for Council District 4 - *Jefferson Parish, LA* - Project Manager responsible for preparing drainage studies, analyses, and design improvements for various drainage projects for Jefferson Parish Council District No. 4.

Donaldsonville to the Gulf Levee Project - *Donaldsonville, LA* - Feasibility study for hurricane protection for the Donaldsonville, LA, to Gulf of Mexico study area measured alternatives against federal, environmental, and economic criteria. Tasks included structure inventories, GIS mapping and fieldwork, calculating structure values and database management. Tasks also included pump station inventory, contact with pump manufacturers for over 100 pumps, calculating losses and total dynamic head, and developing pump curves. All of the work was used in a hydrologic and hydraulic model by the U.S. Army Corps of Engineers.

Taft Park Drainage Pumping Station - *Metairie, LA* - Principal provided QA/QC for the design of the new Taft Park Drainage Pumping Station at Taft Park and 35th Street. This HMGP project was designed to drain the low-lying neighborhood. BKI's design included a new 63 CFS pumping station; new gravity collection drains on Taft Park, Belmont Place, and North Turnbull Drive between West Napoleon and the I-10 South Service Road; and a new effluent force main from the new pump station routed to the West Napoleon Canal south of the station. Provisions were installed for connections to a portable generator.

25th Street Canal - *Gretna, LA* - Provided project oversight for drainage improvements to the 25th Street Canal Neighborhood. Using a combination of LA Capital Outlay Funds, CDBG Funds, and FEMA Flood Mitigation Grant dollars. BKI performed Hydraulic Analyses with Benefit Cost Analysis, Construction Documents for green infrastructure, 350 cubic feet per second pump station, 5400 feet of new drainage pipe, 2000 feet of sheet pile wall, 8 flapgates and concrete lining of the 25th Street Canal. Resident inspection and construction administration was performed as well.

Avenue D Canal Drainage Improvements - *Jefferson Parish, LA* - Provided oversight for the design and construction of subsurface drainage improvements in the King's Grant/Avenue "D" Subdivision on the Westbank of Jefferson Parish. The project included the removal of existing storm drain pipe and existing roadway, and the construction of new concrete curb, pavement, and storm drain pipe.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 12/06/2018, the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Michael David Chopin
4921 Henican Place
Metairie, LA 70003-1156

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)	
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com	
Mr. Michael David Chopin		
License/Certificate Type - Number	Expiration Date	
PE.0026797	09/30/2022	
Status: Active		
<p>Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).</p> <p>LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.</p>		

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TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Henry M. Picard, III, PE, PLS (Minimum Qualifications - 3)
<i>Senior Vice President</i>
Project Assignment
Principal / QA/QC
Name of Firm with which associated

Years' experience with this Firm:
32
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 1981 / Civil Engineering
Active registration: Year first registered/discipline
1986 / Professional Engineer, State of LA No. 22289 1996 / Professional Engineer, State of AL No. 20937 2000 / Professional Engineer, State of FL No. 56552 1994 / Professional Land Surveyor, State of LA No. 4736
Other experience and qualifications relevant to the proposed project:
<p>Mr. Picard is a Senior Vice President at BKI in charge of project management, hydraulics, and traffic engineering. Additionally he manages schedules, staff, budgets, technical review, and account management. He has 40 years of engineering experience with extensive hydrologic and hydraulic experience both managing and overseeing numerous master drainage plans that the firm has completed in the Greater New Orleans region, as well as the design and construction oversight of drainage improvement projects. Mr. Picard holds a Bachelor of Science in Civil Engineering; is a Registered Professional Engineer in Louisiana, Alabama, and Florida; and is a Registered Professional Land Surveyor in Louisiana. He is an active member of the American Society of Civil Engineers and the Society of American Military Engineers.</p> <p><i>Mr. Picard's applicable projects are listed on the following page.</i></p>

Mr. Picard has worked on the following applicable projects:

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

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

St. James Master Drainage Plan - *St. James Parish, LA* - Project Manager completed hydrologic/hydraulic modeling and levee alignment analysis for a Master Drainage Plan / Flood Protection Plan to alleviate flooding in the existing subdivisions and agricultural lands through parishes using upgraded outfalls. The study was performed using HEC-HMS and HEC-RAS modeling software.

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

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

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

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

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

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

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

Maplewood Area Drainage Improvements - *Harvey, LA* - Principal provided project supervision and subconsultant coordination for the development of construction drawings and specifications for the installation of 9,100 linear feet of stormwater culverts, 33 junction boxes, 80 catch basins, and 3,500 square yards of paving. The FEMA HMGP funds were awarded to improve drainage after flooding during intense rainfalls.

Sharp Road Detention Pond - *Mandeville, LA* - Project Manager for the development of a detention pond and drainage improvements for Asbury Drive, Century Oaks Lane, Sharp Road, Marquette Street, and Cypress Lake. Challenges included expansion of channels within the existing drainage servitude widths, coordination with multiple utility conflicts at multiple roadways, and coordination with multiple community and neighborhood groups.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 12/06/2018, the Louisiana Professional Engineering and Land Surveying Board (LPELS) has the following information on file:

Mr. Henry Maurice Picard
1230 Rue Beauvais
Mandeville, LA 70471-123

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LPELS)	
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com	
Mr. Henry Maurice Picard III		
License/Certificate Type - Number	Expiration Date	
PE.0022289	03/31/2023	
Status: Active		
<p>Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).</p> <p>LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.</p>		

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Louisiana Professional Engineering and Land Surveying Board

License Information

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

Name:	Address:
Mr. Henry Maurice Picard III	1230 Rue Beauvais Mandeville, LA 70471-1233

License/Certificate Information

License	Status	First Issuance Date	Expiration Date	Listed Discipline(s)
PLS.0004736	Active	06/16/1994	03/31/2023	

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[Online Contact Info Update \(https://renewals.lapels.com/Activities/Listing.aspx?ID=40\)](https://renewals.lapels.com/Activities/Listing.aspx?ID=40)

9643 Brookline Avenue | Suite 121 | Baton Rouge, LA 70809-1433
225-925-6291 | Fax 225-925-6292

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Rene A. Chopin, III, PE (Minimum Qualifications - 3)
<i>Supervisor - Civil Engineer</i>
Project Assignment
Supervisor - Civil Engineer
Name of Firm with which associated

Years' experience with this Firm:
33
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 1988 / Civil Engineering
Active registration: Year first registered/discipline
1993 / Professional Engineer, State of LA No. 25174 2005 / Certified Structural Engineer, State of LA No. 1774-1105
Other experience and qualifications relevant to the proposed project:
<p>Mr. Chopin is a Senior Vice President/Chief Engineer at BKI, in charge of project production, project management, and staff supervision. He has 29 years of professional engineering experience and has provided professional consulting focused on a wide range of highway, roadway, and bridge designs. He has served as Project Manager or Project Engineer on numerous bridge, roadway, dock, wharf, structural, and infrastructure projects. Mr. Chopin's projects have garnered awards and commendations from the American Concrete Institute Louisiana Chapter and the National Partnership for Highway Quality. Mr. Chopin holds a Bachelor of Science in Civil Engineering, and is a Registered Professional Engineer in Louisiana, Mississippi, Florida, Alabama, and Texas. He is also a member of the American Society of Civil Engineers and the American Concrete Institute of which he is Past President of the Louisiana Chapter. Mr. Chopin attended the Traffic Control Supervisor Refresher – LA State Specific training course for the American Traffic Safety Services Association in 2019.</p> <p><i>Mr. Chopin's applicable projects are listed on the following page.</i></p>

Mr. Chopin has worked on the following applicable projects:

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

Willowridge, Ellington, and Magnolia Ridge Drainage Pumping Stations - *St. Charles Parish, LA* - Provided structural oversight for the design of three new drainage pump stations (a total of 1300 CFS) in the Willowridge Subdivision, the Ellington watershed, and off Magnolia Ridge Road. Pump station design for all three stations included vertical pumps, backup generators, and mechanical bar screen cleaners.

Lions Water Treatment Plant Pump Station Intake Project - *St. John the Baptist Parish, LA* - Provided structural engineering for the improvement of the pumping capacity and the ability to pump during low water levels in the Mississippi River for the Old Raw Water Pump Station located at the Lions WTP in St. John the Baptist Parish.

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

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

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

Peters Road Bridge and Extension - *Plaquemines and Jefferson Parishes, LA* - Project Manager for construction engineering support including shop drawings, submittal review, answering RFIs, and the preparation of plans and specifications for the design of a new fixed, high level bridge across the intracoastal waterway (AASHTO LRFD Design). Project also includes four miles of new approach roadways and reconfiguring the Peters Road/Engineers Road Interchange. Mentored others in roadway geometric design. Prepared Hammerhead Pier design calculations and details for younger engineers to follow design method.

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

Mandeville By Pass - *Mandeville, LA* - Provided civil engineering services for the preparation of line and grade studies. Preliminary plans included the preparation of typical sections, plan/profile sheets, existing and design drainage maps, geometric layouts, sequence of construction, and cross sections.

US 167 Widening Dry Prong to Winn Parish - *Grant and Winn Parishes, LA* - Provided project management services for the preparation of plans and specifications for the widening of a 14.5 mile stretch of US 167 from two lanes to four lanes. Project included numerous box culverts and two slab span bridges.

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

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

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

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

I-610 Interchange - Railroad Underpass Pump Station - *New Orleans, LA* - Project Engineer for the line and grade study and the conceptual plans of the alternatives for the Williams Blvd., Causeway Blvd., I-10/I-610 split and the Metairie Road interchanges.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 10/5/2021 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Rene Adrian Chopin III
4728 Green Acres Court
Metairie, Louisiana 700031104

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com
Mr. Rene Adrian Chopin III	
License/Certificate Type - Number	Expiration Date
PE.0025174	09/30/2023
Status: Active	
<p>Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).</p> <p>LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.</p>	

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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:

David E. Boyd, PE (Minimum Qualifications - 2)

Project Assignment

Project Manager

Name of Firm with which associated



Years' experience with this Firm:

16

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 2004 /Civil Engineering

Active registration: Year first registered/discipline

2010, Professional Engineer, State of LA No. 35510

Other experience and qualifications relevant to the proposed project:

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

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

Mr. Boyd has worked on the following applicable projects:

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

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

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

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

St. John the Baptist Master Drainage Plan - *St. John the Baptist Parish, LA* - Civil Engineer performed hydrologic and hydraulic analyses of an open channel drainage network for the east bank of St. John the Baptist Parish using HEC-HMS and HEC-RAS unsteady flow model, ArcGIS, HEC-GeoHMS, and HEC-GeoRAS to evaluate the existing and proposed drainage network.

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

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

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

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

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

Maplewood Area Drainage Improvements - *Harvey, LA* - Project Engineer provided project engineering for the development of construction drawings and specifications for the installation of 9,100 linear feet of stormwater culverts, 33 junction boxes, 80 catch basins, and 3,500 square yards of paving. Hazard Mitigation Grant Program funds were awarded to Jefferson Parish after Hurricane Gustav, and the project would improve drainage in the Maplewood subdivision, which had historically flooded during intense rainfall events. Mr. Boyd provided more than 950 hours of service on the project.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 12/06/2018, the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. David Edward Boyd
7222 Sardonyx Street
New Orleans, LA 70124

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)	
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com	
Mr. David Edward Boyd		
License/Certificate Type - Number	Expiration Date	
PE.0035510	09/30/2022	
Status: Active		
<p>Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).</p> <p>LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.</p>		

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TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Timothy J. Koenig, PE (Minimum Qualifications - 3) <i>Associate Civil Engineer</i>
Project Assignment
Civil Engineer
Name of Firm with which associated

Years' experience with this Firm:
18
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2004 / Civil Engineering Bachelor of Science / 1998 / Microbiology
Active registration: Year first registered/discipline
2009 / Professional Engineer State of LA No. 35079
Other experience and qualifications relevant to the proposed project:
<p>Mr. Koenig is an Associate Civil Engineer at BKI with 18 years of experience. He holds a Bachelor of Science in Civil Engineering from the University of New Orleans. Mr. Koenig has provided professional consulting services to public and private clients throughout the Gulf South region for over 13 years. He has provided these services for a wide range of projects, serving as Project Manager or Project Engineer on numerous roadway, transportation, rail, and drainage projects. Most notably, MR. Koenig has been an integral part of Hurricane Katrina recovery at the Port of New Orleans.</p> <p><i>Mr. Koenig's applicable projects are listed on the following page.</i></p>

Mr. Koenig has worked on the following applicable projects:

St. James Parish East Bank Master Drainage Plan, Culvert Analysis, and Design Program - *St. James Parish, LA* - Provided civil engineering services for the preparation of the Master Drainage Plan to alleviate flooding in the existing subdivisions and agricultural lands through development of better outfalls. The study was performed utilizing LADOTD Hydraulic Software (HydrWin 2009) software to determine the potential of improving the existing culverts or the need for new outfalls. The Master Drainage Plan resulted in BKI's participation in an Eastbank-wide culvert analysis and design program partly funded by the LADOTD Statewide Flood Control Program and GOHSEP grants.

St. James - Ascension Master Drainage Plan / Flood Protection Project -*St. James and Ascension Parishes, LA*- Civil Engineer: Provided civil engineering services for St. James and Ascension Parishes flood protection projects which included developing levee alignments, conceptual pump station, floodgate, and pipeline crossing designs, and cost estimates.

St. James Parish Interior Drainage Improvements - *St. James Parish, LA* - Civil Engineer is providing review of design documents for an inventory of existing driveway drainage culverts including their size, type, and condition.

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

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

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

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

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

Wardline Road Drainage Improvements - *Hammond, LA* - Civil Engineer provided design and plan preparation services for drainage improvements that aimed to reduce or eliminate flooding in the Wardline Road area from a moderate (10-year frequency) rainfall event. BKI's services included surveys along Wardline Road, a hydraulic and hydrologic study, road design, storm drainage, and construction administration services.

Rosethorne Sewage Treatment Plant - *Jefferson Parish, LA* - Civil Engineer for a new 0.5 MGD average daily flow treatment facility to take the place of an existing Rosethorne WWTP in Lafitte, LA. BKI's design included all process equipment and controls, pumps, piping, and other items to construct a complete and functional WWTP including rehabilitation of the existing sewer lift station and a new effluent pump station.

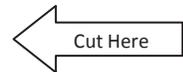


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Mr. Timothy James Koenig
4176 Canal Street
New Orleans, LA 70119

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)	
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com	
Mr. Timothy James Koenig		
License/Certificate Type - Number	Expiration Date	
PE.0035079	03/31/2022	
Status: Active		
<p>Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).</p> <p>LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.</p>		



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TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Rene A. Chopin, IV, PE (Minimum Qualifications - 3) <i>Civil Engineer</i>
Project Assignment
Civil Engineer / Hydraulics Engineer
Name of Firm with which associated

Years' experience with this Firm:
8
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2013 / Civil Engineering
Active registration: Year first registered/discipline
2009 / Professional Engineer State of LA No. 42349
Other experience and qualifications relevant to the proposed project:
<p>Mr. Chopin joined BKI full time in 2013 after serving as an intern for two years. He graduated from the University of New Orleans with a Bachelor of Science in Civil Engineering and is a Registered Professional Engineer in Louisiana. Mr. Chopin works in the Civil Department with a focus on Hydraulic and Hydrologic Engineering. His experience includes HEC-HMS, HEC-RAS, HEC-GIS, PLSWMM, PondPac, and HydrWin software. He has worked on various projects such as roadway and drainage improvement projects, master drainage plans, and harbor improvements including dredging. His responsibilities have included performing engineering calculations, site layout, plan and specification preparation, estimating project costs, and construction administration.</p> <p><i>Mr. Chopin's applicable projects are listed on the following page.</i></p>

Mr. Chopin has worked on the following applicable projects:

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

St. James - Ascension Master Drainage Plan / Flood Protection Project -*St. James and Ascension Parishes, LA*- Civil Engineer: Surveyed existing culverts in St. James Parish, analyzed data, and reassessed deficiencies to provide a suitable solution. Assisted in creating plan sheets of analyzed culverts to provide the Parish with a Master List. Created existing and proposed surface models in AutoCAD Civil 3D.

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

St. James Interior Drainage (Matherne, David, Woods Canal) – *St. James Parish, LA* – Reviewed and prepared final plans for the improvement of lateral ditches and culverts along LA 3125. Responsibilities included performing Rational Method calculations for sizing culverts and calculating quantities for ditch improvements and outfall armoring. Carried out Construction Administration responsibilities including preparing bid documents, tabulating bids, performing periodic site visits, and generating closeout documents.

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

West Shore Levees and Floodwalls -*St. Charles, St. John the Baptist, and St. James Parishes, LA*- Civil Intern/Engineer: Calculated quantities for access roads as well as creating levee cross-sections for a new multiparish hurricane protection levee project extending from St. Charles to Ascension Parish. A feasibility study evaluated several alternate alignments and pump station locations for the proposed levee system.

LA 23 Widening: Lapalco Blvd-Engineers Rd - *Jefferson/Plaquemines Parishes, LA* - Civil Engineer calculated the additional watershed with the widening of LA 23 and added drainage structures as needed to prevent flooding.

Gabriel Runoff Control Piping Relocation - *New Orleans, LA* - Civil Engineer created construction documents for relocating a trunk line adjacent to the levee.

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

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

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

Inland Rivers Marine Terminal Railroad - *Baton Rouge, LA* - Civil Engineer: determined the additional runoff generated by raising the railroad and made the necessary adjustments and improvements to existing drainage structures to prevent future flooding.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 12/06/2018, the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Rene Adrian Chopin IV
5005 Green Acres Court
Metairie, LA 70003

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS) 9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com	
	Mr. Rene Adrian Chopin IV	
License/Certificate Type - Number	Expiration Date	
PE.0042349	09/30/2022	
Status: Active		

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TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Andrew R. Jensen, PE (Minimum Qualifications - 1) <i>Civil Engineer</i>
Project Assignment
Civil Engineer
Name of Firm with which associated

Years' experience with this Firm:
8
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2014 / Civil Engineering
Active registration: Year first registered/discipline
2019 / Professional Engineer State of LA No. 43382
Other experience and qualifications relevant to the proposed project:
<p>Mr. Jensen joined the BKI Team in 2014 after earning his Bachelor of Science in Civil Engineering from the University of New Orleans. He has worked on various projects involving roadway and drainage and flood protection and has experience performing drainage calculations, providing plans and cost estimates, and providing construction administration. Mr. Jensen is proficient in AutoCAD Civil 3D, AutoTurn, and InRoads software.</p> <p><i>Mr. Jensen's applicable projects are listed on the following page.</i></p>

Mr. Jensen has worked on the following applicable projects:

St. James Parish Master Drainage Plan - *St. James Parish, LA* - Provided drainage calculations in the preparation of a Master Drainage Plan for the area in St. James Parish bounded by Hope Canal, the Mississippi River, Panama Canal/Bayou Conway, and Lake Maurepas. The goal of the study was to alleviate flooding in subdivisions and agricultural lands through development of improved outfalls. The Master Drainage Plan resulted in BKI's participation in an Eastbank-wide culvert analysis and design program partly funded by GOHSEP grants.

City of Gretna Downtown Drainage Improvements - *Gretna, LA* - Provided a technical design and constructability review for a layered green and grey stormwater infrastructure project within the city's downtown area. The project was part of FEMA's LASAFE program, which addresses community resiliency.

Lafitte Area Independent Levee District Tidal Levee Protection System - Pailet Basin, -*Jefferson Parish, LA*- Civil Engineer: Assisting in plans and specifications and cost estimates for a flood protection system for the town of Jean Lafitte. The project includes levees, floodwalls, and pump stations.

St James / Ascension Storm Surge Flood Protection Project -*St. James/Ascension Parishes, LA*- Civil Engineer: Assisted in the feasibility study and conceptual design of geometric layout of a flood protection system feasibility study including levees T-walls, pump stations. Created existing and proposed surface models in AutoCAD Civil 3D.

Upper Barataria Risk Reduction Project -*St. Charles & Lafourche Parishes, LA*- Civil Engineer: Assisted in the design, production of deliverables, cost estimating, and civil engineering for a Hurricane & Storm Damage Risk Reduction project protecting six parishes in Louisiana including earthen levees, floodwalls, and pump stations.

St. Charles Parish West Bank Hurricane Protection System - *St. Charles Parish, LA* - Civil Engineer: performed design tasks and provided construction administration for 5.5 miles of levee construction including two drainage pump stations as part of a project to reduce storm surge on the west bank of the parish.

FEMA Lower Ninth Ward Northwest Group B RR109 (FRC) Reynes Street Improvements -*New Orleans, LA*- Performed all civil engineering design services for urban full street reconstruction projects involving dozens of blocks at a construction cost of tens of millions of dollars. Pavement, drainage, water and sewer utilities are being replaced as part of the projects.

RR136: Plum Orchard Group C (FRC) - Performed all civil engineering design services for urban street full reconstruction projects involving 11 blocks at a construction cost of about 6 million dollars. Pavement, drainage, water and sewer utilities are being replaced as part of the projects.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 10/5/2021 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Andrew Robert Jensen
10 37th Street
Kenner, Louisiana 70065

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com
Mr. Andrew Robert Jensen	
License/Certificate Type - Number	Expiration Date
PE.0043382	09/30/2023
Status: Active	
<p>Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).</p> <p>LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.</p>	

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TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Renee Poole, EI <i>Civil Engineer Intern</i>
Project Assignment
Civil Engineer Intern
Name of Firm with which associated

Years' experience with this Firm:
2
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2019 / Civil and Environmental Engineering
Active registration: Year first registered/discipline
2019 / Engineering Intern, State of LA No. 34097
Other experience and qualifications relevant to the proposed project:
<p>Ms. Poole is a Civil and Environmental Engineering graduate of the University of New Orleans (UNO). Ms. Poole's firm experience includes both hydrologic and hydraulic analyses, drainage design, and construction oversight. Her previous experience includes work as an engineering tutor to UNO students and as an engineering intern at BLD Services in Kenner, where she worked for three years assisting project managers and engineers on several city sewer, drainage, water maintenance, and capital improvement projects. She serves on the Board of Directors of the American Concrete Institute, Louisiana Chapter, and is a member of the American Public Works Association.</p> <p><i>Ms. Poole's applicable projects are listed on the following page.</i></p>

Ms. Poole has worked on the following applicable projects:

St. James Parish Master Drainage Plan and Design Program - *St. James Parish, LA* - Reviewed and assisted in preparing final plans for the improvement of lateral ditches and culverts along LA 3125. Assisted in performing Rational Method calculations for sizing culverts and calculating quantities for ditch improvements and outfall armoring. Aided with Construction Administration responsibilities including preparing bid documents, tabulating bids, performing periodic site visits, and generating closeout documents.

Rural Bridge Replacement Initiative projects - *Multiple Parishes, LA* - Completed the hydrologic, hydraulic and scour analyses for this project. Found the drainage area, hydrologic length, slope, and soil classification to calculate the existing channel's flow. Cut cross sections of the channel. Created a HEC-RAS model to analyze the existing structure and channel. Worked with the roadway team to determine a suitable low chord for the proposed bridge. Created a new HEC-RAS model for the proposed bridge and new geometry of the channel. Used the HEC-RAS model to analyze the proposed scour. Completed the criteria and hydraulic reports for this project.

St. James Parish Interior Drainage Improvements - Driveway Culverts - *St. James Parish, LA* - Creating design documents for an inventory of existing driveway drainage culverts including their size, type, and condition. Analyzed existing culverts capacities and made recommendations for improvements.

Reynes Street Improvements - *New Orleans, LA* - Reviewed contractor's project and product submittals and assisted in the preparation of plans, specifications, and detailed quality estimates for a full roadway reconstruction project (Reynes Street from North Claiborne Avenue to Florida Avenue) including new roadway pavement, sidewalks, ADA ramps, driveways, drainage infrastructure, gravity sewer, and water utilities.

Upper Barataria Risk Reduction Project Phase 1 - *Various Parishes*- Performed calculations to determine the required riprap design weight, depth and layout for the proposed discharge basin.

St. Charles Westbank Levee - *St. Charles Parish, LA*- Performed hydraulic calculations to determine the size of the weir in the proposed channel improvements for the Magnolia Ridge Levee.

RR136 Plum Orchard Group C (FRC): - *New Orleans, LA* - Completed a full drainage analysis including all necessary calculations, assumptions and reports. Created the roadway profiles to meet city standards and tie-in to the existing locations at multiple intersections and driveways. Created the complete sub-surface network analysis, for water, sewer, and drainage. Worked with the city to determine the final scope of the project. Also, put together the project specifications, cost estimate, and scoping report. Helped to complete the preliminary design.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 10/5/2021 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Ms. Renee Poole
4176 Canal St
New Orleans, Louisiana 70119

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com
Ms. Renee Poole	
License/Certificate Type - Number	Expiration Date
EI.0034097	09/30/2023
Status: Active	
<p>Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).</p> <p>LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.</p>	

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TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Daniel S. Caluda <i>Mechanical Designer</i>
Project Assignment
Mechanical Designer
Name of Firm with which associated

Years' experience with this Firm:
34
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 1981 / Petroleum Engineering
Active registration: Year first registered/discipline
N/A
Other experience and qualifications relevant to the proposed project:
<p>Mr. Caluda is an Associate with major technical responsibility in the Mechanical Engineering Division of BKI. He has 39 years of experience and holds a Bachelor of Science in Petroleum Engineering from Louisiana State University in Baton Rouge. Mr. Caluda's professional experience includes drainage, water and sewer utilities, HVAC, plumbing, sprinklers, and mechanical/industrial systems. Mr. Caluda has provided mechanical design services for dozens of pump stations in the Greater New Orleans region and has overseen design and construction of two of the largest pump stations in the world. His design and construction experience has also led to providing supervision for pump station operations as well as training of pump station operators.</p> <p><i>Mr. Caluda's applicable projects are listed on the following page.</i></p>

Mr. Caluda has worked on the following applicable projects:

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

Taft Park Drainage Pumping Station - *Metairie, LA* - Provided mechanical design for the drainage pump station, including distribution, controls, and a standby generator. This was a Hazard Mitigation Grant Program funded project.

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

Cousins Pump Station Complex Floodwalls and P.S. Expansion - *Jefferson Parish, LA* - Mechanical Designer: Mr. Caluda provided mechanical design for a 2,000 CFS addition to the Cousins Pump Station in Jefferson Parish. The station expansion includes two horizontal pumps and concrete discharge tubes.

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

Drainage Pump Station Nos. 6 and 7 Refurbishment - *St. Bernard Parish, LA* - Provided mechanical design for the repair of vertical pumps at Lake Borgne Basin Levee District Pump Station 6 and rehabilitating and recoating the discharge piping at Pump Stations 6 and 7.

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

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

Rosethorne Sewage Treatment Plant - *Jefferson Parish, LA* - Mechanical Designer for a new 0.5 MGD average daily flow treatment facility to take the place of an existing Rosethorne WWTP in Lafitte, LA. BKI's design included all process equipment and controls, pumps, piping, and other items to construct a complete and functional WWTP including rehabilitation of the existing sewer lift station and a new effluent pump station.

Rehabilitation of the Fifth Street Water Tower - *Gretna, LA* - Provided mechanical design for the rehabilitation of the existing 250,000 gallon water tank located on 5th Street.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Robert P. Furlow, PE <i>Mechanical Engineer</i>
Project Assignment
Mechanical Engineer
Name of Firm with which associated

Years' experience with this Firm:
1
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 1981 / Petroleum Engineering
Active registration: Year first registered/discipline
2011 / Professional Engineer, State of LA No. 35966
Other experience and qualifications relevant to the proposed project:
Mr. Furlow was hired by BKI in 2021 and has 11 years prior experience as a Professional Mechanical and Hydraulic Engineer with work experience in the oil, gas and petrochemical industries as well as extensive experience in piping and facility design which includes pipe stress analysis and hydraulics, pipeline engineering, and project management. Mr. Furlow's experience also includes developing piping, equipment & construction specifications, P&ID development, pump and compressor sizing, equipment selection and procurement, pressure vessel analysis, process balancing; fire protection and drafting & design. He is experienced with industry standards ASME B31.3, B31.4 & B31.8.
Mr Furlow's skills and knowledge include:
<ul style="list-style-type: none"> • CAESAR II • ASME, API, NFPA Codes & Standards • PVElite • PIPE-FLO • AutoCAD • Pipe Flow Expert • Pipeline Toolbox • NozzlePRO • Pipephase
<i>Mr. Furlow's applicable projects are listed on the following page.</i>

Mr. Furlow has worked on the following applicable projects:

25th Street Canal Drainage Improvements Project (Resiliency District) - *Gretna, LA* - Mechanical engineering and design for new pump station with capacity of 350 cfs to provide drainage of residential area in Jefferson Parish.

Ascension Storm Surge Protection - *Ascension Parish, LA* - Provided pump storm modification plans, specifications, and cost estimates for increasing the capacity of the Sorrento Pump Station. In addition, provided hydraulic design, plans, specifications, and cost estimates for 5 floodgates along the levee alignment. Provided construction administration and closeout services for this project.

Cheniere Water Storage Tank - *Grand Isle, LA* - Mechanical engineer for a 1,000,000 gallon ground storage tank and duplex pump station at the water department's Cheniere facility in Grand Isle.

Rosethorne Sewage Treatment Plant - *Jefferson Parish, LA* - Construction administrator and mechanical engineer for a new 0.5 MGD wastewater treatment plant in Jefferson Parish, LA. The new plant included an influent lift station, headworks, sludge facility, and a disinfection/effluent pump station.

Marrero WWTP Headworks - *Marrero, LA* - Mechanical Engineer consultant for RFI's related to the construction of the wastewater treatment plant.

New Anna Street Sewer Lift Station - *Slidell, LA* - Construction administrator for the new 350 GPM sewer lift station in St. Tammany Parish.

Upgrades to Cardinal Dr. Sewer Lift Station - *Slidell, LA* - Construction administrator for demolition of pump system and installation of two (2) new 140 GPM pumps and appurtenances in St. Tammany Parish.

Pre-BKI Experience

Senior Mechanical Engineer, Keystone Engineering – Covington, LA Oct. 2018 – March. 2020

Lead design mechanical engineer for multiple systems on large offshore oil & gas platform including Flowline, Heat Media, Seawater Cooling Media, and Gas Sales. Involvement included P&ID development, hydraulic analysis and equipment RFQ management. Lead pipe stress engineer for offshore oil & gas platform.

Senior Pipeline Engineer/Project Manager, T. Baker Smith – Covington, LA April 2016 – Sep. 2018

Led effort in developing engineering consulting group for oil & gas clientele. Performed engineering design and project management for pipeline systems and facilities such as terminals, pipelines, compressor/pump, pigging and meter stations.

Chevron Pipeline Company (CPL) – Covington, LA June 2014 – April 2016

- As Field Engineer/Project Manager provided technical support to operations. Responsibilities included calculations, documentation and recommendations such as relief valve settings, field connection, MOP studies, hydraulic analysis, pipeline capacity evaluations, design and installation of new connections, and technical input to Operations Manual as requested. Functioned as a technical consultant for field teams regarding interpretation of various codes, laws and regulations. In addition, provided technical consultation and project development services to the Business Development team for business opportunities. Provided facility and pipeline project management services for CPL operated systems on projects typically less than \$5MM. This included project scoping, cost estimating, evaluation of alternatives, hydraulic analysis, procurement, environmental and permit coordination, contracting and construction management and ensuring that vital records were kept current. Projects included producing water/Methanol handling at Chevron crude oil terminal. Terminal did not have a means to handle off spec crude from offshore facilities; increasing flow of y-grade through CPL pipelines (included tying 2 existing pipelines, de-bottlenecking and modification of the pump station; and the Marine Vapor Recovery Unit upgrade at CPL Crude oil terminal.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 12/06/2018, the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Robert P. Furlow
134 Tchefuncte Parc Drive
Madisonville, LA 70447

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com
Mr. Robert P. Furlow	
License/Certificate Type - Number	Expiration Date
PE.0035966	03/31/2023
Status: Active	

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Galen Light, GISP, PMP <i>Lead GIS Analyst</i>
Project Assignment
GIS
Name of Firm with which associated

Years' experience with this Firm:
16
Education: Degree(s)/Year/Specialization:
Master of Geographic Information Systems / 2018 Bachelor of Science / 2015 / Bachelor of General Studies / Concentration Applied Sciences Associate of Science / 1995 / Computer-Aided Drafting and Design
Active registration: Year first registered/discipline
Geographic Information Systems (GIS) Professional No. 160730
Other experience and qualifications relevant to the proposed project:
<p>Mr. Light joined BKI's Shreveport office in 2006 as a GIS/CAD Drafter. He holds a Master of Geographic Information Systems (GIS), a Bachelor in General Studies with a Concentration in Applied Sciences, an Associate in Computer Aided Drafting/Design (CAD), and is currently pursuing a Master of Industrial Engineering. Mr. Light has over 24 years of professional drafting and design experience in addition to 6 years military service. Mr. Light is proficient in the use of Excel, Access, WaterGems, AutoCAD, and ESRI GIS software. Prior to joining BKI, he was employed as a Designer Draftsman for Gordon Inc. in Bossier City, LA. He also served the Lead Design Drafter for Kellogg, Brown & Root in Baghdad, Iraq where he provided support for ongoing military construction projects. Prior to that he was the Lead Mechanical Designer Draftsman for Bethlehem Steel in Sparrows point Maryland. Mr. Light is also an ESRI Certified GIS Desktop Associate, is a certified NASSCO PACP/ LACP & MACP user, and is a certified Six Sigma Green Belt.</p> <p><i>Mr. Light's applicable projects are listed on the following page.</i></p>

Mr. Light has worked on the following applicable projects:

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

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

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

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

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

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

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Stephen Pederson <i>GIS Analyst</i>
Project Assignment
GIS
Name of Firm with which associated

Years' experience with this Firm:
7
Education: Degree(s)/Year/Specialization:
Master of Science / 2022 (projected graduation date)/ Transportation Planning Bachelor of Science / 2013 / GIS
Active registration: Year first registered/discipline
Other experience and qualifications relevant to the proposed project:
Mr. Pederson joined BKI in 2015 as an Engineering Technician in the Shreveport office, and rejoined that office in November 2019 as a GIS Analyst with expertise in spatial analysis and municipal asset management including sewer/water/drainage and transportation and roadway/traffic projects. He has extensive experience in using GIS to develop information products, maps, presentations, and reports. He has a Bachelor of Science in Geographic Information Science from Louisiana Tech University in Ruston and is proficient in MS Access and Office Products, and ArcGIS by ESRI software
<i>Mr. Pederson's applicable projects are listed on the following page.</i>

Mr. Pederson has worked on the following applicable projects:

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

Sanitary Sewer Evaluation Survey & Wastewater Master Plan Consent Decree Negotiations Assistance - *Shreveport, LA* - Database Manager/GIS Analyst – Responsible for SSA Phase 2 and 3 Rehab Recommendations and Sewer Assessment based on PACP guidelines and in accordance with the EPA Consent Decree. Charged with modifying the existing GIS database using civil designer and contractor - developed record documents to update all sanitary sewer assets in a timely manner. To date, approximately 750,000 linear feet and 2,500 manholes in Phase 1 construction projects have been updated. This data is converted from raster and vector entities to GIS features to ensure accuracy of the product.

NLCOG 2045 Metropolitan Transportation Plan Update - *Caddo, Bossier, DeSoto and Webster Parishes* - Northwest Louisiana - GIS technician responsible for development of the Travel Demand Model (TDM) and Traffic Analysis Zones (TAZ) based on geographic and physical constraints and travel patterns for Webster Parish, and the optimization of GIS input data.

City of Shreveport Master Service Agreement for Miscellaneous Sewer Design Projects - *Shreveport, LA* - GIS for preliminary design reports, survey, utility coordination, environmental assessments, and final design of each of the task orders as a part of the remediation measures plan for the approximately 1,000,000 LF of gravity sewer to be rehabbed in Phase 1.

Shreveport Water Model - *Shreveport, LA* - GIS Technician provided GIS analysis for an assessment of the potable water distribution system, a review of previous engineering studies for the City, and recommendations for near-term, short-term and long-term protective measures to the distribution system. The project includes data collection, demand analysis and determination, existing conditions model, assessment of improvements, population projections, and implementation recommendations.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Thomas B. Litchliter <i>Senior CADD Technician</i>
Project Assignment
CADD
Name of Firm with which associated

Years' experience with this Firm:
39
Education: Degree(s)/Year/Specialization:
Autocad Certification / 1983
Active registration: Year first registered/discipline
Other experience and qualifications relevant to the proposed project:
Mr. Litchliter is a CADD Drafter with Burk-Kleinpeter, Inc. He has provided public and private clients with professional plans, specs and drawings for hydraulic structures, floodwalls, drainage systems, mechanical systems and other structural design projects. Mr. Litchliter has 39 years of experience and holds a certificate in AutoCAD from Pearl River Junior College. <i>Mr. Litchliter's applicable projects are listed on the following page.</i>

Mr. Litchliter has worked on the following applicable projects:

New Orleans Corps ID/IQ General Design - *New Orleans, LA* - Drawings associated with design for numerous task orders awarded by the U.S. Army Corps of Engineers, New Orleans District, to provide general design support services to the District. Projects assigned to Mr. Litchliter included: Plans and Specifications for Installation of Two Emergency Generators at S & WB Drainage Pump Station No. 6 in the Vicinity of New Orleans, LA; Feasibility Study for floodproofing all 22 S & WB drainage pump stations from flood and wind damage in New Orleans; and Preparation of Plans and Specifications for Construction of Westbank and Vicinity, New Orleans, LA Hurricane Protection Project, East and West of Algiers Canal, Fronting Protection, New Orleans, S & WB Pump Station No. 13, New Orleans S & WB Pump Station No. 11, Belle Chasse Pump Station No. 1, Belle Chasse Pump Station No. 2, and Planters Pump Station.

Orleans Levee Board Hurricane Recovery - *New Orleans, LA* - CAD Drafter - Drawings associated with the preliminary engineering assessments of damage to the Lakefront Airport, Southshore Marina, Orleans Marina, Lakeshore Drive Seawall and the Franklin Avenue Maintenance Facility following Hurricane Katrina and Hurricane Rita. BKI also prepared preliminary cost estimates and made recommendations as to repairs to restore each of the affected sites to normal operations.

Destrahan Eastbank Drainage Improvements - *St Charles Parish* - CAD Drafter - Drawings for a 500-cfs addition to Destrahan Drainage Pump Station No. 2 and 54-cfs addition to Dianne Place Drainage Pump Station on East Bank of St Charles Parish.

Harvey Canal Flood Walls - *Harvey, LA* - CAD Drafter - Design drawings for the installation of floodwalls, gates and earthen levee improvements, including utility relocation and extension of pump station discharge tubes and backflow valves through the new floodwall structure.

Slidell Drainage - *Slidell, LA* - CAD Drafter - Drawings for added pump, relocated 'maintenance' pump, improved pump and discharge piping. Also, drawings of a new structure to house maintenance pump.

Lakewood Drainage - *St. Charles Parish, LA* - CAD Drafter - Drawings for a 56-cfs addition to Lakewood Drainage Pump Station DW4A and for a 41-cfs addition to Lakewood Drainage Pump Station DW4 on the West Bank of St. Charles Parish.

Low Retention Pond - *St. Tammany Parish* - CAD Drafter - Design drawings for storm water detention pond, three-pump drainage pumping station and associated outfall piping with a capacity of 476 million gallons.

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>East Jefferson Flood Reduction Study & Master Drainage Plan Update</p> <p align="center"><i>Jefferson Parish, LA</i></p> <p align="center">Mark Drewes</p> <p>1221 Elmwood Park Blvd Jdfferson, LA 70123 (504)736-6494</p>	<p>Burk-Kleinpeter, Inc. was selected by Jefferson Parish to analyze the drainage in a 30,000-acre urban area on the east bank of the Mississippi River. The study area was located within a leveed system entirely below sea level and has six outfall pumping stations. BKI's staff researched computer software to find a program capable of analyzing this type of interconnected drainage network and performing the computations on a desktop PC. The UNET software, developed as an enhancement of the HEC-2 software, was used for the hydraulic analysis, and HEC-1 hydrology software was used for the hydrologic analysis. The hydraulic model included 64 separate channel reaches. Each channel was interconnected, and the model incorporated over-bank storage areas to accommodate storm surges that produced water levels above the top bank of the channels. The basin was analyzed for 10-, 50-, and 100-year design storms for the existing conditions and for future improvements.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
1995	\$650,000 (Fee)	\$450,000 (Fee)

TEC Professional Services Questionnaire

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Marvin Braud Pump Station Watershed Study</p> <p><i>Ascension Parish, LA</i></p> <p>Dempsey Lambert</p> <p>Ascension Parish DPW 42077 Churchpoint Rd. Gonzoles, LA, 70737 (225)715-0680</p>	<p>Burk-Kleinpeter, Inc., was selected to evaluate the capacity of the existing Marvin Braud Pump Station and to recommend improvements. The existing pump station was designed to pump for a 5-Year Storm Event. Ascension Parish, and more specifically the East Bank of the Parish, had sustained rapid growth for many years after the initial construction. During the rainfall event generated by Hurricane Rita in September 2005, the five 1,000 CFS pumps were not able to keep pace with the stormwater flows reaching the station located in the vicinity of Sorrento, LA. The project included performing a complete hydrologic (HEC-HMS) and unsteady state hydraulic model (HEC-RAS) study of the basin to determine existing and future runoff based on existing and projected land usages on the East Bank of Ascension Parish. This model was calibrated to the Hurricane Rita event using stream gauges throughout the basin. The model was used to keep pace with the rapid development taking place. The HEC-HMS and HEC-RAS software was utilized to perform this model study by BKI with the resulting recommendation to add two 1,000 CFS pumps to meet the existing and future demands based upon a 10-Year Storm Event. The results of the model were used to create inundation shapefiles comparing the benefits of the recommendations. These inundation shapefiles were created using ESRI's ArcGis and Hec Geo-RAS to display inundation areas and depths. BKI was also selected by the District to develop the construction documents as well as perform construction administration, and resident inspection. The work was done in two phases, first a hurricane rated metal building was added. The next phase increased the station capacity by the 2000 CFS required for a 10 year storm event. The existing station fuel tanks were relocated and the area was excavated to make space for the installation of two new pump bays. Once the station footprint was expanded BKI designed the structural, mechanical, electrical and instrumentation to increase the station capacity.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
09/2007	\$81,008 (Fee)	\$81,008 (Fee)

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Belle Chasse Master Drainage Plan</p> <p><i>Plaquemines Parish, LA</i></p> <p>Ken Dugas Plaquemines Parish Government 333 F. Edward Hebert Blvd. Building 100 Belle Chasse, LA 70037</p>	<p>Burk-Kleinpeter, Inc. was selected by Plaquemines Parish Government to prepare a Master Drainage Plan for the area bounded by the Mississippi River, Orleans Parish, the Gulf Intercoastal Waterway, and the Walker Road Canal. The goal of the study is to alleviate flooding in the existing subdivisions and agricultural lands through development of better canal networks and a new pumping station. BKI reviewed the existing land use and projected land use to develop HEC-HMS and HEC-RAS models to simulate the existing drainage conditions and future drainage conditions based upon the existing drainage infrastructure. BKI also developed future condition models to recommend drainage infrastructure improvements. The study was performed utilizing the latest HEC-GeoHMS and HEC-GeoRAS modeling software in conjunction with the latest ArcGIS software and the latest available LIDAR imagery to develop the HEC-HMS and HEC-RAS models of the existing drainage system. Once the existing conditions models were created, BKI modified the models for future land use and drainage conditions. As part of the Master Drainage Plan, the potential of improving the existing canals or the need for a new outfall pump station will be evaluated, construction cost estimated, and individual projects prioritized. The Master Drainage Plan will be the basis for infrastructure programming and guidance for residential and commercial developments.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
08/2013	\$734,396 (Fee)	\$734,396 (Fee)

TEC Professional Services Questionnaire

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p align="center">St. James Parish Master Drainage Plan</p> <p align="center"><i>St. James Parish, LA</i></p> <p align="center">Rick Webre St. James Parish Government Department of Public Works P.O. Box 106 Convent, LA 70723 (225)562-2293</p>	<p>Burk-Kleinpeter, Inc. was selected by St. James Parish and the Pontchartrain Levee District to prepare a Master Drainage Plan for the area bounded by Hope Canal, the Mississippi River, Panama Canal/Bayou Conway, and Lake Maurepas. The goal of the study was to alleviate flooding in the existing subdivisions and agricultural lands through development of better outfalls. The existing drainage flowed overland through the wetlands to Lake Maurepas. The only existing outfalls in the study area were the Parish Canal, Pipeline Canal, Bayou Des Acadiens, and Blind River. The study was performed using HEC-HMS and HEC-RAS modeling software to determine the potential of improving the existing canals or the need for a new outfall. This phase of the study determined existing drainage conditions, created an existing conditions model, and identified drainage and flooding problem areas. The Master Drainage Plan included detailed culvert analysis across the parish. Through this effort, St. James Parish was awarded grant funding to replace undersized and damaged culverts both in St. James Parish and Louisiana Department of Transportation and Development (LADOTD) right of ways. Grant awards totaling \$4.5 million were from the Governor's Office of Homeland Security & Emergency Management (GOHSEP) and the Gulf of Mexico Energy Security Act (GOMESA); LADOTD funds totaled \$1.25 million. These culvert improvement programs will route runoff to the parish outfalls in a more efficient manner, reducing the repetitive flooding in St. James Parish</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing	\$2,066,740	\$470,000 (Fee)

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Update Louis Armstrong New Orleans International Airport (LANOIA) Master Drainage Plan</p> <p align="center"><i>Kenner, LA</i></p> <p>Don Mauras New Orleans International Airport P.O. Box 20007 New Orleans, LA (504)464-2650</p>	<p>Burk-Kleinpeter, Inc. was tasked with updating the Louis Armstrong New Orleans International Airport's 1992 Master Drainage Plan, as the airport has since seen many changes to its facility. Expansive paving operations increased rainfall runoff, impacting the airport drainage system. In addition, Jefferson Parish has also expanded further increased its own rainfall runoff. To evaluate the increase in airport rainfall runoff, BKI updated the U.S. Army Corps of Engineers' (USACE) HEC-HMS (Hydrologic Modeling Software) Model of Jefferson Parish East Bank. BKI completed an inventory of the airport's existing drainage system then incorporated the data into the USACE's HEC-RAS (River Analysis Software) Unsteady State Model of Jefferson Parish East Bank. This demonstrated the drainage system's existing conditions and current flooding from which drainage improvements could be modeled and recommended to alleviate this flooding. Once the LANOIA existing conditions and improvement models were created and calibrated, future condition models were created based on the airport's Strategic Growth Plan. Future drainage improvements were modeled and recommendations, including cost estimates, were created to alleviate any potential flooding. Finally, BKI created a Comprehensive Drainage Manual per FAA regulations and standard practices. The manual enabled airport facility engineers to evaluate localized drainage conditions or problems, then offer techniques to properly mitigate these issues.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
08/2010 (Actual)	\$684,338 (Fee)	\$577,675 (Fee)

State of Louisiana

TEC Professional Services Questionnaire

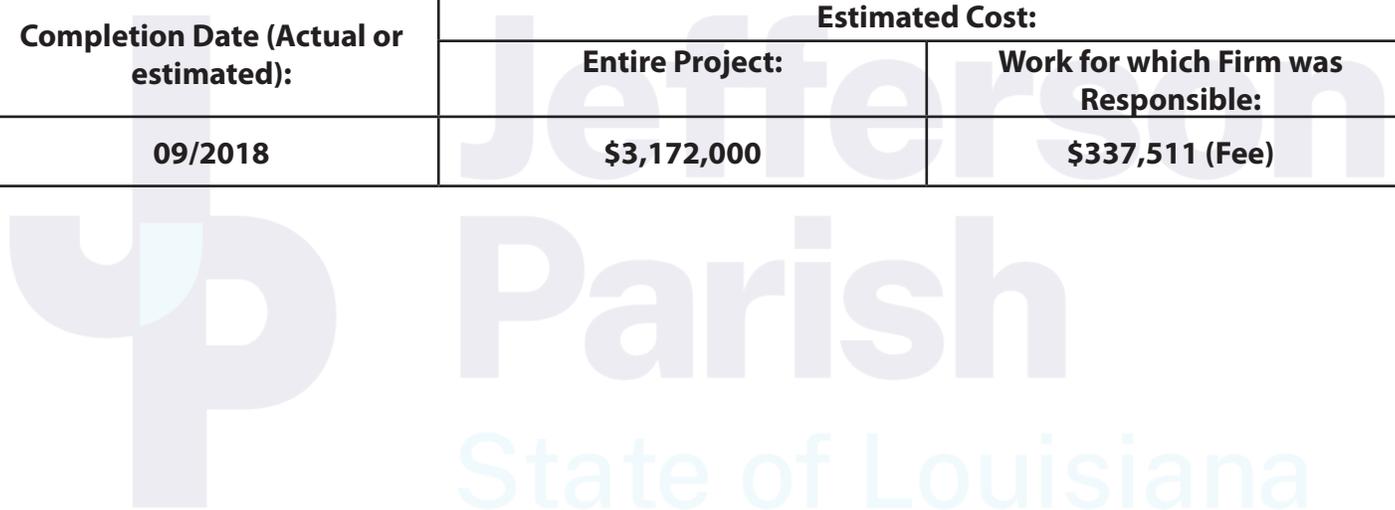
PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p align="center">St. John the Baptist Master Drainage Plan</p> <p align="center"><i>LaPlace, LA</i></p> <p align="center">Senneca Boudreaux Ponchartrain Levee District 2069 Railroad Ave Lutcher, LA 7007 (225) 869-9721</p>	<p>Burk-Kleinpeter, Inc. was selected by the Pontchartrain Levee District and St. John the Baptist Parish to prepare a Master Drainage Plan for the area bounded by the Upper Guide Levee of the Bonnet Carré Spillway, Lake Pontchartrain, US Highway 51, and the Mississippi River. St. John the Baptist Parish is comprised of eight communities and is bisected by the Mississippi River. The west bank of the river is primarily agricultural, while the east bank is heavily industrial. A large percentage of the parish consists of open water or wetlands. The goal of the study was to alleviate flooding the existing subdivisions through development of better outfalls. The existing drainage flows overland through the wetlands to Lake Pontchartrain. The only existing outfalls in the study area are Prescott Canal and Woodland Canal. The study was performed utilizing HEC-HMS and HEC-RAS modeling software to determine the potential of improving the existing canals or the need for a new outfall.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
12/2011	\$284,690 (Fee)	\$284,690 (Fee)
PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p align="center">St. Charles Parish Westbank Drainage Analysis</p> <p align="center">St. Charles Parish, LA</p> <p align="center">Sam Scholle St. Charles Parish P.O. Box 705 Luling, LA 70070 (985)783-5102</p>	<p>Burk-Kleinpeter, Inc. was tasked with the development of a hydraulic model for the West Bank of St. Charles Parish for the purposes of determining interior drainage improvements and new drainage pumping station capacities as the result or the implementation of a new levee system. In addition, this model was used as part of the permitting requirements for the levee's impact on local drainage. BKI utilized HEC-HMS, HEC-RAS, and ARC-GIS 32 to create the model. Results of the model included the development of a detention pond, channel conveyance sizes, 3 new drainage pumping stations, and other interior drainage improvements. The final report on the modeling effort was reviewed and approved by the United States Army Corps of Engineers, New Orleans District, and the Louisiana Department of Natural Resources. Ultimately the projected improvements were designed by Burk-Kleinpeter, Inc and have either been constructed or are currently under construction.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
08/2010 (Actual)	\$50,000,000	\$300,000 (Study Fee) \$9,000,000 (Design Fee)

TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Bayou Liberty Watershed Studies</p> <p><i>St. Tammany Parish, LA</i></p> <p>Jay Watson</p> <p>St. Tammany Parish Government P. O. Box. 628 Covington, LA 70434 (985)646-4270</p>	<p>Burk-Kleinpeter, Inc., (BKI), was contracted by St. Tammany Parish to document the existing drainage conditions in the Bayou Liberty Watershed and to propose targeted improvement projects to alleviate the flooding conditions. The study consisted of developing a United States Army Corps of Engineers (U.S.A.C.E.) hydrologic model (HEC HMS) to determine the runoffs generated from 2 year through 500 year Soil Conservation Service (S.C.S.) storm events within the Bayou Liberty Watershed. Once these flows were determined, a U.S.A.C.E. steady state hydraulic model (HEC-RAS) was created to determine the water surface elevations generated from the aforementioned flows. The hydraulic model was then calibrated using regression equations, previous flood insurance studies, and historical data. After the models were calibrated, various detention pond pairings were modeled to determine the most effective detention pond locations.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
10/2016 (Actual)	\$208,801 (Fee)	\$208,801 (Fee)
PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>25th Street Canal Drainage Improvements</p> <p><i>Gretna, LA</i></p> <p>Amelia Pellegrin City of Gretna 740 2nd St Gretna, LA 70053 (504)363-1568</p>	<p>The 25th Street Canal Neighborhood in Gretna, Louisiana experiences the worst repetitive flood claims in the State of Louisiana. The neighborhood flooding occurs when the Heebe Canal backflows into the 25th Street Drainage Canal and overtops its banks. Using a combination of La. State Capital Outlay funds, CDBG funds and FEMA Flood Mitigation Grant Dollars, the City of Gretna awarded BKI the Design, Construction Administration and Resident Inspection Services on the project. The estimated construction costs is \$13,970,000. The components of the project consist of both Green Infrastructure and Grey Infrastructure. Currently, the neighborhood is a Gravity Drainage System using both the 25th Street Canal and several outfall pipes into the Heebe Canal. After performing Hydraulic Modeling using the United States Army Corps of Engineers Software (HEC RAS), it was determined that a 350 cubic feet per second pump station would be built at the confluence of the 25th Street and Heebe Canals. In addition, the gravity drainage system to the Heebe Canal would be manifolded to route all the runoff to the Pump Station by placing flap gates on the existing outfall drainage pipes, reversing drainage pipe grades and installing Green Infrastructure to reduce runoff. Because the Eastern Bank of the Heebe Canal was failing, Over 2000 feet of sheet pile wall was installed to secure the bank and allow for flap gate installation. In order to manifold the drainage system and force the runoff to the pump station over 5400 feet of new drainage pipe was installed. Green Infrastructure techniques such as Gabion retaining walls, bioswales and riparian plantings were used along the upstream portions of the 25th Street Canal to not only lessen runoff and required pumping capacity but also to provide recreational aesthetic amenities for the neighborhood residents.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
11/2021 (Design) 05/2024 (Construction)	\$13,970,000 (Construction) \$1,225,720 (Fee)	\$922,345 (Fee)

TEC Professional Services Questionnaire

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Gretna Downtown Drainage Improvements</p> <p><i>Gretna, LA</i></p> <p>Amelia Pellegrin City of Gretna 740 2nd St Gretna, LA 70053 (504)363-1568</p>	<p>Burk-Kleinpeter, Inc. was selected by the City of Gretna for the design and engineering of a layered green and grey stormwater infrastructure project within the downtown area, roughly bounded by the Mississippi River, Governor Hall Street, the Westbank Expressway, and Dolhonde Street. To alleviate localized stormwater flooding issues, the project uses green infrastructure improvements along the public right-of-way to meet multiple demands: stormwater management; continued revitalization in the downtown area; and improved public right-of-way safety and accessibility. Though foremost a stormwater drainage project, the City recognized that incorporating green infrastructure including pervious pavement alongside conventional ("grey") drainage systems would allow for a more intelligent, creative investment of public dollars. BKI's extensive experience preparing master drainage plans and drainage studies relies on a combination of technical analyses using USACE's HEC-HMS and HEC-RAS modeling tools, along with ArcGIS 3D and Spatial Analyst Extensions.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
09/2018	\$3,172,000	\$337,511 (Fee)



TEC Professional Services Questionnaire

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

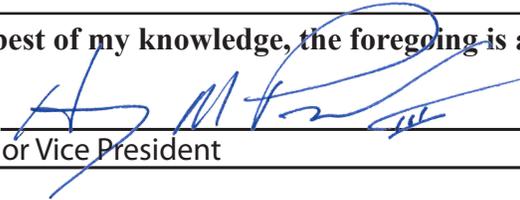
Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. N/A	N/A	N/A
2. N/A	N/A	N/A
3. N/A	N/A	N/A
4. N/A	N/A	N/A

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

BURK-KLEINPETER, INC., (BKI) is pleased to submit our Statement of Qualifications Parish of Jefferson in response to your public notice for **Jefferson Parish Engineering and Supplemental Services for a Drainage Master Plan (East Bank) Resolution no. 138896**. Founded in 1910, BKI has become one of the leading consulting firms in the southeast region providing professional engineering (civil, structural, mechanical, and electrical) planning, and environmental services to public and private clients throughout the southeastern US. The firm's engineering practice has consistently ranked among the top 20 firms in the southern states and is included regularly in the Top 500 Design Firms in the nation by *Engineering News Record*. This is a major accomplishment for a privately owned, New Orleans based firm. BKI's stability and depth of experience has provided numerous state and local public works authorities with consulting services for the successful completion of a wide range of projects. With a multidisciplinary platform of experience and abilities, BKI integrates the proven best practices from all of our disciplines with a keen eye toward meeting clients' big-picture needs in an ever-changing environment. **BKI has provided engineering services to Jefferson Parish for more than 70 years.** BKI, independently and in coordination with subconsultants, has over 50 years of experience performing a variety of engineering services for hydrologic and hydraulic modeling.

(See Additional Pages)

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

Signature:  Print Name: Henry M. Picard, III, PE, PLS
 Title: Senior Vice President Date: 03/21/2022

MINIMUM REQUIREMENTS FOR SELECTION

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.

- **Michael D. Chopin, PE**, BKI's President, is a principal in the firm and a licensed, registered professional engineer in the State of Louisiana.
- **Henry M. Picard, III, PE** is the regional manager and is a licensed, registered professional engineer in Louisiana with 31 years of experience at BKI and 40 years experience as an engineer.

2. The persons or firms under consideration shall have a professional in charge of the Project who is a licensed, registered professional engineer in the State of Louisiana with a minimum of five (5) years experience (Section K. "PROFESSIONAL IN CHARGE OF PROJECT:" of the Professional Services Questionnaire).

- **David Boyd, PE** is the Professional in Charge of Project and a licensed, registered professional engineer in Louisiana with 16 years of experience at BKI.

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

- **Timothy J. Koenig, PE** is a Civil Engineer and is a licensed, registered professional engineer in Louisiana with 17 years of experience at BKI.
- **Rene A. Chopin, IV, PE** is a Civil Engineer and is a licensed, registered professional engineer in Louisiana with 8 years of experience at BKI.
- **Andrew R. Jensen, PE** is a Civil Engineer and is a licensed, registered professional engineer in Louisiana with 7 years of experience at BKI.

EVALUATION CRITERIA

1. Professional Training and Experience in master drainage planning

BKI has provided **drainage master planning and resiliency planning** services on a wide range of projects including pump station redesigns, Master Drainage Plans, hydrologic and hydraulic modeling, and Drainage Studies. BKI has nurtured a working relationship with the Jefferson Parish Engineering Department as well as the various heads of the Public Works Department to provide detailed project scopes of work and to develop an engineered solution. If we are selected to provide engineering services for the **Professional Engineering and Supplemental Services for a Drainage Master Plan for the East Bank of Jefferson Parish**, we will use our previous experience and working relationships to provide a successful project from conceptual design through construction.

Key personnel, with their role on this project in italics, include:

Michael D. Chopin, PE - *Principal / QA/QC; LA Registered Professional Engineer*

- **30 years of experience in civil engineering planning, design, and construction of Jefferson Parish projects**
- Wide range of experience includes **drainage and resiliency projects** as Principal, Project Manager, or Project Engineer
- Extensive background related to **Hydrologic and Hydraulic modeling**.

Henry M. Picard, III, PE, PLS - *QA/QC; LA Registered Professional Engineer*

- **40 years of experience includes project management of public works projects**
- Wide range of experience as Principal, Project Manager, or Project Engineer includes many drainage projects and Master Drainage Plans.
- Extensive background related to **Hydrologic and Hydraulic modeling**

David E. Boyd, PE - *Professional Engineer, Project Management*

- **16 years of engineering experience in a variety of project types including Master Drainage Plans and pump stations**
- Has served as Project Manager or Project Engineer on a wide variety of projects including **master drainage plans** and watershed studies in St. Tammany, Ascension, Jefferson, Orleans, and St. James parishes
- Extensive background related to **Hydrologic and Hydraulic modeling**

2. Capacity for Timely Completion

The BKI Team's current workload and future project schedules are such that we can firmly commit our technical and support staff to meeting the requirements of this contract and fulfilling its assignments. BKI is committed to providing specialized, professional services as required under this contract. Throughout our history we have worked in close coordination with municipal, state, and federal project staff. We have chosen our team based on proven technical and managerial track records. We are committed to providing timely performance of work to our clients and can afford to give individualized attention to keeping you abreast of each phase of the project. Since BKI is centrally located with a branch office in **Metairie**, we are highly accessible and can provide support for infrastructure design and construction projects on short notice (24 hours) or within an agreed-upon time frame with engineering staff in emergency situations.

BKI's entire company staff (including branch offices) consists of 54 full-time employees.

TEC Professional Services Questionnaire Additional Page

ENGINEER	PLANNER	DESIGNER/ DRAFTER	ENGINEERING INTERN	CONSTRUCTION INSPECTOR	ADMINISTRATIVE
Civil: 12 ; Mechanical: 1 Structural: 4	3	8	4	9	14

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

3. Location of the principal office where work will be performed

Burk-Kleinpeter, Inc's **Metairie** office will be the principal office where work will be performed. All staff selected for work on this project are domiciled in Louisiana and live in the greater New Orleans area. Additional staff can be pulled from our other offices in Louisiana and Alabama should the need arise.

4. BKI Work which Resulted in Litigation Between Jefferson Parish and BKI

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

5. Prior successful completion of projects of the type and nature of the engineering services, as defined, for which the firm has provided verifiable resources

Over the years, BKI has provided engineering and design services for many drainage plans. Similar projects with verifiable references include:

PROJECT	DESCRIPTION	CLIENT REFERENCE
<i>Shreveport Master Drainage Plan</i>	Burk-Kleinpeter, Inc., (BKI), was selected to update the City of Shreveport's Drainage GIS Database (GIS) for the City's storm water (drainage) system. The database will be updated by rectifying, digitizing, and attributing the drainage system based on as-built plan sheets. The City's current GIS was initially created from quarter section maps (circa 1980s) and updated (circa 2000) by field survey crews with handheld GPS units to include above ground assets, mostly in the form of catch basin inlets. Many as-built plan sheets for drainage subdivisions and businesses have not been added to GIS. The intent of this project is to enter identified as-built plan sheets (and corresponding CAD files if available) and drawings to improve the functionality of the database, and to help evaluate the work needed to fill in the remaining gaps in the drainage system.	Matthew Redmon City of Shreveport 318-673-6049

State of Louisiana

TEC Professional Services Questionnaire Additional Page

PROJECT	DESCRIPTION	CLIENT REFERENCE
<p><i>St. Charles Parish West Bank Hurricane Protection System</i></p>	<p>Burk-Kleinpeter, Inc., was selected by St. Charles Parish to perform H&H Modeling, Permitting, Design, Construction Administration, and Resident Inspection of flood control structures, pump stations, and earthen levees for St. Charles Parish. This portion of the Parish is subject to heavy rainfall, tidal surges from the Gulf of Mexico, and hurricane flooding, often resulting in damages to industrial, commercial, residential, agricultural, and environmental facilities. As a result, St. Charles Parish is constructing flood control structures and earthen levees (the St. Charles Parish West Bank Hurricane Protection Levee, or "WBHPL") to reduce the damages caused by storm surges. The nine (9) mile levee alignment extends from the Sunset Levee District on the western flank to the Davis Pond Guide Levee to the east. Three (3) new drainage pumping stations and numerous tidal exchange structures are necessary to address both the interior drainage and the encapsulated wetlands ecosystem. The total construction cost of the project is in excess of \$150 million. The WBHPL is a phased project consisting of the following: The Magnolia Ridge Phase has a partially constructed earthen levee, including a first lift. A second lift, tidal interchange structures, and major 300 CFS diesel driven pumping station are currently in the construction stages. The recently constructed Willowridge Phase includes earthen levees, drainage canals, tidal exchange structures, concrete T-Walls, and a 300 CFS electric motor driven drainage pumping station. The Ellington Phase includes earthen levees, drainage canals, tidal exchange structures, concrete T-Walls at the existing Cousins and Kellogg Pumping Stations and across two (2) gas pipeline locations, and a 500 CFS electric motor driven drainage pumping station under construction. The design and preparation of contract documents for this project was done in accordance with USACE HSDRRS criteria. The WBHPL is part of the larger Upper Barataria Risk Reduction (UBRR) project which is now being studied by the USACE through funding received as part of the Bipartisan Budget Act of 2018 (BBA-18).</p>	<p align="center">Sam Scholle St. Charles Parish 15045 River Road Hahnville, LA 70057 Scholle, St. Charles Parish, (985) 783-5102</p>
<p><i>St. Charles Parish Sunset Pump Station Bar Screen - Canal Dredging Hydraulic Study</i></p>	<p>BKI was selected by St. Charles Parish to analyze the bayou Gauche drainage system. BKI created a HEC-HMS and HEC-RAS model of the drainage basin. Crawford Canal and Canal No.10 are the primary contributors to the Sunset Pump Station. BKI evaluated the existing station and prepared multiple alternatives including pump station and canal improvements. BKI recommended the addition of a 900 CFS pump station capacity and the installation of an automated bar screen with a 1770 CFS capacity for both existing and proposed flows.</p>	<p align="center">Sam Scholle St. Charles Parish 15045 River Road Hahnville, LA 70057 Scholle, St. Charles Parish, (985) 783-5102</p>
<p><i>Destrehan Eastbank Drainage Improvements</i></p>	<p>BKI designed a 500-cfs addition to Destrehan Drainage Pump Station No. 2 and a 125-cfs addition to Dianne Place Drainage Pump Station on the east bank of St. Charles Parish. Project included a review of previous master drainage plan recommendations and a new hydraulic computer model of the Ormond Subdivision pumped drainage system to determine the priority of interior improvements to the present system. Expansion of the Destrehan DPS No. 2 consisted of two 72 in. vertical pumps with natural gas-powered engines and right-angle gear units driving each pump. The pumps and related equipment are housed in a metal pumphouse building for protection from the weather. Each pump discharges through a 72 in. steel discharge pipe into the existing wetlands outside the present levee system.</p>	<p align="center">Sam Scholle St. Charles Parish 15045 River Road Hahnville, LA 70057 Scholle, St. Charles Parish, (985) 783-5102</p>

Conclusion

In the body of this Jefferson Parish Professional Services Questionnaire, BKI has provided the information requested in your Request for Qualifications. We feel we have the manpower, expertise, and equipment to exceed your expectations for **Professional Engineering and Supplemental Services for a Drainage Master Plan for the East Bank of Jefferson Parish Resolution no. 138896**

All South Consulting Engineers
TEC Questionnaire



TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 22-014 to provide Professional Engineering and Supplemental Services for a Drainage Master Plan for the East Bank of Jefferson Parish – Res. No. 138896

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



652 Papworth Avenue,
Metairie, Louisiana 70005

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:

John Teegarden, P.L.S.
Vice President, Survey Division Manager
504-322-2783
jteegarden@ascellc.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.

Engineering

Timothy P. Bonura, P.E.
Managing Partner
504-322-2783
tim@ascellc.com

Surveying

John Teegarden, P.L.S.
Vice President, Survey Division Manager
504-322-2783
jteegarden@ascellc.com

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

<u>8</u> Administrative	<u>1</u> Estimators	<u>1</u> Specification Writers
<u>0</u> Architects (Licensed)	<u>0</u> Geologists	<u>2</u> Structural Engineers
<u>0</u> Chemical Engineers	<u>0</u> Geotechnical Engineers	<u>2</u> Graduate Engineers
<u>9</u> Civil Engineers	<u>0</u> Interior Designers	<u>4</u> Project Managers
<u>10</u> Construction Inspectors	<u>0</u> Landscape Architects	<u>2</u> Clerical
<u>0</u> Ecologists	<u>1</u> Land Surveyor	<u>8</u> Grant/Funding Specialist
<u>0</u> Electrical Engineers	<u>0</u> Mechanical Engineers	<u>0</u> Sanitary Engineers
<u>5</u> Engineer Intern	<u>0</u> Environmental Engineers	
<u>1</u> Professional Land Surveyor		<u>65</u> TOTAL

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

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

TEC Professional Services Questionnaire

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

1.

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. N/A		
2.		
3.		

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

All South Consulting Engineers, LLC will provide **7** key personnel to this project as needed: 1 Professional Land Surveyor, 1 Land Surveyor Intern, 2 Survey Party Chiefs, and 3 Survey Assistants.

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:

John Teegarden, PLS
Vice President, Survey Division Manager

Project Assignment:

Senior Professional Land Surveyor, Survey Project Manager

Name of Firm with which associated:

All South Consulting Engineers, LLC

Years' experience with this Firm:

7

Education: Degree(s)/Year/Specialization:

International Correspondence School, Surveying and Mapping Course (2-year course completed)

Active registration: Year first registered/discipline:

1990/ Professional Land Surveyor/ Louisiana License No. 4635
1999/ Professional Land Surveyor/ Mississippi License No. 2782

Other experience and qualifications relevant to the proposed Project:

John S. Teegarden, PLS joined All South Consulting Engineers, LLC in 2014 as Vice President and Survey Division Manager. Mr. Teegarden has extensive experience in all aspects of land surveying including boundary, elevation, topographic, hydrographic, industrial, and construction projects. Over his 38-year career, he has participated in or directed surveys for a wide variety of clientele including local municipal and governmental agencies, state agencies, and federal agencies (including the U.S. Army Corps of Engineers). In his career, he has served as a Field Party Chief, Field Supervisor, CAD Technician, Project Manager, and Division Manager.

Mr. Teegarden's varied project experience includes high precision survey control, single and multibeam hydrographic surveys, large boundary surveys, surveys for public right-of-way taking, topographic route surveys, mapping of subsurface utilities based on the markings provided by a subsurface utility engineering firm, coastal restoration projects, laser scanning surveys and GPS project surveys, to name just a few. This experience includes over 20 years' experience in directing and performing hydrographic surveys. He has executed and/or supervised numerous hydrographic surveying projects throughout Coastal Louisiana.

Tudor and Tallulah Drainage Analysis River Ridge, Jefferson Parish, Louisiana

TEC Professional Services Questionnaire

Mr. Teegarden provided topographic survey services and collected field data for the Tudor and Tallulah drainage project. This work included picking up horizontal and vertical data in the drainage area, including locating the multiple subsurface utilities that could affect the project.

Alidore Drainage Study and Improvements *Lafourche Parish, Louisiana*

For this project, Mr. Teegarden obtained Topographic survey elevation data on culverts with pipe sizes and conditions, cross sections of ditches and canals for drainage study and design of a new pump station. Mr. Teegarden's role in this project included planning the survey, running GPS control, processing GPS and robotic total station files for import into AutoCAD Civil 3D. Party chief, ±71 Ac.

Taxiway Golf Drainage *Houma Terrebonne Airport Commission, Houma, Louisiana*

Mr. Teegarden provided topographic survey services for the Taxiway Golf drainage improvement project. This project includes about 4,700' of subsurface drainage along the taxiway. The job also included catch basins, grading, and other features. He supervised the field crew, including the location of many utility conflicts in the project area. Mr. Teegarden also processed the field data for use in project design.

Canal No. 10 Underground Utility Locations *Jefferson Parish, Louisiana*

Mr. Teegarden provided topographic survey services for the West Esplanade at Canal 10 Drainage Improvements project. His responsibilities included a topographic survey of canal crossing, location of underground utilities located by subsurface utility engineering contractor and added to an existing topographic survey.

Jean Lafitte Parkway Drainage *Chalmette, Louisiana*

Mr. Teegarden provided a topographic and boundary survey of Jean Lafitte Parkway from Judge Perez Drive to the Forty Arpent Canal for the design of much needed drainage improvements.

Geisenheimer Canal Topographic Survey *Jefferson Parish, Louisiana*

Mr. Teegarden led our survey teams in the preparation of a topographic survey that included the location of the Geisenheimer Canal Box Canal and the adjoining surface features from the north curb line of Airline Highway into the fairway of Metairie Country Club adjacent to Airline Highway.

Woodvine Ditch Topographic Survey *Jefferson Parish, Louisiana*

Mr. Teegarden is providing a topographic survey over the existing 54" RCP drain line followed the line from Nassau Drive south across the Metairie Country Club Golf course to its tie in point at Geisenheimer Canal. Improvements along that route were located along with trees, with size and species and topographic features on the golf course, that included ties, sand traps and the raised greens that fell in the route.

Loumor Outfall Ditch Topographic Survey *Jefferson Parish, Louisiana*

Mr. Teegarden and the All South survey staff provided a topographic survey of the route that follows the 78" X 122" RCAP along the western edge of Metairie Country Club Golf course, then southeasterly and finally south to Geisenheimer Canal just north of Airline Highway. Improvements along that route were located along with trees, with size and species and topographic features on the golf course, that included ties, sand traps and the raised greens that fell in the route.

Lake Cataouatche Pump Station Topographic Survey *Jefferson Parish, Louisiana*

Mr. Teegarden and his team prepared a topographic survey at the site of the current Lake Cataouatche pump station located on Churchill Farms. The survey area adjacent to the existing pump station will be the site for a new pump station under design. The survey included cross sections of the site and the adjacent canal along with the location of improvements in the project area.

Silt and Debris Measurement in Jefferson Parish Canals *Jefferson Parish, Louisiana*

Mr. Teegarden is providing topographic and bathymetric survey services for the Jefferson Parish Drainage Department. We are surveying canals to determine the amount of silt build up utilizing All South's Z-Boat, a six-foot-long remotely controlled vessel equipped with GPS, a dual-frequency echosounder and a laptop to record the data.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title: Taylor Casteigne, LSI Land Surveyor Intern, Survey Supervisor
Project Assignment: Land Surveyor Intern
Name of Firm with which associated: All South Consulting Engineers, LLC
Years' experience with this Firm: 2
Education: Degree(s)/Year/Specialization: Bachelor of Science / 2019 / Geomatics
Active registration: Year first registered/discipline: 2021/ Land Surveyor Intern/ Louisiana License No. 0000714
Other experience and qualifications relevant to the proposed Project: Mr. Casteigne is a graduate from Nicholls State University with a degree in Geomatics. After graduation, he served as party chief and AutoCAD draftsman doing a variety of surveys for both roadways and pump stations in the state of Louisiana. He is well versed in the latest in surveying equipment technology to ensure a fast and accurate project survey. Bayou Vista Subdivision Drainage Model <i>Thibodaux, Louisiana</i> Mr. Casteigne performed full topographic survey services including retrieving existing Lidar data From the NGS website to be combined with survey data taken in the field in order to produce a drainage model for Bayou Vista Subdivision. Savanne Rd Drainage Improvements <i>Houma, Louisiana</i> Mr. Casteigne performed full boundary surveying services for the acquisition of a servitude by Terrebonne Parish for drainage Improvements. This included performing the necessary field work for the survey, then processing the data into a useable format. Once the data was in a useable format it is imported into Auto CAD where a boundary map could be prepared. St. Louis Canal Rd <i>Houma, Louisiana</i> Mr. Casteigne performed full boundary surveying services for the acquisition of a servitude by Terrebonne Parish for drainage Improvements. This included performing the necessary field work for the survey, then processing the data into a useable format. Once the data was in a useable format it is imported into Auto CAD and have a boundary map prepared.

TEC Professional Services Questionnaire

Lirette St Pump Station *Houma, Louisiana*

Mr. Casteigne performed full topographic survey and CAD services, for a drainage study to be completed of the entire subdivision, also for the construction and installation of a new pump station. This included performing the necessary field work for the survey, then processing the data into a useable format. Once the data was in a useable format it is imported into Auto CAD, where the data is used to build a TIN surface. With this surface cross sections are generated over the required areas based on the scope. Contours are then generated showing lines of constant elevation. The budget for the project was tracked daily ensuring that the survey was completed on time and under budget. This included placing LA One Call tickets, giving field crews the list of tasks needed to complete the project, and ensuring the project was completed in an orderly fashion.

Avoca Island Topographic Survey *St. Mary Parish, Louisiana*

Mr. Casteigne performed full survey services including data collection, data processing, data management, CAD, and project budget oversight. This includes performing the necessary field work for the survey, then processing the data into a field book file. Once the data was in a field book it is imported into Auto CAD, where the data is used to build a TIN surface. With this surface cross sections are generated over the required areas based on the scope. This project was done at the request of Avoca Island for drainage improvements to be made on the island.

Lisa Park Development *Houma, Louisiana*

Mr. Casteigne performed full survey services including data collection, data processing, data management, CAD, and project budget oversight for improvements to be made in the open space at Lisa Park Elementary School. This included performing the necessary field work for the survey, then processing the data into a useable format. Once the data was in a useable format it is imported into Auto CAD, where the data is used to build a TIN surface. With this surface cross sections are generated over the required areas based on the scope. Contours are then generated showing lines of constant elevation. The budget for the project was tracked daily ensuring that the survey was completed on time and under budget. This included placing LA One Call tickets, giving field crews the list of tasks needed to complete the project, and ensuring the project was completed in an orderly fashion. This included placing LA One Call tickets, giving field crews the list of tasks needed to complete the project, and ensuring the project was completed in an orderly fashion.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Lyle Langley Survey Party Chief
Project Assignment:
Survey Party Chief
Name of Firm with which associated:
All South Consulting Engineers, LLC
Years' experience with this Firm:
7
Education: Degree(s)/Year/Specialization:
SOWELA Technical Community College/ 2012/ Drafting
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Langley has worked on a wide variety of surveying projects and assisted in the integration of a robotic total station and our hydrographic software to track the hydrographic boat in areas where GPS was not feasible. He has the necessary training to use hydrographic equipment, HDS Laser Scanner and is familiar with Hypack hydrographic software. His work experience includes hydrographic surveys using a rod and tape, a total station, GPS and single beam echo sounders to record the data, using side scan sonar to identify underwater obstructions and using a magnetometer to sweep for pipelines and other ferrous metal debris. He has supervised field crews on many topographic and boundary surveys. His current and previous projects include, but not limited to:</p> <p>Tudor and Tallulah Drainage Analysis <i>Jefferson Parish, Louisiana</i> Mr. Langley was part of a team that provided topographic survey services and collected field data for the Tudor and Tallulah drainage project. This work included picking up horizontal and vertical data in the drainage area, including locating the multiple subsurface utilities that could affect the project.</p> <p>Alidore Drainage Study and Improvements, <i>Lafourche Parish, Louisiana</i> Mr. Langley led the field crew to provide a topographic survey to obtain an elevation data on culverts with pipe sizes and conditions, cross sections of ditches and canals for drainage study and design of a new pump station. Mr. Langley was the Party Chief for this effort. Party chief, ±71 Ac.</p> <p>Canal No. 10 Underground Utility Locations, <i>Jefferson Parish, Louisiana</i></p>

TEC Professional Services Questionnaire

Mr. Langley located underground utilities as marked by a Subsurface Utility Engineer and added to an existing topographic survey.

Woodvine Ditch Topographic Survey *Jefferson Parish, Louisiana*

Mr. Langley and his crew provided a topographic survey over the existing 54" RCP drain line followed the line from Nassau Drive south across the Metairie Country Club Golf course to its tie in point at Geisenheimer Canal. Improvements along that route were located along with trees, with size and species and topographic features on the golf course, that included ties, sand traps and the raised greens that fell in the route.

Loumor Outfall Ditch Topographic Survey *Jefferson Parish, Louisiana*

Mr. Langley provided a topographic survey of the route that follows the 78" X 122" RCAP along the western edge of Metairie Country Club Golf course, then southeasterly and finally south to Geisenheimer Canal just north of Airline Highway. Improvements along that route were located along with trees, with size and species and topographic features on the golf course, that included ties, sand traps and the raised greens that fell in the route.

Jean Lafitte Parkway Drainage Improvements, *St. Bernard Parish, Louisiana*

Mr. Langley performed the boundary and topographic survey of Jean Lafitte Parkway from Judge Perez Drive to the Forty Arpent Canal for the design of much needed drainage improvements.

Lake Cataouatche Pump Station Topographic Survey, *Jefferson Parish, Louisiana*

Mr. Langley and his team prepared a topographic survey at the site of the current Lake Cataouatche pump station located on Churchill Farms. The survey area adjacent to the existing pump station will be the site for a new pump station under design. The survey included cross sections of the site and the adjacent canal along with the location of improvements in the project area.

Lake Lery Marsh Creation and Rim Restoration, *St. Bernard Parish, Louisiana*

Mr. Langley provided topographic and bathymetric surveys for the design of shoreline armoring and the creation and nourishment of the surrounding marshland. The work included standard GPS RTK survey work in coastal and marsh environments, a bathymetric survey of a large portion of Lake Lery and a magnetometer survey of the proposed borrow area and access routes.

Bayou Country Sports Complex *Houma, Louisiana*

Mr. Langley provided topographic survey services for several aspects of the Bayou Country Sport Park Development in Terrebonne Parish. This 140-acre development includes baseball, softball, soccer, and other amenities. Mr. Langley provided survey services to support the development of the drainage, water, sewer, and roadway improvements, and also performed significant construction layout services.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
William Lambert Survey Party Chief
Project Assignment:
Survey Party Chief
Name of Firm with which associated:
All South Consulting Engineers, LLC
Years' experience with this Firm:
1
Education: Degree(s)/Year/Specialization:
High School Diploma
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Lambert joined All South Consulting Engineers, LLC in April of 2021. He has over 15 years of experience in land surveying and has served as an instrument man to a survey party chief. He has performed topographic surveys, right-of-way, ALTAs, as-builts, stakeouts, boundaries, and elevation certificates, using Leica robotic instrument and Trimble GPS. He has also performed construction layout using Trimble Robotics and GPS and served as a survey helper in industrial surveys.</p> <p>LALD Lower Lafitte Drainage Improvements <i>Jefferson Parish, Louisiana</i> Mr. Lambert has completed a full topographic survey of approximately 5500ft of streets for the purpose of improving the existing drainage in the area. This included establishing project control and temporary benchmarks and supervising the survey crew ensuring that the project was completed based on the scope of work in an efficient manner.</p> <p>Marrero St. Pump Station <i>Jefferson Parish, Louisiana</i> Mr. Lambert has completed a full topographic survey of the Marrero St. Pump Station for the purpose of making improvements to the pump station. This included establishing project control and temporary benchmarks and supervising the survey crew ensuring that the project was completed based on the scope of work in an efficient manner.</p> <p>Pines Village Road Reconstruction <i>New Orleans, Louisiana</i> Mr. Lambert performed a full topographic survey of approximately 8800ft of roadway in New Orleans. This included overseeing the collection of all necessary field data within the right of way of the designated streets and keeping detailed field notes of the data being obtained. This project was done at the request of the city of New Orleans for the purpose of full depth reconstruction on these roadways.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Austin Bowman Survey Technician
Project Assignment:
Survey Technician
Name of Firm with which associated:
All South Consulting Engineers, LLC
Years' experience with this Firm:
1
Education: Degree(s)/Year/Specialization:
A.A.S. HVAC NCCER Level Graduate/ 2020/ Nunez Community College
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Bowman joined All South Consulting Engineers, LLC in March of 2021 as a survey assistant. He received an Associate of Applied Science degree in HVAC NCCER Level from Nunez Community College in 2020. Since joining All-South, Mr. Bowman has assisted in full topographic and hydrographic surveys.</p> <p>Westside Blvd (W. Park-Alma) Houma, Louisiana Mr. Bowman assisted in the completion of a full topographic survey along Westside Blvd in Houma from W. Park Ave to Alma St. This included assisting the Survey Party Chief in collecting field data inside the right of way of Westside Blvd. This project was done at the request of the Terrebonne Parish Government for the purpose of replacing the existing roadside drainage.</p> <p>Bayou Baratavia Waterline Crossing Lafitte, Louisiana This project was done at the request of Jefferson Parish for the installation of a new waterline running along Rosethorne Rd then crossing Bayou Baratavia. For this project, Mr. Bowman assisted the Survey Party Chief in collecting all the field data necessary for the competition of the survey. This project included full topographic and hydrographic survey services including data collection, data processing, data management, CAD, and project budget oversight. This includes performing the necessary field work for the survey, then processing the data into a field book file. Once the data was in a field book it is imported into Auto CAD, where the data is used to build a TIN surface. With this surface, Plan and Profile sheets could be generated along with cross sections across Bayou Baratavia.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Jackson Sorrells <i>Senior CADD Technician, Drafting Supervisor</i>
Project Assignment:
CADD Technician III/ Draftsman
Name of Firm with which associated:
All South Consulting Engineers, LLC
Years' experience with this Firm:
5
Education: Degree(s)/Year/Specialization:
Associate of Applied Science / 2017/ Civil Construction and Engineering Technology Associate of Applied Science / 2011/ Drafting and Design
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Sorrells joined the All South team after 8 years in the Land Surveying industry. His experience includes AutoCAD C3D which he utilizes in survey and design projects that include topographic, boundary, route corridor surveys, hydrographic surveys, ALTAs, field data input, plan and profile sheets, import/export of survey points, proposed design corridors, and volume calculations. Mr. Sorrells coordinates with field crews, drafters, engineers, and clients to generate AutoCAD C3D drawings and plan sheet sets from the beginning of a project to final stamped plans. His current and previous projects include, but not limited to:</p> <p>Alidore Drainage Improvements <i>Raceland, Louisiana</i> Mr. Sorrells prepared topographic and right-of-way drawings for the construction of a new drainage pumping station. The project involved a levee re-alignment, ditch re-grading and research into the BNSF railroad right-of-way. Site plans provided by Mr. Sorrells were used to design better drainage for the surrounding area and proved to be more economical.</p> <p>Gray Campus Development - CIS Gray, Louisiana Mr. Sorrells prepared the design plans for the construction of a Cardiovascular Institute of the South, Terrebonne Parish. The plans included new site plan, pavement plan, drainage and grading plan, sewer and water plans and utility plan. Also included in the plans were the topographic survey and a new retention pond design. Mr. Sorrells coordinated with the project engineer and sub-contractors to conform and finalize the plans.</p> <p>Silverleaf Flood Control Project <i>Gonzales, Louisiana</i></p>

TEC Professional Services Questionnaire

Mr. Sorrells prepared Aerial maps showing drainage, flooding and resolutions in the area of Silverleaf located in Ascension Parish, Louisiana. He provided a land use map, flood boundary map and a drainage area map for this project.

Sorrento Flood Control Project *Sorrento, Louisiana*

Mr. Sorrells prepared Aerial maps showing drainage, flooding and resolutions in the area of the town of Sorrento located in Ascension Parish, Louisiana. He provided a land use map, flood boundary map and a drainage area map for this project.

Russell Street Pump Station *River Ridge, Louisiana*

Mr. Sorrells prepared proposed location of a new pump station to be installed by Ralph J. Bunche Elementary School (Russell St. Pump Station) in Jefferson Parish, Louisiana. These plans included an overall site plan, plan view and a typical section. Coordination with the project engineer to properly show the existing utilities, railroad and rights-of-way was very important in this project.

Lake Lery Marsh Creation and Rim Restoration Project Phase III *St. Bernard Parish, Louisiana*

Mr. Sorrells prepared the Lake Lery project area and vicinity map showing access to the lake through Bayou Lery. The project required soil boring tests, which Mr. Sorrells created an in-depth plan of access, location map and a location table with coordinates. Typical boring details were created for the marsh area and the borrow area to show the depths and limits.

Lake Trail Drive Drainage Improvements *Kenner, Louisiana*

Mr. Sorrells prepared the topographic and right-of-way drawings for Lake Trail Drive, from its intersection with the northern right-of-way of Bruin Drive, north to the southern right-of-way of West Esplanade Avenue; approx. 2880 LF. The drawings included elevation shots of Lake Trail Drive, right-of-way to right-of-way for the creation of cross sections every 50'. He also created a 3D surface, a centerline profile, and underground utility profiles for this project.

Westgate Drainage *Kenner, Louisiana*

Mr. Sorrells prepared the Record Drawings for this project. Although coming in late to this project Mr. Sorrells developed the record drawings for this project by coordinating with the project engineer, inspectors, and sub-contractors. Ensuring that the record drawings incorporated all as-built conditions of this project.

Lake Cataouatche Pump Station Topographic Survey *Jefferson Parish, Louisiana*

Mr. Sorrells prepared the plan and profile sheets and cross sections from the topographic survey at the site of the current Lake Cataouatche pump station located on Churchill Farms. The survey area adjacent to the existing pump station will be the site for a new pump station under design. The survey included cross sections of the site and the adjacent canal along with the location of improvements in the project area.

South Kenner Avenue Rehabilitation (Between Live Oak Blvd. and Chenevert Rd.) *Jefferson Parish, Louisiana*

Mr. Sorrells provided drafting support for this project, including plan sheets, cross sections, and existing subsurface pipe networks. Showing the existing roadway and existing sidewalk, which were to be developed in a wider and improved asphalt roadway with new sidewalks and subsurface drainage. This project conformed to the Jefferson Parish criteria.

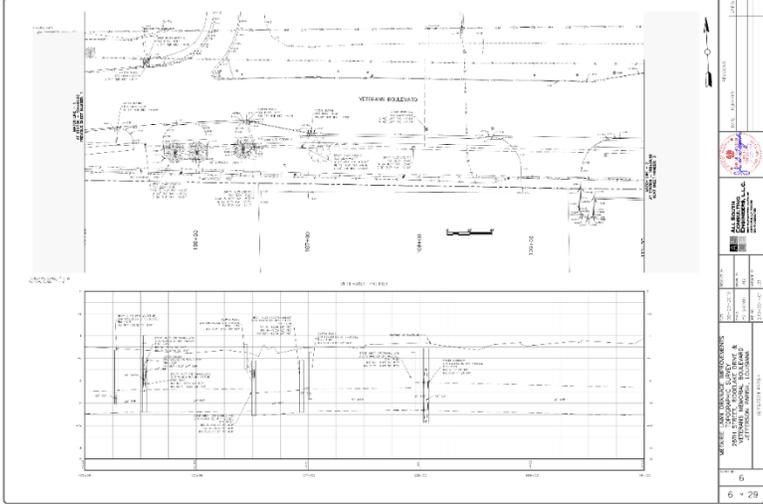
TEC Professional Services Questionnaire

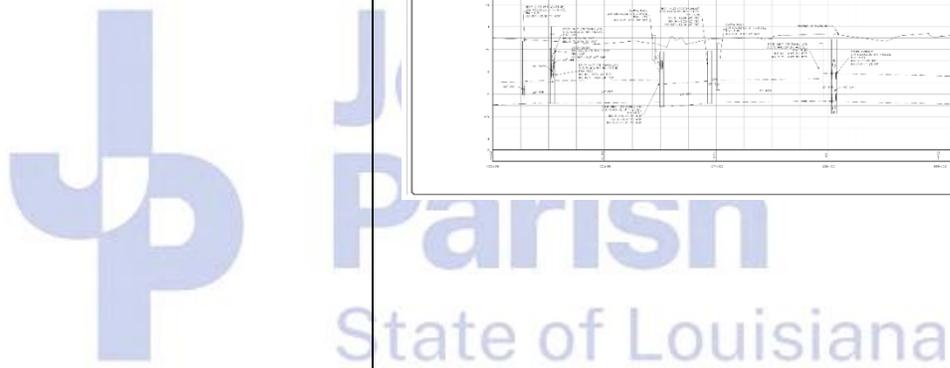
L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 1

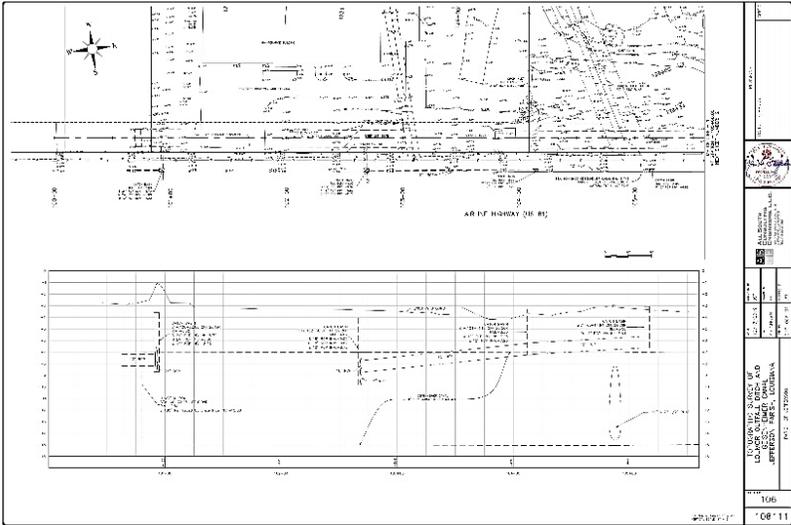
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:					
<p>Tudor and Tallulah Drainage Improvements, <i>Jefferson Parish, Louisiana</i></p> <p>Jefferson Parish Government Neil Schneider, Capital Projects 1221 Elmwood Park Blvd. Jefferson, Louisiana 70123 (504) 736-6500</p>	<p>All South was selected by Jefferson Parish to analyze the drainage requirements in this project area. The goal of this analysis is to provide a master plan that will result in no street flooding due to the 10-yr, 24-hr rainfall event. This report includes the study results, drainage recommendations and cost estimate with recommended phasing.</p> <p>The Tudor and Tallulah project area is located in River Ridge, Louisiana and includes Caroline Street, Tudor Avenue, Tallulah Avenue, Russell Street, Stephen Drive and South Lester Avenue from the Mississippi River to Canal #6 and from Florida Avenue to Soniat Canal. This area is located in Jefferson Parish and regularly experiences significant street flooding within the project area.</p> <p>All South performed a hydrologic and hydraulic analysis on each drainage area to examine the existing drainage patterns. Existing topography, culvert sizes and slopes were used to determine the adequacy of the existing system. A 10-year storm event with a rainfall of 7.8 inches in a 24-hour period was used to analyze each system. Peak flows were determined using the EPA SWMM method. Using the same design storm and criteria, an analysis of the required drainage capacity was also performed to help identify improvements.</p> <p>All South provided the study and recommendations with cost analysis to improve the systems. As a result of this report, All South was tasked with the permitting, design and construction management of increased capacity collection system, new pumping station, and out fall system. Collection system improvements include the removal 1,000 feet of 54" reinforced concrete pipe and installation of new 72" RC P. This process involves the relocation of several utilities and the design of concrete conflict box. This 72" RCP will be installed within a 96" steel Pipe jack and bored under an existing CN Railroad track. As part of the permit, All South will design a cofferdam system for approval by CN Railroad. The new pumping station will have a 165 CFS capacity, generated with three vertical mixed flow pumps with controls. The out fall will consist of 36" steel pipes out falling into an existing drainage canal. The existing drainage canal will be outfitted with new concrete headwalls and bottom slab to prevent erosion.</p> <p>As part of this project All South's survey crews collected data on existing drainage structures along the CN Railroad right of way.</p>					
	<p>Estimated Cost:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Entire Project:</th> <th style="width: 33%;">Work for which Firm was Responsible:</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">\$260,000</td> <td style="text-align: center;">Survey Fee: \$60,000</td> </tr> </tbody> </table>		Entire Project:	Work for which Firm was Responsible:	\$260,000	Survey Fee: \$60,000
	Entire Project:	Work for which Firm was Responsible:				
\$260,000	Survey Fee: \$60,000					
<p>Completion Date (Actual or estimated):</p> <p style="text-align: center;">07/2017</p>						

TEC Professional Services Questionnaire

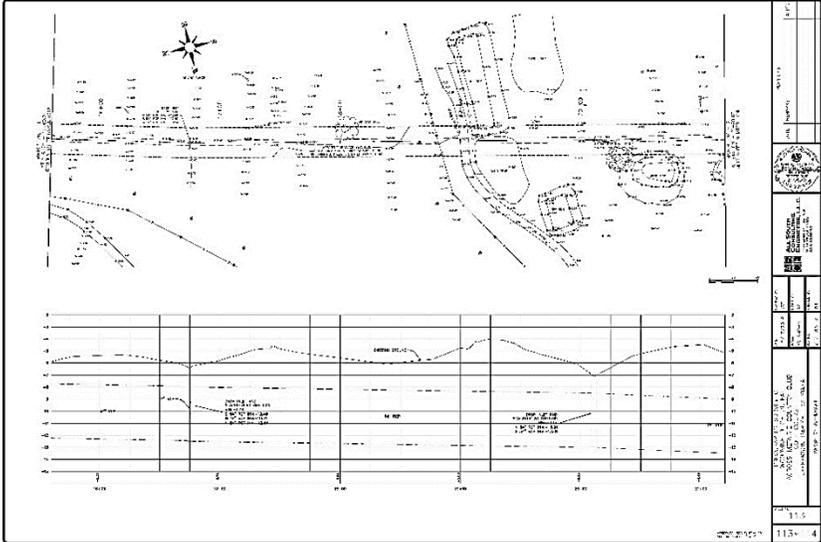
PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Metairie Lawn Drainage Improvements <i>Jefferson Parish, Louisiana</i></p> <p>Mr. Neil Schneider, P.E. Director of Capital Projects 1221 Elmwood Park Blvd Jefferson, Louisiana 70123 (504)736-6753</p>	<p>All South provided a topographic survey of 26th Street from Metairie Lawn Avenue to Ridgelake Drive, Ridgelake Drive from 26th Street to Veterans Boulevard and on Veterans Boulevard from Ridgelake Drive to a point approximately 1000 feet east of Ridgelake Drive for the design of drainage improvements. Boundary evidence was also collected to show the existing rights of way for each street.</p> <div style="text-align: right;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
05/2019	N/A	Survey Fee: \$19,000



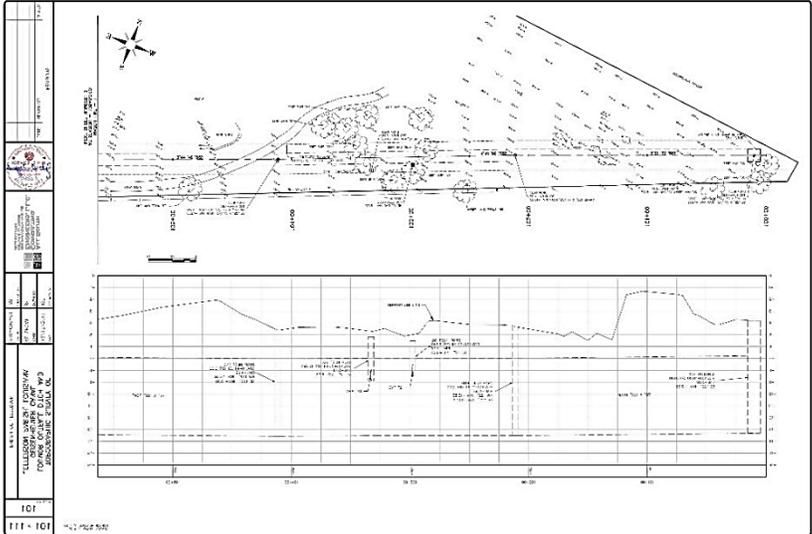
TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Geisenheimer Canal Topographic Survey <i>Jefferson Parish, Louisiana</i></p> <p>Jefferson Parish Government Mr. Neil Schneider, P.E. Director of Capital Projects 1221 Elmwood Park Blvd Jefferson, Louisiana 70123 (504)736-6753</p>	<p>This survey was prepared to provide the field data necessary to design drainage improvements for the Geisenheimer Canal which flows to Hoey's Canal and from there to 17th Street Canal and Lake Pontchartrain.</p> <p>In order to accomplish this, we prepared a topographic survey of the surface area above Geisenheimer Canal from the maintenance facility for the Metairie Country Club to the tie in point at Hoey's Canal. For this route we located all surface improvements, visible signs of utilities, trees with size and species and cross sections at 50' intervals.</p> <p>We were able to locate the underground concrete box canal by accessing it through an access cover where we set a control point in the bottom of the box, we then located the sides and roof and the tie in point for the concrete arch pipe outfall for the Loumor Ditch. From a drop inlet cover near the Woodvine Ditch outfall we located the outfall and determined the invert. This was verified by probing the outfall pipe at the edge of the box. At Hoey's Canal we probed the top of the Geisenheimer Canal box and the Hoey's Canal box to determine the point of intersection.</p> <p>The deliverable for this survey were plan and profile drawings of Geisenheimer Canal which were included in a master set with Loumor</p> <div style="text-align: center;">  </div> <p>Ditch and Woodvine Ditch.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
02/2020	N/A	Survey Fee: \$25,920

TEC Professional Services Questionnaire

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Woodvine Ditch Topographic Survey <i>Jefferson Parish, Louisiana</i></p> <p>Jefferson Parish Government Mr. Neil Schneider, P.E. Director of Capital Projects 1221 Elmwood Park Blvd Jefferson, Louisiana 70123 (504)736-6753</p>	<p>This survey is for drainage improvements to the Woodvine Ditch beginning at the western right of way of Nassau Drive and following the drain line west-southwesterly across the parking lot that lies on the north side of the swimming pools and tennis courts to the eastern side of the golf course where the drain line turns in a southerly direction and heads south-southwest to its discharge point into Geisenheimer Canal at the north right of way of Airline Highway.</p> <p>The topographic survey over the existing 54" RCP drain line followed the line from Nassau Drive south across the Metairie Country Club Golf course to its tie in point at Geisenheimer Canal. Improvements along that route were located along with trees, with size and species and topographic features on the golf course, that included ties, sand traps and the raised greens that fell in the route.</p> <p>Deliverables were plan and profile sheets that were included with the master set of Loumor Ditch Outfall, Geisenheimer Canal and Woodvine Ditch.</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
02/2020	N/A	Survey Fee: \$16,720

TEC Professional Services Questionnaire

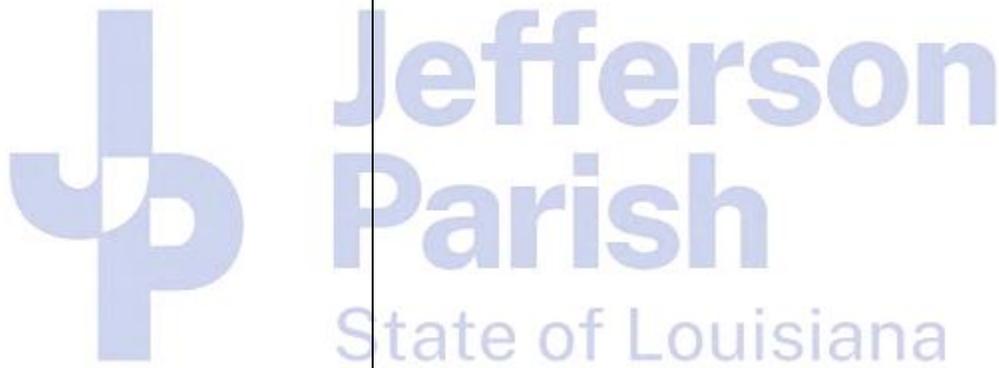
PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Loumor Outfall Ditch Topographic Survey <i>Jefferson Parish, Louisiana</i></p> <p>Mr. Neil Schneider, P.E. Director of Capital Projects 1221 Elmwood Park Blvd Jefferson, Louisiana 70123 (504)736-6753</p>	<p>This survey is for drainage improvements to the Loumor Outfall Ditch beginning at the southwest corner of Pontiff Playground and running southeast then turning in a south-southwesterly direction along the northern and western boundary of Metairie Club Estates Subdivision to its discharge point into Geisenheimer Canal and the north right of way of Airline Highway.</p> <p>This survey route follows the 78" X 122" RCAP along the western edge of Metairie Country Club Golf course, then southeasterly and finally south to Geisenheimer Canal just north of Airline Highway. Improvements along that route were located along with trees, with size and species and topographic features on the golf course, that included ties, sand traps and the raised greens that fell in the route.</p> <p>We also located the maintenance facility for the golf course, ponds and a pump house that were near the drain route.</p> <p>Deliverables for this project were plan and profile sheets that were included with the master set of Loumor Ditch Outfall, Geisenheimer Canal and Woodvine Ditch.</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
02/2020	N/A	Survey Fee: \$19,340

TEC Professional Services Questionnaire

PROJECT NO. 6					
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:				
<p style="text-align: center;">Menard Road Drainage <i>Terrebonne Parish, Louisiana</i></p> <p style="text-align: center;">Jeanne Bray Terrebonne Parish Consolidated Government 8026 Main Street, 7th floor, Houma, LA 70360 (985) 873-6720</p>	<p>All South provided engineering and land surveying services on this project to address drainage issues. A topographic survey was performed along the rear portion of lots fronting Menard Road and of a proposed pump station site on the property of Enterprise Marine. Drainage improvements were designed and areas where the parish would need to acquire additional right of way were identified. All South located the boundaries of the affected properties and prepared right of way maps and legal descriptions for the needed parcels.</p> <div style="text-align: center; border: 1px solid black; padding: 5px; margin: 10px 0;"> </div>				
Completion Date (Actual or estimated):	Estimated Cost:				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%; text-align: center;">Entire Project:</th> <th style="width: 50%; text-align: center;">Work for which Firm was Responsible:</th> </tr> <tr> <td style="text-align: center; vertical-align: middle;">N/A</td> <td style="text-align: center; vertical-align: middle;">Survey Fee: \$22,000</td> </tr> </table>	Entire Project:	Work for which Firm was Responsible:	N/A	Survey Fee: \$22,000
Entire Project:	Work for which Firm was Responsible:				
N/A	Survey Fee: \$22,000				
07/2018					

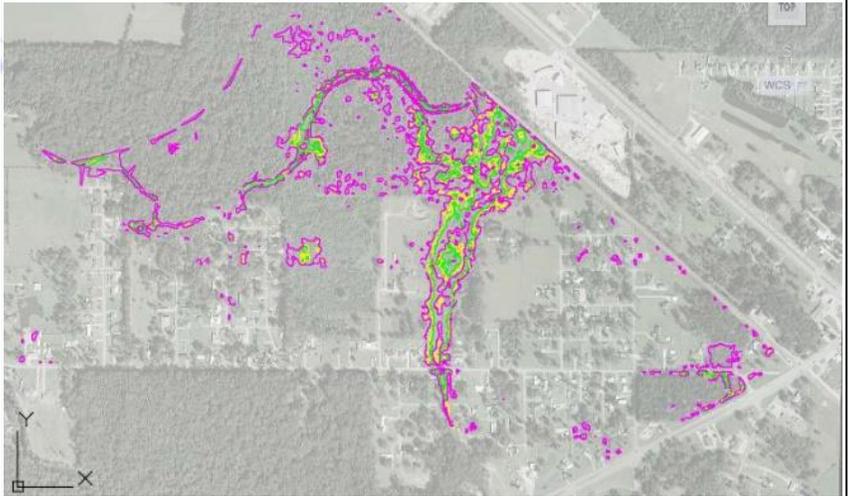
TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Bayou Vista Drainage Model <i>Thibodaux, Louisiana</i></p> <p>Lafourche Parish Government James Barnes Public Works Director P.O. Box 425 Mathew, LA 70375 (985) 532-8235</p>	<p>All South performed full topographic survey services including retrieving existing Lidar data From the NGS website to be combined with survey data taken in the field in order to produce a drainage model to mitigate the water pooling at the rear of the Bayou Vista Subdivision.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
02/2021	N/A	Survey Fee: \$12,000

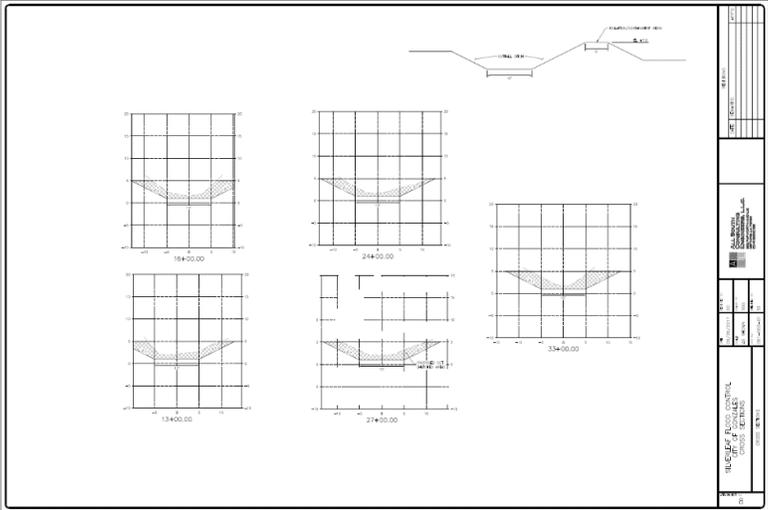


TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Sorrento Statewide Flood Control <i>Town of Sorrento, Louisiana</i></p> <p style="margin-left: 40px;">Town of Sorrento Mike Lambert, Mayor 8173 Main St. Sorrento, LA 70778 (225) 675-5337</p>	<p>As part of the Sorrento State Flood Application project, All South's surveying department completed professional surveying services to support the overall grant application. The Application was based on flooding that occurs along Brittany St. during heavy rain events. As such, the All South's crews provided topographic and hydrographic survey services for the "B" drainage ditch that runs through the Town of Sorrento and carries flows to the Sorrento Pumping Station. Crews also surveyed an existing ditch that carries flows from the rear of Oak St. through an existing railroad trestle adjacent to Sorrento Lumber Company. This survey data was incorporated into models of the flows through these drainage ditches during heavy rain events and ultimately to the Sorrento Drainage Pump Station.</p> <p>The survey captured approximately 5,000 LF of drainage ditches, including culvert and headwall features included across LA Hwy 22 and along the route. Cross sections were taken approximately every 300 LF to maximize data on the limited budget.</p> <p>Additionally, our drafters and survey staff worked hand-in-hand with the hydraulic modelers on the project to produce flood maps of the model results and ensure the field data met all required modeling needs.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
09/2019	\$420,000	Survey Fee: \$32,560



TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Silverleaf Drainage Statewide Flood Application <i>Gonzales, Louisiana</i></p> <p>City of Gonzales Jackie Baumann 120 South Irma Boulevard Gonzales, LA 70737 (225) 647-2841</p>	<p>The Southwood Subdivision is an existing, 135-acre development located within the City of Gonzales and the Ascension Parish 100-year floodplain. The subdivision experiences significant flooding during heavy rain events, which inundates both roadways and residences. The subdivision is designed to drain by curb and gutter and into two outfall ditches at the rear of the development. The two outfall ditches merge into a single ditch which enters into Boyle Bayou before eventually making its way into Bayou Conway. East Silverleaf Street drains from east to west via roadside ditches with culverts located under driveways, eventually discharging into one of the outfall ditches that drains Southwood. Flooding occurs when the two outfall ditches begin backing up during heavy rains, forcing water back into the Southwood Subdivision and up East Silverleaf Street.</p> <p>All South's survey crews performed all topographic surveying services for the project in support of design and modeling services for the project. Surveys included details cross sections of the outfall into Boyle Bayou, as well as of the surrounding drainage features in the Silverleaf neighborhood.</p> <div style="text-align: center;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
07/2018	\$23,500	Survey Fee: \$5,000

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. IMC Construction	Jefferson Parish	Jefferson Parish filed 3 rd party demand to All South Consulting Engineers, LLC. Status is pending
2.		
3.		
4.		

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



All South Consulting Engineers

All South Consulting Engineers, LLC is a Limited Liability Corporation owned by Timothy Bonura, Jens J. Nielsen Jr., and Stephen Smith. Established in May 2004, All South was founded to provide professional engineering services to municipalities and governmental agencies, as well as private clients throughout the South. All South has since experienced tremendous growth and is proudly recognized as one of the Gulf South’s leading Surveying firms, as well.

All South’s Surveying Division has a client list that includes the following parishes, municipal and state organizations: Jefferson Parish, Plaquemines Parish, St. Bernard Parish, Orleans Parish, St. Tammany Parish, Lafourche Parish, Terrebonne Parish, East Baton Rouge Parish, Livingston Parish, Ascension Parish, Coastal Protection and Restoration Authority, City of Gretna and City of Slidell. Projects range from topographic surveys for design of new facilities and infrastructure to bathymetric surveys for coastal restoration and drainage maintenance.

PROFESSIONAL TRAINING AND EXPERIENCE

All South offers outstanding surveying services from leading professionals, including our Professional Land Surveyor. As Vice President and Survey Division Manager, Mr. John S. Teegarden, PLS has extensive experience in all aspects of land surveying which he has acquired over his 30-year career. All South’s substantial local experience providing Professional Land Surveying services can be found throughout the TEC Professional Services Questionnaire. Firm capabilities and services include but are not limited to the following:

- **Control Surveys** – Establish the horizontal and vertical survey info via deep rod monuments and GPS network surveys
- **Boundary/ALTA-NSPS Surveys** – ALTA-NSPS (American Land Title Association-National Society of Professional Surveyors) surveys for large property transactions

TEC Professional Services Questionnaire

- **Topographic Surveys** – Route and corridor surveys and development site surveys
- **Elevation Surveys** – Elevation certifications and effects of subsidence over time
- **Hydrographic Surveys** – Coastal restoration, maintenance dredging, dock construction and maintenance, USACE permitting surveys, and using side scan single beam and multi-beam hydrographic profiles
- **HDS (High-Definition Survey) Laser Scanning** – High resolution point clouds to verify measurements, monitor movement of a structure, and provide a 3D model of area surveyed using 360° scans at our survey sites for this reason
- **GIS Data Acquisition** – Collect data for infrastructure inventory, complete with geocoded photographs of each item
- **Pipeline Surveying** – Collect pipe tally measurements, record heat, weld and joint numbers, record horizontal and depth of cover

LAND SURVEY, HYDROGRAPHIC SURVEY SERVICES:

All South possesses the staff and capability to offer licensed surveying services, including land and hydrographic survey services. Our land survey crews have completed multiple coastal and flood protection relation projects, including all the projects listed above, through the pre-site survey, setting project control points, dredging and borrow quantity measurement, and as-built surveys.

All South is a leading provider of hydrographic surveying services. We are experienced with single-beam, multi-beam, and side-scan sonar surveys and efficiently process hydrographic data with HYPACK software. Our 26' survey vessel is outfitted with a dual-frequency echosounder to take on large hydro projects. The 6' Z-Boat remote survey boat allows us to access sites where a manned boat can't be used.

EQUIPMENT/ SOFTWARE:

- GPS (Global Positioning System)
- Leica GS-14 GPS Receivers
- AutoCAD Stations Civil 3D, Microstation, InRoads, CadConform
- 26' Scully Aluminum Boat with Dual 150 h.p. motors
- 14' Aluminum Flat Boat
- 6' Z-boat, remotely operated hydrographic survey boat
- Odom Hydrographic CV100 dual frequency Echosounder
- Tritech Starfish 990F side scan sonar
- Getac X500 Laptop with Hypack Hydrographic Software
- G-882 Magnetometer
- Four-wheel off-road vehicles / marsh buggies
- Hypack – Hydrographic software
- LEICA Geo – GPS Software



SIZE OF FIRM

The All South team includes 64 professionals driven to excellence and focused on our client's needs. We are made up of 11 Louisiana Licensed Professional Civil Engineers, 5 Engineering Interns, **1 Professional Land Surveyor, 1 Land Surveyor Intern, 2 Survey Party Chiefs, and 3 Survey Technicians.** Our staff also includes program managers, CADD technicians/draftsmen, grant specialist, inspectors, field monitors, survey crews, and administrative support staff, all of which provide years of experience to help ensure that our work is exceptional.

CAPACITY FOR TIMELY COMPLETION

With 64 employees and ample resources, All South has more than enough capacity to meet any deadlines that the Parish requests. At All South, we understand the importance and value of time. We take pride in completing our projects ahead of schedule and would not sign an agreement to complete a project if we could not meet or exceed the schedule

TEC Professional Services Questionnaire

designated by the owner. Our team is committed to and capable of meeting all schedules and deadlines that the Parish requests to ensure timely completion of all projects.

Additionally, we will utilize Team Gantt software for this project as a means of communication and accountability between consultants and Parish personnel. Team Gantt is an excellent project management tool designed to help create, manage, and finish projects on time and on budget. This software allows us to change start and end dates, reorder tasks, and adjust timelines seamlessly. It allows us to see every project update and document on a single page and quickly share them with both internal and external stakeholders. Team Gantt allows us to effectively manage resources, stay on budget, and ensure everyone is working but not overloaded. We can compare the original timeline projection with the actual timeline of the project with a baseline report. Parish personnel will be issued access to Team Gantt, so they can remain updated on the progress of the project at their own convenience.

PAST PERFORMANCE

As mentioned in the above referenced project descriptions, All South has substantial local experience providing Surveying services on various projects. Aside from our technical experience, All South stands out amongst competitors because of our unrivaled devotion to our clients and ability to meet their needs.

The satisfaction expressed by our clients can be directly accredited to not only our ability to deliver exceptional work that meets all contractual, time, and budgetary obligations, but also the genuine and lasting relationships we build throughout the process. At All South, we understand the grave role we play in each project and thus, uphold the highest standard of personal and professional integrity and competence.

LOCATION OF THE PRINCIPAL OFFICE

All South's home office is located at 652 Papworth Avenue, Metairie, Louisiana 70005.

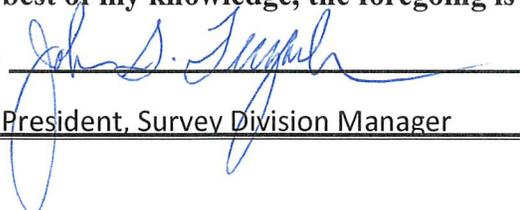
ADVERSARIAL LEGAL PROCEEDINGS

Please refer to section M of this TEC Questionnaire.

PRIOR SUCCESSFUL COMPLETION

Please refer to the project descriptions listed above to see All South's prior successful completion of similar projects, as well as their respective verifiable references. All South has been working with the staff of Jefferson Parish since inception and had never received any negative comments or reviews from the staff. We have completed millions of dollars in construction of Jefferson Parish infrastructure and look forward to continuing this great relationship.

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

Signature: 

Print Name: John S. Teegarden, PLS

Title: Vice President, Survey Division Manager

Date: March 14, 2022

**BFM Corporation, LLC
TEC Questionnaire**



TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Professional Engineering and Supplemental Services for a
Drainage Master Plan for the East Bank of Jefferson Parish
 SOQ **22-014** | Resolution No. **138896**

B. Firm Name & Address:



BFM
 CORPORATION, LLC
 Professional Land & Hydrographic Surveying

BFM Corporation, LLC
 15 Veterans Memorial Boulevard
 Kenner LA 70062

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

Chad M. Poché, P.E., Executive Vice President
 504-468-8800 • 504-460-5239 cell • cpoche@bfmcorporation.com
 Registered Professional Civil Engineer, Louisiana No. 27667 (since 1998)

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

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

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

4	Administrative	-	Estimators	-	Specification Writers
-	Architects (Licensed)	-	Geologists	-	Structural Engineers
-	Chemical Engineers	1	Geotechnical Engineers	-	Graduate Engineers
-	Civil Engineers	-	Interior Designers	2*	Project Managers
-	Construction Inspectors	-	Landscape Architects	-	Clerical (<i>see Administrative</i>)
-	Ecologists	-	Land Surveyor (<i>see PLS</i>)	-	Grant/Funding Specialist
-	Electrical Engineers	-	Mechanical Engineers	-	Sanitary Engineers
-	Engineer Intern	-	Environmental Engineers	1	Principals
2	Professional Land Surveyors			1	Researcher/Archivist
				3	Drafting/AutoCADD
				5	Survey Crew Chiefs
				6	Instrument Men
				24	TOTAL

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

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 a 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 Prime 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:

24 (all personnel, primary and support, will be available on all assigned projects)

TEC Professional Services Questionnaire

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Ralph P. Fontcuberta, Jr., PLS
Executive Vice President

Project Assignment:

Registered Professional Land Surveyor

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

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

Active registration: Year first registered/discipline:

1974, Professional Land Surveyor (Louisiana Lic. No. 4329)
1974, Professional Land Surveyor (Mississippi Lic. No. 1633)

Other experience and qualifications relevant to the proposed Project:

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

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

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

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

Mr. Fontcuberta's **surveying experience with Jefferson Parish can be traced back to BFM's inception in 1982**, and before then while working as a surveyor with another firm. He has over half a century of experience with surveying throughout the region and **specifically with Jefferson Parish**. He has served as the PLS for projects throughout every corner of Jefferson Parish. Relevant project history includes, but is certainly not limited to, the following:

- *Bissonet Plaza Drainage Improvements (Phase 1, Elmwood Parkway and Craig Avenue), Metairie, Jefferson Parish, LA*
- *Lapalco Boulevard Bridge at Harvey Canal, (PW 2017-046-RBP; DOTD H.004396), Jefferson Parish, LA*
- *Orange Lane Drainage Pump Station Project (Drainage Mapping), Grand Isle, Jefferson Parish, LA*
- *Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, LA*
- *West Bank Expressway, Phase I Drainage Map, from Peters Road to Manhattan Boulevard, Jefferson Parish, LA*
- *West Bank Subsurface Drainage Improvement Project, Phase II, Bellemeade Boulevard to the Violet Canal Discharge, Jefferson Parish, LA*
- *Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA*
- *Coventry Drainage Pump Stations, Jefferson Parish, LA*
- *Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, LA*
- *Mounes Subsurface Drainage – Phase I, Jefferson Parish, LA*
- *Jack & Bores Survey (Drainage Project), Waggaman, Jefferson Parish, LA*
- *Oakwood Terrytown Drainage Improvements (HMGP) (Carol Sue Drainage Improvements), Jefferson Parish, LA*
- *Drainage Improvements, Metairie Lawn to Labarre Drive, Jefferson Parish, LA*
- *Mary Ridge Court, Jefferson Parish, LA*
- *Bannerwood Drainage Improvements (Mt. Laurel Bridge & Oakwood Canal), Jefferson Parish, LA*
- *Orleans Village Subdivision Drainage Improvements, Jefferson Parish, LA*
- *Westgate Subdivision Subsurface Drainage Improvements, Jefferson Parish, LA*
- *Kawanee Drive Drainage Improvements, Jefferson Parish, LA*
- *Paillet – Maplewood Drainage Improvements, Jefferson Parish, LA*
- *Hoey's Canal Drainage Improvements (Deckbar Ave to Labarre Rd), Jefferson Parish, LA*
- *25th Street & Adjacent Canal, Gretna, Jefferson Parish, LA*
- *Mason Ditch Drainage Improvements, Jefferson Parish, LA*
- *Breaux Ditch Improvements, East Ames Boulevard – Leo Kenner Parkway, Jefferson Parish, LA*
- *Drainage Improvements to the Canal No. 11 Culvert Crossing West of Duncan Canal, Jefferson Parish, LA*
- *Mazoue Ditch Drainage Improvements (Rose Crest Lane to Darby Lane), Jefferson Parish, LA*
- *Ames Boulevard Drainage Pump Station Warehouse, Jefferson Parish, LA*
- *Improvements to Bayou Segnette Drainage Pump Station No. 1, Jefferson Parish, LA*
- *Cleary Avenue & West Napoleon Lift Station & Force Main, Jefferson Parish, LA*
- *Westwego Drainage Pump Station No. 1, Jefferson Parish, LA*
- *Parish Line Pump Station No. 5, Kenner, Jefferson Parish, LA*
- *Hero Pump Station, Harvey, Jefferson Parish, LA*
- *Fulton Street Pump Station, Jefferson Parish, LA*
- *Westwego Drainage Pump Station 1, Westwego, Jefferson Parish, LA*
- *Goose Bayou Drainage Pump Station, Lafitte, Jefferson Parish, LA*
- *Taft Park Drainage Pump Station, Jefferson Parish, LA*
- *Drainage Pump Station, Veterans North & South, Right-of-Way, 17th Street Canal, Jefferson Parish, LA*
- *Drainage Pump Station, West Esplanade and 17th Street Canals, Jefferson Parish, LA*
- *Bayou Segnette Fronting Protection/New Pump Station, Westwego, Jefferson Parish, LA*
- *Morton & Ingrid Pump Station, Jefferson Parish, LA*

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Chad M. Poché, P.E.
Executive Vice President

Project Assignment:

Engineering Liaison

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

M.S., 1998, Civil Engineering, University of New Orleans
B.S., 1993, Civil Engineering, Louisiana State University

Active registration: Year first registered/discipline:

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

Other experience and qualifications relevant to the proposed Project:

Mr. Poché is an Executive Vice President with (and partial owner of) BFM Corporation, LLC, and a co-founder of BFM's sister company, Gulf South Engineering and Testing, Inc. He has been a consulting geotechnical engineer for more than 20 years in South Louisiana, working on traditional and unique geotechnical engineering projects (shallow and deep foundation design, slope stability, pavement design, etc.). Mr. Poché has also provided construction oversight for waste facilities and virtually every type of earthwork related project. He has been the geotechnical engineer of record for thousands of projects throughout his career.

Mr. Poché's experience includes the development of appropriate scopes of work and proposals for a broad range of projects; planning and coordinating analyses; preparing technical reports; foundation and geotechnical engineering design; construction recommendations; Miss. River facility permitting; managing personnel and office operations; and expert witness testimony. Mr. Poché has logged soil borings; overseen the installation of ground water monitoring wells, piezometers, and inclinometers; overseen and evaluated pile load tests; overseen, performed, and evaluated dynamic pile testing (PDA and PIT); performed CMT field testing and inspection; and performed laboratory testing.

BFM Corporation projects overseen by Mr. Poché would include:

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

Chad M. Poché, P.E. (continued)

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

Bissonet Plaza Drainage Improvements (Phase 1), Metairie, Jefferson Parish, LA. BFM prepared a Route Topographic Survey for Phase 1 of the project, located at Elmwood Parkway and Craig Avenue. This project built upon work executed by the firm for a previous extensive surveying project involving Bissonet Plaza subdivision; this allowed for BFM to build upon established surveys to save time and expenses. Surveying for each element of the project included services included confirming all controls and benchmarks, topographic features, location of improvements and utilities, location of natural elements as applicable, and notation of right-of-way points. (\$7,980 (fee); 2020)

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

Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, LA. BFM provided surveying services for this Drainage Evaluation Project (PW 2018-024-DR). The scope of services included a full Route Topographic Survey (includes all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work) from gutter line to gutter line along Metairie Road from the westerly apparent right-of-way (R/W) of Causeway Boulevard to easterly apparent ROW of Focis Street. The project encompassed approximately 10,400 linear feet, with cross-sections and elevations surveyed included as part of the scope. (\$18,350 (fee); 2020)

Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA. BFM executed a Route Topographic Survey for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. The project area (Allo Street) extended from 4th Street to 6th Street. (\$12,855 (fee); 2019)

Holly Drive Drainage Project, Lewisburg Estates Subdivision, Mandeville, St. Tammany Parish, LA. BFM provided boundary with topographic surveying of the project site (multiple lots) in the Lewisburg Estates Subdivision for the drainage project. (\$13,392 (fee); 2019)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

John Philip Thayer
Field Operations Supervisor

Project Assignment:

Field Operations Supervisor

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

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

Active registration: Year first registered/discipline:

Professional Land Surveyor Registration in process, State of Louisiana

Other experience and qualifications relevant to the proposed Project:

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

West Bank Subsurface Drainage Improvement Project, Phase II, Bellemeade Boulevard to the Violet Canal Discharge, Jefferson Parish, LA. BFM provided topographic surveying for the project, which encompassed Bellemeade Boulevard from Briargrove to Brookmeade and Brookmeade from Bellemeade to the Violet Canal Discharge. (\$16,108 (fee); 2010)

Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, LA. BFM provided topographic surveying services for Phase IV of the project, part of a multiphase program to improve drainage issues on Mounes Street. Phase IV of the project involved a topographic survey of the project, extending from Dickory Avenue to Elmwood Park Boulevard. Services provided by BFM included establishment of a baseline, setting temporary benchmarks (TBMs), elevation surveys, locating improvements and utilities as well as natural elements, and right-of-way surveying. (\$23,540 (fee); 2017)

Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA. BFM executed a Route Topographic Survey for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. The project area (Allo Street) extended from 4th Street to 6th Street. (\$12,855 (fee); 2019)

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

John Philip Thayer (continued)

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

Bissonet Plaza Drainage Improvements (Phase 1), Metairie, Jefferson Parish, LA. BFM prepared a Route Topographic Survey for Phase 1 of the project, located at Elmwood Parkway and Craig Avenue. This project built upon work executed by the firm for a previous extensive surveying project involving Bissonet Plaza subdivision; this allowed for BFM to build upon established surveys to save time and expenses. Surveying for each element of the project included services included confirming all controls and benchmarks, topographic features, location of improvements and utilities, location of natural elements as applicable, and notation of right-of-way points. (\$7,980 (fee); 2020)

Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, LA. BFM provided surveying services for this Drainage Evaluation Project (PW 2018-024-DR). The scope of services included a full Route Topographic Survey (includes all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work) from gutter line to gutter line along Metairie Road from the westerly apparent right-of-way (R/W) of Causeway Boulevard to easterly apparent ROW of Focis Street. The project encompassed approximately 10,400 linear feet, with cross-sections and elevations surveyed included as part of the scope. (\$18,350 (fee); 2020)

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

Louisiana Statewide Flood Control Program (Package 1 & 2 Control and Package 3), City of Kenner, LA. BFM provided topographic surveying services for the project. Typical surveying elements included records research, establishment of baseline, Temporary Benchmarks, and shooting of elevations. BFM provided surveying for the location of improvements and utilities (sewer, water, drainage, storm, etc.), as well as natural elements in the project area. The Louisiana Statewide Flood Control Program uses state funds in the construction of flood control infrastructure to reduce (or eliminate) the incidence of flooding or damages in a specific area. (\$17,688 (fee); 2016)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Gary J. Lambert, Jr., PLS
Registered Professional Land Surveyor

Project Assignment:

Registered Professional Land Surveyor; Project Manager/Drafting Supervisor

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

B.S., 2018, Geomatics, Nicholls State University
B.S., 2014, Construction Management, Louisiana State University

Active registration: Year first registered/discipline:

2021, Professional Land Surveyor (Louisiana Lic. No. 5929)

Other experience and qualifications relevant to the proposed Project:

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

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

Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA. BFM executed a Route Topographic Survey for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. The project area (Allo Street) extended from 4th Street to 6th Street. (\$12,855 (fee); 2019)

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

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

Bissonet Plaza Drainage Improvements (Phase 1), Metairie, Jefferson Parish, LA. BFM prepared a Route Topographic Survey for Phase 1 of the project, located at Elmwood Parkway and Craig Avenue. This project built upon work executed by the firm for a previous extensive surveying project involving Bissonet Plaza subdivision; this allowed for BFM to build upon established surveys to save time and expenses. Surveying for each element of the project included services included confirming all controls and benchmarks, topographic features, location of improvements and utilities, location of natural elements as applicable, and notation of right-of-way points. (\$7,980 (fee); 2020)

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

Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, LA. BFM provided surveying services for this Drainage Evaluation Project (PW 2018-024-DR). The scope of services included a full Route Topographic Survey (includes all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work) from gutter line to gutter line along Metairie Road from the westerly apparent right-of-way (R/W) of Causeway Boulevard to easterly apparent ROW of Focis Street. The project encompassed approximately 10,400 linear feet, with cross-sections and elevations surveyed included as part of the scope. (\$18,350 (fee); 2020)

West Causeway Approach Bike Path Drainage Study, City of Mandeville, St. Tammany Parish, LA. BFM executed a Route Topographic Survey for the project area. Scope included establishing a baseline parallel to the street; establishing temporary benchmarks (TBMs) along the project baseline; locating existing improvements with the designated Limits of Survey; locating existing above-ground and underground utilities. BFM also researched available location data from controlling agencies. Cross sections were taken on a 100 ft. grid within the Limits of Survey. BFM also provided surveying services to provide a Drainage Area Map for the project. The scope of services included establishing Vertical Control and the location of existing drainage structures. (\$16,720 (fee); 2018)

Revere Road W-3 Drainage Survey, St. Tammany Parish, LA. BFM provided surveying services to the St. Tammany Parish Government (Survey Services Contract No. 16-104) for this Drainage Survey project on Revere Road. The scope of services included a boundary survey with notation of improvements. Extensive records research was a precursor to the execution of the field survey. BFM also provided cross sections of Bayou De Zaire and of the drainage feature with notation of natural ground features, improvements, encroachments, and easements/servitudes. Upon completion, BFM provided AutoCAD maps and parcel property descriptions to the Parish. (\$18,960 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Christopher Lemley
Quality Control Supervisor

Project Assignment:

Quality Control Supervisor

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Mr. Lemley serves as BFM's Quality Control Supervisor, overseeing all work and activity by the firm's personnel to be sure all is kept up to our exacting standards. His surveying experience includes over 8 years as a Survey Crew Chief. His survey software experience includes projects involving Trimble, Topcon, Leica, and Hypack, and has maintained and operated GPS, Auto-Level, and Total Station.

Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, LA. BFM provided surveying services for this Drainage Evaluation Project (PW 2018-024-DR). The scope of services included a full Route Topographic Survey (includes all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work) from gutter line to gutter line along Metairie Road from the westerly apparent right-of-way (R/W) of Causeway Boulevard to easterly apparent ROW of Focis Street. The project encompassed approximately 10,400 linear feet, with cross-sections and elevations surveyed included as part of the scope. (\$18,350 (fee); 2020)

Drainage Improvements, Metairie Lawn to Labarre Drive, Jefferson Parish, LA. BFM provided Surveying Services for this project located in Bayou Metairie Park. (\$9,740 (fee); 2016)

Mounes Subsurface Drainage – Phase I, Jefferson Parish, LA. BFM provided topographic surveying services for Phase I of the project, which extended from Dickory to Elmwood Park Boulevard). (\$26,240 (fee); 2017)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Thomas O. Wright
Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

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

Other experience and qualifications relevant to the proposed Project:

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

Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, LA. BFM provided topographic surveying services for Phase IV of the project, part of a multiphase program to improve drainage issues on Mounes Street. Phase IV of the project involved a topographic survey of the project. Services provided by BFM included establishment of a baseline, setting temporary benchmarks (TBMs), elevation surveys, locating improvements and utilities as well as natural elements, and right-of-way surveying. (\$23,540 (fee); 2017)

Massachusetts Avenue Drainage Improvements, Jefferson Parish, LA. BFM provided topographic surveying services for the project, which extended from W Napoleon Avenue to Veterans Memorial Boulevard. (\$28,515 (fee); 2009)

Coventry Drainage Pump Stations, Jefferson Parish, LA. BFM provided a Route Topographic Survey with Hydrographic Survey for the project. The limits of survey extended from r/w to r/w along Jefferson Highway. The levee and hydrographic survey area was noted as 400 feet wide (200 ft. in either direction of the extended centerline of Colonial Heights Road). Drone Surveying was a key element of the project. The hydrographic survey extended 500 feet into the river from the water's edge. (\$89,780 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Curtis "Jay" Barrios
Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

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

Other experience and qualifications relevant to the proposed Project:

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

West Bank Subsurface Drainage Improvement Project, Phase II, Bellemeade Boulevard to the Violet Canal Discharge, Jefferson Parish, LA. BFM provided topographic surveying for the project, which encompassed Bellemeade Boulevard from Briargrove to Brookmeade and Brookmeade from Bellemeade to the Violet Canal Discharge. (\$16,108 (fee); 2010)

Sena Drive Subsurface Drainage Improvements, Jefferson Parish, LA. BFM provided topographic surveying services for the Sena Drive Subsurface Drainage Improvements project, which extended along Sena Drive from West Esplanade Avenue (Canal No. 2) to Nero Street. (\$13,364 (fee); 2010)

Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA. BFM executed a Route Topographic Survey for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. The project area (Allo Street) extended from 4th Street to 6th Street. (\$12,855 (fee); 2019)

Woodland West Subdivision Drainage Improvements, Marrero, LA. BFM provided a topographic survey for the design of drainage improvement. (\$8,900 (fee); 2006)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Eric Gladney
Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:



Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

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

Other experience and qualifications relevant to the proposed Project:

Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA. BFM executed a Route Topographic Survey for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. The project area (Allo Street) extended from 4th Street to 6th Street. (\$12,855 (fee); 2019)

Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, LA. BFM provided topographic surveying services for Phase IV of the project, part of a multiphase program to improve drainage issues on Mounes Street. Phase IV of the project involved a topographic survey of the project, extending from Dickory Avenue to Elmwood Park Boulevard. Services provided by BFM included establishment of a baseline, setting temporary benchmarks (TBMs), elevation surveys, locating improvements and utilities as well as natural elements, and right-of-way surveying. (\$23,540 (fee); 2017)

Drainage Improvements, Metairie Lawn to Labarre Drive, Jefferson Parish, LA. BFM provided Surveying Services for this project located in Bayou Metairie Park. (\$9,740 (fee); 2016)

25th Street & Adjacent Canal, Gretna, Jefferson Parish, LA. BFM provided cross section surveying and a limited drainage survey for the project. (\$2,925 (fee); 2017)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Jeff Patin
Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

Transportation Work Identification Card (TWIC)

Other experience and qualifications relevant to the proposed Project:

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

Coventry Drainage Pump Stations, Jefferson Parish, LA. BFM provided a Route Topographic Survey with Hydrographic Survey for the project, located in River Ridge, Louisiana. The limits of survey extended from r/w to r/w along Jefferson Highway. The levee and hydrographic survey area was noted as 400 feet wide (200 ft. in either direction of the extended centerline of Colonial Heights Road). Drone Surveying was a key element of the project. The hydrographic survey extended 500 feet into the river from the water's edge. (\$89,780 (fee); 2020)

Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, LA. BFM provided surveying services for this Drainage Evaluation Project (PW 2018-024-DR). The scope of services included a full Route Topographic Survey (includes all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work) from gutter line to gutter line along Metairie Road from the westerly apparent right-of-way (R/W) of Causeway Boulevard to easterly apparent ROW of Focis Street. The project encompassed approximately 10,400 linear feet, with cross-sections and elevations surveyed included as part of the scope. (\$18,350 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Anthony Watson
CADD Technician

Project Assignment:

CADD Technician

Name of Firm with which associated:



Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

Coursework - CAD, Avatech Solutions, Los Colinas, TX

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Mr. Watson has experience as a draftsman/CADD technician, having started his career as an intern with the Surveying Department of the City of Plano, TX. His experience through the years includes manual and computer-aided drafting for a wide range of projects, ranging from small lot surveys to subdivisions to municipal treatment and private industrial plants. He has experience in all facets of surveying (boundary, topographic, ALTA/ACSM, plan & profile, etc.) in both drafting and field environments.

Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, LA. BFM provided topographic surveying services for Phase IV of the project, part of a multiphase program to improve drainage issues on Mounes Street. Phase IV of the project involved a topographic survey of the project, extending from Dickory Avenue to Elmwood Park Boulevard. Services provided by BFM included establishment of a baseline, setting temporary benchmarks (TBMs), elevation surveys, locating improvements and utilities as well as natural elements, and right-of-way surveying. (\$23,540 (fee); 2017)

Bissonet Plaza Drainage Improvements (Phase 1), Metairie, Jefferson Parish, LA. BFM prepared a Route Topographic Survey for Phase 1 of the project, located at Elmwood Parkway and Craig Avenue. This project built upon work executed by the firm for a previous extensive surveying project involving Bissonet Plaza subdivision; this allowed for BFM to build upon established surveys to save time and expenses. Surveying for each element of the project included services included confirming all controls and benchmarks, topographic features, location of improvements and utilities, location of natural elements as applicable, and notation of right-of-way points. (\$7,980 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Shaun Clements
CADD Technician

Project Assignment:

CADD Technician

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

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

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, LA. BFM provided surveying services for this Drainage Evaluation Project (PW 2018-024-DR). The scope of services included a full Route Topographic Survey (includes all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work) from gutter line to gutter line along Metairie Road from the westerly apparent right-of-way (R/W) of Causeway Boulevard to easterly apparent ROW of Focis Street. The project encompassed approximately 10,400 linear feet, with cross-sections and elevations surveyed included as part of the scope. (\$18,350 (fee); 2020)

Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA. BFM executed a Route Topographic Survey for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. The project area (Allo Street) extended from 4th Street to 6th Street. (\$12,855 (fee); 2019)

Bissonet Plaza Drainage Improvements (Phase 1), Metairie, Jefferson Parish, LA. BFM prepared a Route Topographic Survey for Phase 1 of the project, located at Elmwood Parkway and Craig Avenue. This project built upon work executed by the firm for a previous extensive surveying project involving Bissonet Plaza subdivision; this allowed for BFM to build upon established surveys to save time and expenses. Surveying for each element of the project included services included confirming all controls and benchmarks, topographic features, location of improvements and utilities, location of natural elements as applicable, and notation of right-of-way points. (\$7,980 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Kevin A. Roberts
CADD Technician

Project Assignment:

CADD Technician

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

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

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

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

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

Holly Drive Drainage Project, Lewisburg Estates Subdivision, Mandeville, St. Tammany Parish, LA. BFM provided boundary with topographic surveying of the project site (multiple lots) in the Lewisburg Estates Subdivision for the drainage project. (\$13,392 (fee); 2019)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Dawn Hoffman
Researcher/Archivist

Project Assignment:

Researcher/Archivist

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

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

Education: Degree(s)/Year/Specialization:

A.D., 1999, Computer-Aided Drafting, Southeast College of Technology
Certificate, 2003, Introduction to ArcGIS, Louisiana State University

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

West Bank Subsurface Drainage Improvement Project, Phase II, Bellemeade Boulevard to the Violet Canal Discharge, Jefferson Parish, LA. BFM provided topographic surveying for the project, which encompassed Bellemeade Boulevard from Briargrove to Brookmeade and Brookmeade from Bellemeade to the Violet Canal Discharge. (\$16,108 (fee); 2010)

Bissonet Plaza Drainage Improvements (Phase 1), Metairie, Jefferson Parish, LA. BFM prepared a Route Topographic Survey for Phase 1 of the project, located at Elmwood Parkway and Craig Avenue. This project built upon work executed by the firm for a previous extensive surveying project involving Bissonet Plaza subdivision; this allowed for BFM to build upon established surveys to save time and expenses. Surveying for each element of the project included services included confirming all controls and benchmarks, topographic features, location of improvements and utilities, location of natural elements as applicable, and notation of right-of-way points. (\$7,980 (fee); 2020)

Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA. BFM executed a Route Topographic Survey for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. The project area (Allo Street) extended from 4th Street to 6th Street. (\$12,855 (fee); 2019)

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>Bissonet Plaza Drainage Improvements (Phase 1, Elmwood Parkway and Craig Avenue), Metairie, Jefferson Parish, Louisiana</p> <p>Meyer Engineers Ltd. 4937 Hearst St. Ste. B Metairie LA 70001</p> <p>Ana Theriot, P.E., 504-885-9892</p>	<p>BFM prepared a Route Topographic Survey for Phase 1 of the project, located at Elmwood Parkway and Craig Avenue. This project built upon work executed by the firm for a previous extensive surveying project involving Bissonet Plaza subdivision; this allowed for BFM to build upon established surveys to save time and expenses. Surveying for each element of the project included services included confirming all controls and benchmarks, topographic features, location of improvements and utilities, location of natural elements as applicable, and notation of right-of-way points.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020 March	N/A	\$7,980 (fee)

PROJECT NO. 2

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Lapalco Boulevard Bridge at Harvey Canal, (PW 2017-046-RBP; DOTD H.004396), Jefferson Parish, Louisiana</p> <p>Hardesty & Hanover 3850 N Causeway Blvd Ste 1850 Metairie LA 70002</p> <p>Babak Naghavi, 504-962-9212 bnaghavi@hardestyhanover.com</p>	<p>BFM Corporation provided extensive surveying services for a topographic survey and right-of-way (R/W) determination for the project. Project elements included setting GPS Static Control (5 permanent control points), traversing a proposed survey line, and land topography surveying. Additional phases include hydrographic topography/bathymetric surveying of the project area, the right-of-way determination, and subsurface utility engineering (SUE). Drone Surveying was utilized throughout the project. A Route Topographic Survey was also included as part of the scope, as was Subsurface Utility Engineering (SUE).</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020 September	N/A	\$478,744 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Orange Lane Drainage Pump Station Project (Drainage Mapping), Grand Isle, Jefferson Parish, Louisiana</p> <p>AIMS Group, Inc. 4421 Zenith Street Metairie LA 70001</p> <p>Lowell Pitré, P.E., 504-887-7045 ljp@aimsgroupinc.com</p>	<p>The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue. The scope includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020 August	N/A	\$32,280 (fee)

PROJECT NO. 4		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, Louisiana</p> <p>APTIM 2424 Edenborn Avenue Suite 450 Metairie LA 70001</p> <p>Gene S. Gillen, P.E., 504-832-4881 info@aptim.com</p>	<p>BFM provided topographic surveying services for Phase IV of the project, part of a multiphase program to improve drainage issues on Mounes Street. Phase IV of the project involved a topographic survey of the project, extending from Dickory Avenue to Elmwood Park Boulevard. Services provided by BFM included establishment of a baseline, setting temporary benchmarks (TBMs), elevation surveys, locating improvements and utilities as well as natural elements, and right-of-way surveying.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2017 December	N/A	\$23,540 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>West Bank Expressway, Phase I Drainage Map, from Peters Road to Manhattan Boulevard, Jefferson Parish, Louisiana</p> <p>Design Engineering 3330 W Esplanade Ave Ste 205 Metairie LA 70002</p> <p>John Holtgreve, P.E., 504-836-2155 jholtgreve@dei-engr.com</p>	<p>BFM provided topographic surveying services for the preparation of a drainage map for the project area. The Limits of Survey extended 300 feet in each direction on Peters Road, beginning at the westernmost right-of-way (R/W) Peters Road and terminating at the eastern edge of the Manhattan Boulevard intersection with the West Bank Expressway. The survey area further extended southerly and northerly down side streets (for 150 feet from the R/W) along the West Bank Expressway. BFM provided elevation shots on the gutter line and first lane divider on the east and westbound sections of the elevated structure. Sections on the elevated structure were taken at 25-foot intervals. A digital elevation model was also prepared.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2004 September	N/A	\$155,790 (fee)

PROJECT NO. 6		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, Louisiana</p> <p>GEC, Inc. 3445 N Causeway Blvd Ste 401 Metairie LA 70002-3779</p> <p>Jerome Lohmann, 504-207-6926 jlohmann@gecinc.com</p>	<p>BFM provided surveying services for this Drainage Evaluation Project (PW 2018-024-DR). The scope of services included a full Route Topographic Survey (includes all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work) from gutter line to gutter line along Metairie Road from the westerly apparent right-of-way (R/W) of Causeway Boulevard to easterly apparent R/W of Focis Street. The project encompassed approximately 10,400 linear feet, with cross-sections and elevations surveyed included as part of the scope.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020 May	N/A	\$18,350 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Coventry Drainage Pump Stations, Jefferson Parish, Louisiana</p> <p>ECM Consultants, Inc. 1301 Clearview Pkwy Ste 200 Metairie LA 70001</p> <p>Sunina Shrestha, 504-885-4080 SShrestha@ecmconsultants.com</p>	<p>BFM provided a Route Topographic Survey with Hydrographic Survey for the project, located in River Ridge, Louisiana. The limits of survey extended from r/w to r/w along Jefferson Highway. The levee and hydrographic survey area was noted as 400 feet wide (200 ft. in either direction of the extended centerline of Colonial Heights Road). Drone Surveying was a key element of the project. The hydrographic survey extended 500 feet into the river from the water's edge.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020	N/A	\$89,780 (fee)

PROJECT NO. 8		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Waggaman Canal Relocation Survey (Jefferson Parish Landfill Sites), Jefferson Parish, Louisiana</p> <p>CDMSmith 1515 Poydras St Ste 1000 New Orleans LA 70112</p> <p>Jenny Bywater, P.E., 504-799-1168 bywaterje@cdmsmith.com</p>	<p>BFM Corporation was contracted to provide boundary, right-of-way, and topographic surveying services for the project site. Location of improvements were plotted within the designated limits of the survey; this included buildings, fences, light standards, traffic control devices, signage, structures, pavement, and other topographic features. Existing storm sewer and sanitary sewers were located using top of casing; invert elevations were provided on the survey.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2016 February	N/A	\$19,940 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Revere Road W-3 Drainage Survey, St. Tammany Parish, Louisiana</p> <p>St. Tammany Parish Post Office Box 628 Covington LA 70434</p> <p>Beverly Mathies, 985-898-2520 procurement@stpgov.org</p>	<p>BFM provided surveying services to the St. Tammany Parish Government (Survey Services Contract No. 16-104) for this Drainage Survey project on Revere Road. The scope of services included a boundary survey with notation of improvements. Extensive records research was a precursor to the execution of the field survey. BFM also provided cross sections of Bayou De Zaire and of the drainage feature with notation of natural ground features, improvements, encroachments, and easements/servitudes. Upon completion, BFM provided AutoCAD maps and parcel property descriptions to the Parish.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020 May	N/A	\$18,960 (fee)

PROJECT NO. 10		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Brewster Road Subsurface Drainage Improvements and Proposed Detention Pond, St. Tammany Parish, Louisiana</p> <p>N-Y Associates, Inc. 2750 Lake Villa Drive Metairie LA 70002</p> <p>Fred Mortali, 419-346-6282 fmortali@n-yassociates.com</p>	<p>BFM provided multiple surveying services (including Route Topographic, Right-of-Way, Drainage Study, Property Acquisition) for the Brewster Road Subsurface Drainage Improvements and Proposed Detention Pond in St. Tammany Parish. The Limits of Survey included the area of Brewster Road between LA HWY 1077 and LA HWY 21; BFM provided Temporary Benchmarks, location of all improvements (natural and man-made) and utilities (including drainage, sewer, and water structures), and coordination with State and Local agencies. BFM took cross-sections at 100 ft. intervals and property corners along the route to determine rights-of-way.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020 September	N/A	\$203,320 (fee)

TEC Professional Services Questionnaire

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

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1.	<div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%;"> <p style="text-align: center;"><i>BFM Corporation is not currently, nor has it previously been involved, in litigation with Jefferson Parish.</i></p> </div>	
2.		
3.		
4.		

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

BFM CORPORATION, LLC

Professional Land & Hydrographic Surveying

CRITERIA 1 • PROFESSIONAL TRAINING AND RELEVANT PROJECT EXPERIENCE

Established in 1982, **BFM Corporation, LLC, Professional Land & Hydrographic Surveying**, has provided services to public & private concerns throughout Louisiana and the Gulf South. The firm provides surveying services covering all facets of engineering, construction, and forensics; topographic, hydrographic, and high definition laser scanning.

BFM is a majority Woman-Owned Business Enterprise (WBE) as well as a Hudson Initiative certified Small & Emerging Business and Small Entrepreneurship in Louisiana.

Our capabilities include the following and more:

- **Topographic Surveying**
- **Drone Surveying / Photogrammic and LiDAR**
- **Bathymetric / Hydrographic Surveys**
- **Property, Boundary, and Right-of-Way Surveys**

TEC Professional Services Questionnaire

N. continued.

- **Maps, Cross-Sections, and Data Sets**
- **3D Laser Scanning**
- **Benchmarks**
- **Construction-Related Surveying**
- **Builder's Package Surveys**
- **American Land Title Association (ALTA) Surveys**

BFM's project work routinely involves **extensive records and related research** as an element of successful completion, as well as coordination with the client, agency or department. BFM has the personnel to make sure this is done correctly and expeditiously.

Our **Survey Field Crews** are equipped with Leica Viva and Leica Captivate Data Collectors, as well as Leica GPS Smart Antennas. Each GPS unit is linked to the Leica SmartNet Network, giving each crew the ability for Real Time Kinematic Positioning (RTK), derived from the Global Navigation Satellite System (GNSS). Furthermore, each crew is outfitted with Leica TS series robotic total stations, simplifying and expediting projects. BFM can also use in-house drones and 3D scanners to further analyze sites and projects. BFM's crews are trained to use this equipment to its full potential to maximize accuracy and efficiency in the field.

BFM offers **Drone Surveying Services**, featuring a DJI Matrice 600 Pro drone outfitted with a Sony A7R3 42-megapixel camera, Pixhawk Triggering System, VMAP PPK system, and an A3 Pro Flight Controller. It can capture 50 acres of land in that time (with a flight ceiling of 165 feet, pixel quality is 0.71 CM). This allows BFM to quickly & accurately capture data and facilitates quicker field work to produce highly accurate and precise surveying information. Deliverables feature Clean Point Cloud, 3D Mesh, Orthomosaic, and AutoCAD DWG Topographic.

BFM's **3D modeling capabilities** allow us to process & model for any design purpose. High-definition scanner data is processed using software from Leica and Autodesk. BFM is working on non-traditional survey deliverables, including virtual tours, live walkthroughs, detailed pipe rack modeling, and modeling for use with Autodesk Revit Architecture.

When needed, BFM Corporation provides **bathymetric surveying** to handle any **hydrographic surveying** tasks. For large rivers and bodies of water, BFM is equipped with Teledyne Odom Hydro Solutions' Hydro Trac Single Beam Echo Sounder. For smaller bodies of water, BFM uses an SL20 Remote Controlled Boat equipped with CEE Scope Dual Channel Echo Sounder. The firm uses Hypack Software to process collected data. Further, BFM can execute multi-beam scans, side scans and magnetometer surveys upon request.

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

TEC Professional Services Questionnaire

N. continued.

CRITERIA 2 • CAPACITY FOR TIMELY COMPLETION OF NEWLY-ASSIGNED WORK

BFM Corporation has the manpower and equipment to execute any surveying task within the reasonable time set forth by the contract or project engineer. It is our continual goal to keep this reputation solid. We establish base costs and fees for our services, and work with our clients to meet all project budgets. Our workload and scheduling, and proximity to the project site, will allow for quick assignment of personnel to any directed project.

BFM Corporation's **Ralph P. Fontcuberta, Jr., PLS**, is a **Louisiana-Registered Professional Land Surveyor (since 1974)** and meets or exceeds any minimum requirements for any surveying project. He has been **providing surveying services in Louisiana for over 50 years** and brings an almost incalculable wealth of experience in the region to any project, especially in Southeast Louisiana.

BFM's **Chad M. Poché, P.E.** brings **more than 25 years of experience** to assist in completing projects on time and within budget. He has been a consulting geotechnical engineer for more than 20 years in South Louisiana and has been the geotechnical engineer of record for thousands of projects throughout his career.

Our personnel included **multiple survey crews** and a **fully-staffed drafting department** to handle any project needs; they are thoroughly trained and extensively familiar with the region and needs of various types of surveying projects.

CRITERIA 3 • LOCATION OF PRINCIPAL OFFICE

BFM has called **Jefferson Parish home office location since the firm's inception in 1982**; our principal office is located in Jefferson Parish at **15 Veterans Memorial Boulevard** in Kenner.

CRITERIA 4 • ADVERSARIAL LEGAL PROCEEDINGS WITH PARISH

BFM Corporation is **not involved in litigation with Jefferson Parish** nor with any of our clients, as is noted in *Item M* of this form.

CRITERIA 5 • PRIOR SUCCESSFUL COMPLETION OF PROJECTS

For nearly 40 years, BFM Corporation has completed thousands of projects throughout Jefferson Parish and Southeast Louisiana, both to municipal and various private clients, similar to the project at hand, not to mention other drainage projects in a wide range of sizes, from small lot to Parish-wide endeavors. **Multiple examples of this work are included throughout this form in both the Personnel Résumés section (Item K) and Representative Project Work (Item L).** Further, BFM has worked with virtually every municipality in the region. We enjoy a high repeat-business rate with all our clients. We offer the following specific references for contact:

- **Mark R. Drewes, P.E.**, Director, Jefferson Parish Public Works Department (504-736-6783 | JPPW@jeffparish.net)
- **Neil Schneider, CCM, P.E.**, Director, Capital Projects, Jefferson Parish Public Works Department (504-736-6783 | JPPW@jeffparish.net)

TEC Professional Services Questionnaire

N. continued.

- **Angela DeSoto, P.E.**, Director of Engineering, Jefferson Parish (504-736-6511 | ADeSoto@jeffparish.net)
- **Sid Trouard, P.E.**, Program Manager, Jefferson Parish Sewerage Capital Improvement Program (504-736-6386 | STrouard@jeffparish.net)
- **Tom Schreiner**, Deputy CAO, Public Works & Capital Projects, City of Kenner (504-468-7515 | tschreiner@kenner.la.us)
- **Greg Cromer**, Mayor, City of Slidell (985-646-4333 | gcromer@cityofslidell.org)

Our professional work history is exemplary. We strive to provide on-time and technically thorough project deliverables at the budget set by our clients.

CRITERIA 6 • SIZE OF FIRM

As noted, BFM has the manpower and equipment to execute any surveying task within the reasonable time set forth by the contract or project engineer. BFM has no issue with meeting the project deadlines set forth by our clients, both municipal and private. It is our continual goal to keep this reputation solid. Further, we establish base costs and fees for our services, and work with our clients to meet all project budgets.

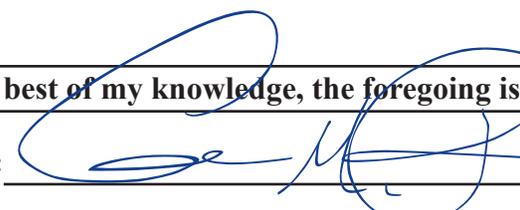
As noted in **item E of this form**, BFM currently has a **full time staff of two dozen people**, including **two Registered Professional Land Surveyors, Survey Field Crew Personnel, and AutoCAD drafting personnel**, as well as **complete administrative and support staff**.

CRITERIA 7 • PAST PERFORMANCE ON PARISH CONTRACTS

BFM has provided surveying services in **Jefferson Parish since 1982**, both **directly to Parish agencies and as a consultant to firms serving the Parish**. The firm has executed many hundreds of projects in the Parish, including both direct Parish projects and agency projects (CPRA, Louisiana DOTD, etc.), not to mention the scores of surveying projects for private individuals and industry.

As noted, Mr. Fontcuberta has **over half a century of professional land surveying experience**, including nearly 40 years with BFM. He has provided professional surveying services for **thousands of projects for and throughout Jefferson Parish**. Additional information beyond the scope of this RFQ response is available upon request.

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

Signature:  Print Name: Chad M. Poché, P.E.
Title: Executive Vice President Date: March 10, 2022

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

Name: BFM Corporation, LLC
Public Address: 15 Veterans Memorial Boulevard
Kenner, Louisiana 70062

License/Certificate Information w/ Supervision

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



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

Mr. Ralph P. Fontcuberta Jr.

License/Certificate Type - Number Expiration Date
PLS.0004329 09/30/2022

Status: **Active**



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

Mr. Chad Mitchell Poche

License/Certificate Type - Number Expiration Date
PE.0027667 09/30/2022

Status: **Active**



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

Mr. Gary James Lambert Jr.

License/Certificate Type - Number Expiration Date
PLS.0005259 03/31/2023

Status: **Active**



Division of Small and Emerging Business Development
SEBD CERTIFICATION

BFM CORPORATION, LLC

is hereby certified as a Small and Emerging Business Enterprise.

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

Issued at Baton Rouge, Louisiana 7/19/2019

This certification expires on: 7/19/2029

Certification No. 9551

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



DIVISION OF SMALL BUSINESS SERVICES

This certification acknowledges that

BFM CORPORATION, LLC

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

This certification is valid from 9/28/2021 to 9/28/2022 .

Certification No. 9551

Stephanie Hartman,
Director, Small Business Services

Linfield, Hunter & Junius, Inc.
TEC Questionnaire



TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Professional Engineering and Supplemental Services for a (Surveying Services)
 Drainage Master Plan for the East Bank of Jefferson Parish
 Resolution No. 138896
 SOQ 22-014

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

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



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

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

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

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

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

<u>5</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u>1</u> Architects (Licensed)	<u> </u> Geologists	<u>4</u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u> </u> Graduate Engineers
<u>6</u> Civil Engineers (Licensed)	<u> </u> Interior Designers	<u> </u> Project Managers
<u>5</u> Construction Inspectors	<u> </u> Landscape Architects	<u>1</u> Clerical
<u> </u> Ecologists	<u>5</u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u> </u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u>4</u> Engineer Intern	<u> </u> Environmental Engineers	<u>3</u> CADD Drafters
<u>2</u> Professional Land Surveyors	<u>1</u> Architect Intern	<u>37</u> TOTAL

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

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

TEC Professional Services Questionnaire

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

- 1. N/A
- 2.

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

YES NO N/A

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

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

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

10

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 and
Supplemental Services for a
Drainage Master Plan for the East
Bank of Jefferson Parish
SOQ No. 22-014
Resolution No. 138896

Prime



BURK-KLEINPETER, INC.

Subconsultant



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

Nathan J. Junius, P.E., P.L.S.
Project Manager / Surveying

Land Surveying

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

Daniel D. Bindewald
Survey Party Chief

Paul H. Morales, IV
Survey Party Chief

Vincent J. Leco, III, E.I.
Survey Crew

Cooper G. Ashworth, E.I.
Survey Crew

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, 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:

20 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, of streets, wastewater treatment plants, sewage collections systems, sewer force mains and waterline distribution miles 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

TEC Professional Services Questionnaire

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

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

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

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



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:

13 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.

DESIRE NEIGHBORHOOD TOPOGRAPHIC AND SUBSURFACE SURVEY, NEW ORLEANS, LA

LH&J provided topographic surveying services for the project that consisted of the patching and reconstruction of 20,285 linear feet of roadway across 39 blocks, construction of new concrete roadway, replacement of the storm drainage system, sewer lines and water mains. Role: Survey Party

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.

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:

9 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:

DESIRE NEIGHBORHOOD TOPOGRAPHIC AND SUBSURFACE SURVEY, NEW ORLEANS, LA

LH&J provided topographic surveying services for the project that consisted of the patching and reconstruction of 20,285 linear feet of roadway across 39 blocks, construction of new concrete roadway, replacement of the storm drainage system, sewer lines and water mains. Role: Survey Party

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

TEC Professional Services Questionnaire

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

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

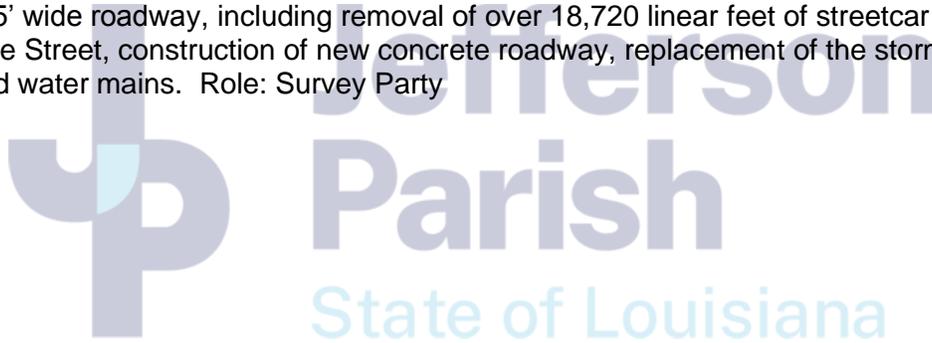
Hydrographic survey of approximately 150 acres in Southshore Harbor including portions of the navigation channel and Lake Pontchartrain. Included cross sections and profiles of approximately 10 acres of the north peninsula floodwall for a potential dredge spoil area.

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

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Vincent J. Leco, III, E.I., Survey Party

Project Assignment:

Survey Party

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

2 Year

Education: Degree(s)/Year Specialization:

University of New Orleans - B.S. / 2018 / Civil Engineering

Active registration: Year first registered/discipline:

Civil / LA License / EI. 0034160

Other experience and qualifications relevant to the proposed Project:

RELEVANT EXPERIENCE:

DESIRE STREET NEIGHBORHOOD SURVEY, NEW ORLEANS, LA

Assisted in drafting the approximately 21,000 LF Desire Neighborhood Survey. This survey included identifying topographic and underground utility features. This survey was assigned for future street, subsurface drainage and underground utility improvements for the Desire Neighborhood in New Orleans, LA.

SELA 72.2 SURVEY, NEW ORLEANS, LA

Assisted in constructing the Limits of Construction and Utility Disposition Plans along General De Gaulle Dr. for the Southeast Louisiana Urban Flood Damage Reduction Project (SELA 72.2) in New Orleans, LA.

HAYNE BOULEVARD RELIEF WELL DRAINAGE, NEW ORLEANS, LA

Assisted in drafting the survey for the Hayne Boulevard relief well system. This survey was assigned to locate relief well structures and to identify the current drainage system for future drainage improvements along Hayne Blvd. in New Orleans, LA.

GEISENHEIMER CANAL IMPROVEMENTS, METAIRIE, LA

Assisted project engineer in design of a 8'X12' box culvert paralleling existing Geisenheimer drainage canal over a distance of approximately 2,800 linear feet. Box culvert is structurally integrated with existing drain lines at three junction box tie-in locations.

TEC Professional Services Questionnaire

Vincent J. Leco, E.I.
Project Assignment – Survey Party

LOUMOR OUTFALL DITCH IMPROVEMENTS, METAIRIE, LA

Assisted project engineer in design of two (2) new underground drainage lines. One drainage line consist of 78" X 122" Reinforced Concrete Pipe Arch (RCPA) segments along the existing drain line identified as Loumor Ditch combining to approximately 1,300 linear feet. The second line consists of a 9'X6' box culvert spanning approximately 320 linear feet. These new segments will tie-into the existing below-grade Geisenheimer Canal box culvert that extends along Airline Drive.

MAGAZINE STREET RECONSTRUCTION (LEAKE AVENUE TO EAST DRIVE), NEW ORLEANS, LA

Assisted project engineer in reconstruction of Magazine Street from Leake Avenue to East Drive. The reconstruction includes regrading, new striping, adjustment of utility manholes where applicable, removal & replacement of roadways and sidewalks, and installation of ADA ramps.

MAF BUILDING 103 DRAINAGE STUDY, NEW ORLEANS, LA

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

PEPSI BUIDING CONCRETE REPAIRS, RESERVE, LA

Resident Inspector for various concrete repairs to the 150,000 SF warehouse building for the Port of South Louisiana.



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Cooper G. Ashworth, E.I., Survey Party

Project Assignment:

Survey Party

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

1 Year

Education: Degree(s)/Year Specialization:

Louisiana State University/B.S./2021/Civil Engineering
FAA Certified Remote Pilot License/2021

Active registration: Year first registered/discipline:

2021 / Civil / LA License / EI.0034948

Other experience and qualifications relevant to the proposed Project:

RELEVANT EXPERIENCE:

ST. JAMES SOLAR, VACHERIE LA, ST. JACQUES SOLAR, VACHERIE LA, AND SUNLIGHT ROAD SOLAR, FRANKLINTON, LA

LH&J was responsible for conducting topographic and boundary surveys for 4,500 acre solar farm facility in Vacherie and Franklinton, LA. The projects consisted of surveying both through traditional surveying and by utilizing Lidar scanning technology. The project fee was over \$250,000.00.

Determined site boundaries, provided contours and, collected georeferenced aerial imagery to provide a construction progress exhibit to the client, collected georeferenced aerial imagery to assist in the development of servitudes and parcels of land.

RENE INDUSTRIES SAND PIT, DARROW, LA

LH&J provided land surveying in conjunction with the permitting of levee crossings and a sand pit on the batture. The project was permitted through CPRA, PLD and LADNR through the use of a Joint Permit Application.

FRANCE ROAD YARD SURVEY, NEW ORLEANS, LA

Approximately 20 acre survey for the NOPBRR for the expansion of a railyard. Included topographic survey, hydrographic surveying of the industrial canal, aerial imagery and survey baseline control.

ORPHEUM AVENUE, NEW ORLEANS, LA

Topographic Survey Drafting, Drone Surveying, Photogrammetry

XPLORE CREDIT UNION, METAIRIE, LA

Boundary Survey Drafting

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

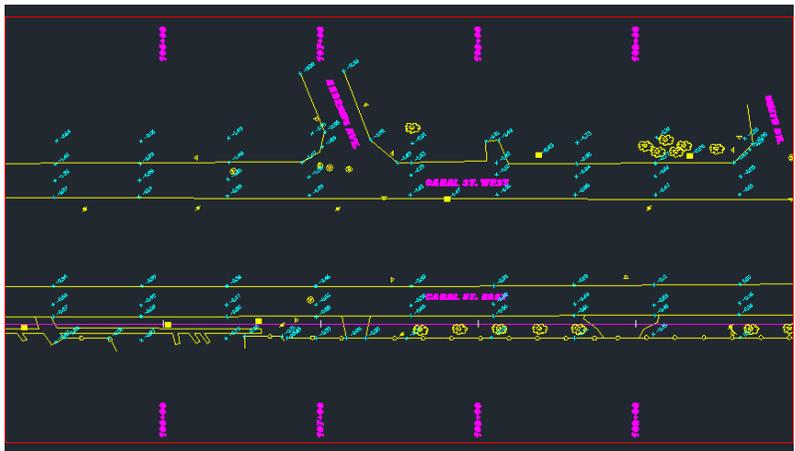
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
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**Canal Street Roadway Improvements
Topographic Survey**

**Jefferson Parish
Department of Capital Projects
1221 Elmwood Park Blvd., Suite 906
Jefferson, LA 70123
Neil D. Schneider, CCM, P.E.
(504) 736-6833**

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.

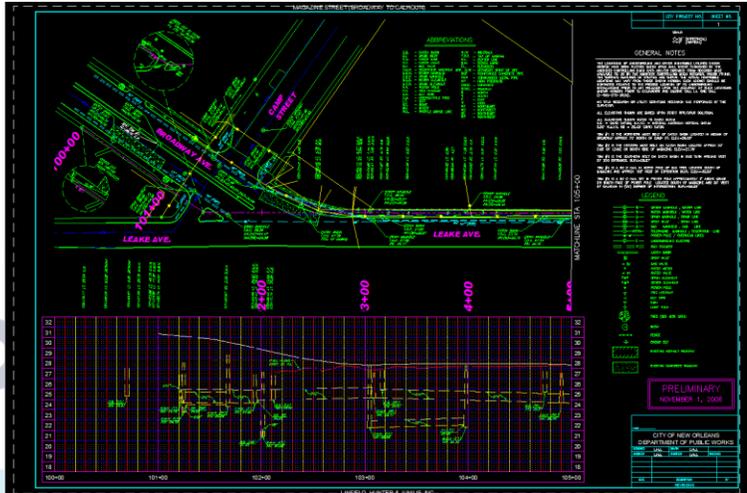
- Key Relevant Features**
- ✓ **Jefferson Parish Project**
 - ✓ **Topographic Survey**
 - ✓ **Differential Level for Project Benchmarks**
 - ✓ **Baseline Establishment**



Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

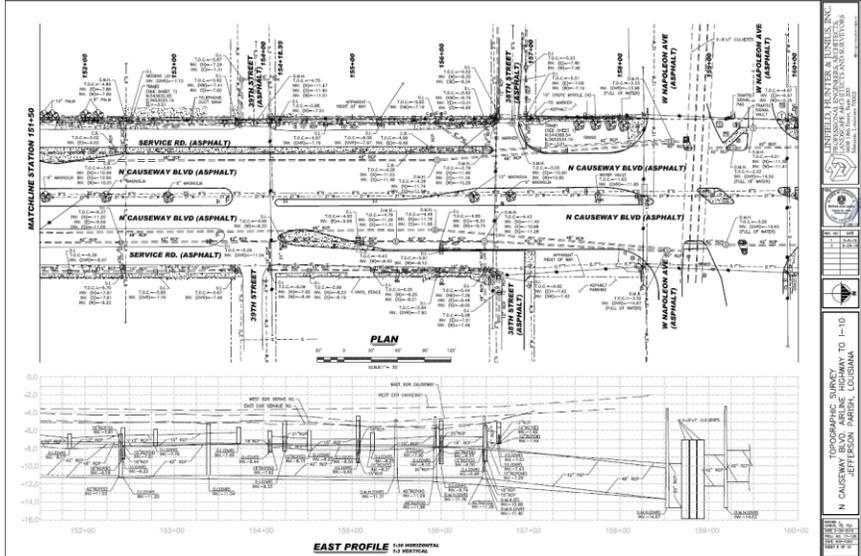
2019	\$54,500 (Topo Survey)	\$54,500 (Topo Survey)
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TEC Professional Services Questionnaire

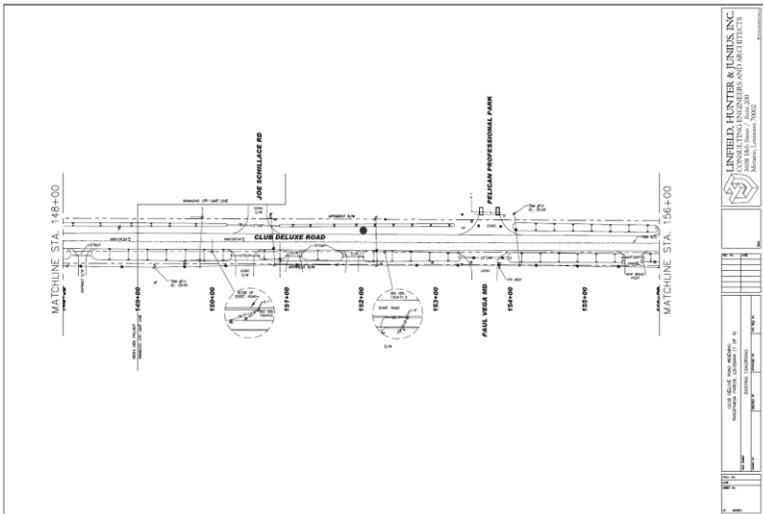
PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Magazine Street Topographic Survey New Orleans, LA</p> <p>City of New Orleans Department of Public Works 1300 Perdido Street, Room 6W03 New Orleans, LA 70112 Alan Weber (504) 658-8209</p> <div style="text-align: center; margin-top: 20px;">  </div>	<p>Linfield, Hunter & Junius, Inc. provided topographic surveying for Magazine Street Improvements between Broadway and Nashville. The survey was used as the basis for the roadway improvements design.</p> <div style="text-align: center; margin-top: 20px; border: 1px solid gray; background-color: #f0f0f0; padding: 10px;"> <p>Key Relevant Features</p> <ul style="list-style-type: none"> ✓ 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>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021	\$175,000 (Topo Survey)	\$175,000 (Topo Survey)

TEC Professional Services Questionnaire

PROJECT NO. 3

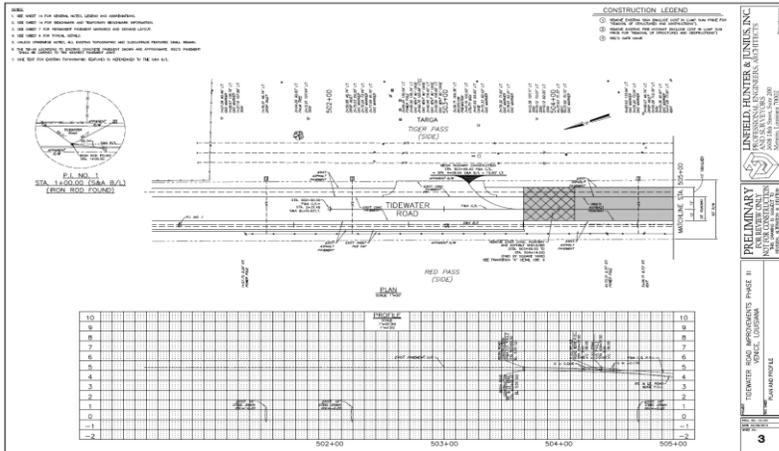
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Causeway Boulevard Survey Metairie Road to W. Napoleon Avenue Metairie, LA</p> <p>Jefferson Parish Department of Capital Projects 1221 Elmwood Park Blvd, Suite 906 Jefferson, LA 70123 Neil D. Schneider, CCM, P.E. (504) 736-6833</p> <div style="text-align: center; margin-top: 20px;">  </div> <div style="text-align: center; margin-top: 20px;">  </div>	<p>LHJ performed a full topographic survey of Causeway Boulevard between Metairie Road and West Napoleon Avenue (5700 L.F. approximately). Existing improvements, utilities, limits of paving, fencing, sidewalks, and signage were located. Cross Sections were performed every 50 ft. and a plan and profile drawing of Causeway Boulevard and the adjacent service roads was delivered.</p> <div style="border: 1px solid gray; padding: 10px; margin-top: 20px; background-color: #f0f0f0;"> <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 <p style="text-align: center; margin: 10px 0 0 0;">Key Relevant Personnel</p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S. ✓ Daniel D. Bindewald ✓ Paul H. Morales, IV </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:
2019	\$200,000 (Topo Survey)	\$200,000 (Topo Survey)

TEC Professional Services Questionnaire

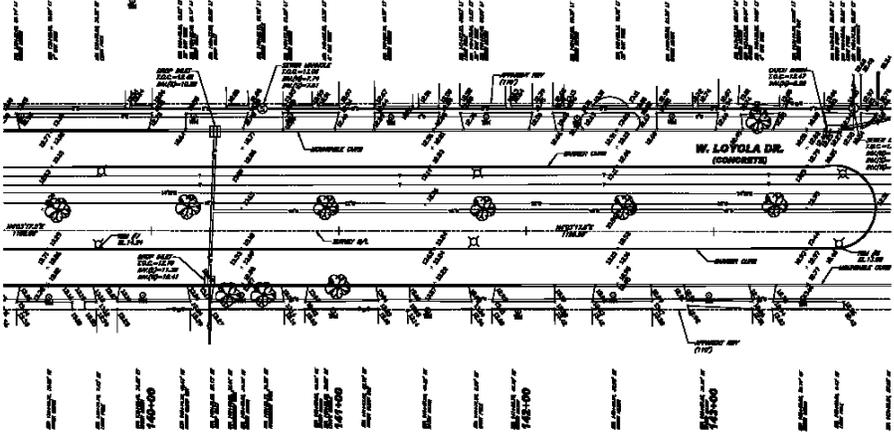
PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Club Deluxe Road Right-of-Way and Topographic Survey Hammond, LA</p> <p>Tangipahoa Parish P.O. Box 215 Amite, LA 70422 Wesley Danna (985) 340-9028</p> <div style="text-align: center; margin-top: 20px;">  </div>	<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 gray; padding: 5px; margin-top: 10px; background-color: #f0f0f0;"> <p style="text-align: center; margin: 0;">Key Relevant Features</p> <ul style="list-style-type: none"> ✓ Topographic Survey of Roadway ✓ Right of Way Survey ✓ Benchmark Loop </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:
06/2014	\$30,500 (Topo Survey)	\$30,500 (Topo Survey)

TEC Professional Services Questionnaire

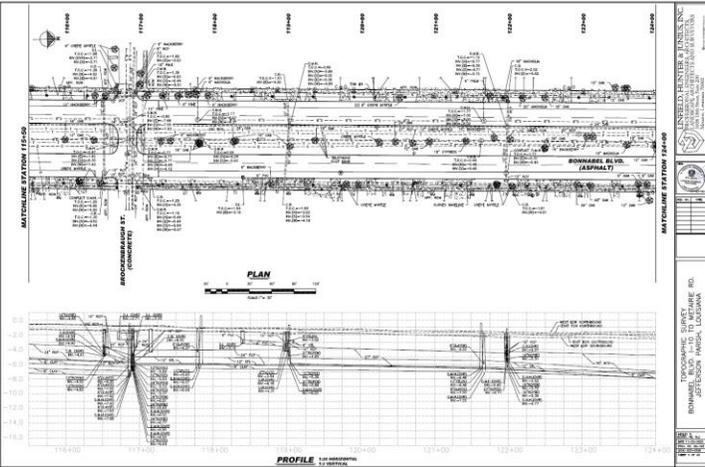
PROJECT NO. 5

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Tidewater Road Topographic Survey Venice, LA</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; border: 1px solid gray; padding: 10px; margin: 10px 0;"> <p>Key Relevant Features</p> <ul style="list-style-type: none"> ✓ Topographic Survey ✓ Baseline Establishment ✓ Hydrographic Surveying </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:
2014	\$99,500 (Topo Survey)	\$99,500 (Topo Survey)

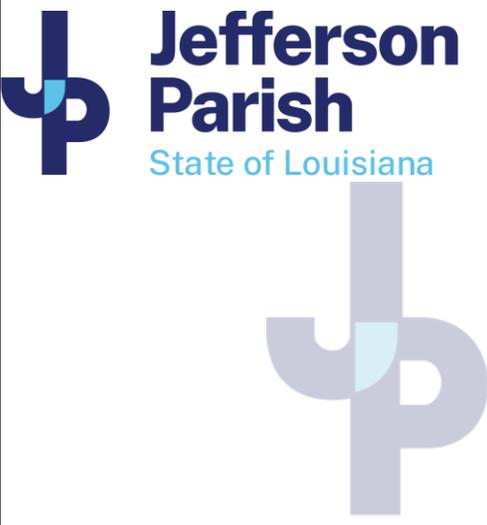
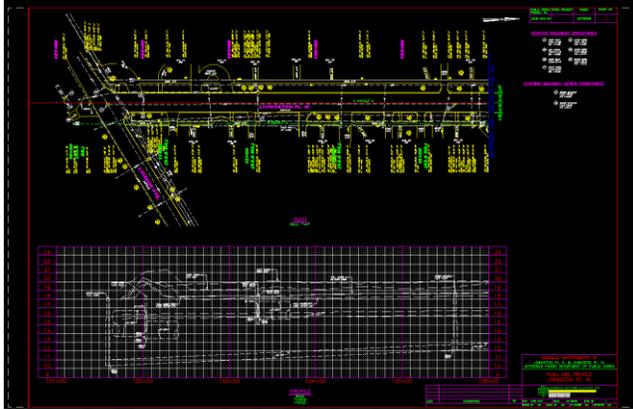
TEC Professional Services Questionnaire

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="text-align: center; margin-top: 20px;">  </div> <div style="text-align: center; margin-top: 20px; background-color: #e6f2ff; padding: 10px; border: 1px solid #ccc;"> <p>Key Relevant Features</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>Bonnabel Boulevard Survey Metairie Road to I-10 Service Road 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>LH&J performed a full topographic survey of Bonnabel Boulevard between Metairie Road and I-10 (3900 L.F. Approximately). Existing improvements, utilities, limits of paving, fencing, sidewalks, and signage were located. Cross Sections were performed every 50 ft. and a plan and profile drawing of Bonnabel Boulevard was delivered.</p> <div style="border: 1px solid gray; background-color: #f0f0f0; padding: 10px; margin-top: 20px;"> <p style="text-align: center; margin: 0;"><u>Key Relevant Features</u></p> <ul style="list-style-type: none"> ✓ Jefferson Parish Project ✓ Topographic Survey ✓ Differential Level for Project Benchmarks ✓ Baseline Establishment <p style="text-align: center; margin: 10px 0 0 0;"><u>Key Relevant Personnel</u></p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S. ✓ Daniel D. Bindewald ✓ Paul H. Morales, IV </div> <div style="text-align: center; margin-top: 20px;">  </div>							
	<div style="text-align: center; background-color: #0070C0; color: white; padding: 5px; font-weight: bold;">Estimated Cost:</div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr style="background-color: #0070C0; color: white;"> <th style="width: 35%; padding: 5px;">Completion Date (Actual or estimated):</th> <th style="width: 30%; 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: 20px 5px;">2020</td> <td style="text-align: center; padding: 20px 5px;">\$88,254 (Topo Survey)</td> <td style="text-align: center; padding: 20px 5px;">\$88,254 (Topo Survey)</td> </tr> </tbody> </table>		Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:	2020	\$88,254 (Topo Survey)	\$88,254 (Topo Survey)
Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:						
2020	\$88,254 (Topo Survey)	\$88,254 (Topo Survey)						

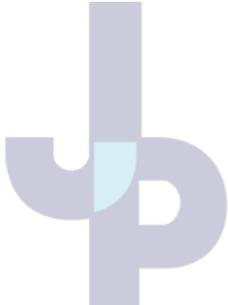
TEC Professional Services Questionnaire

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> 	<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="border: 1px solid gray; padding: 5px; background-color: #f0f0f0; margin: 10px 0;"> <p align="center">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="display: flex; justify-content: space-around; align-items: center;">   </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2008	\$38,000 (Topo Survey)	\$38,000 (Topo Survey)

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>B.W. Cooper, Gert Town, Dixon Group E New Orleans, Louisiana</p> <p>City of New Orleans Department of Public Works 1300 Perdido Street, Room 6W03 New Orleans, LA 70112 Nguyen Phan (504) 658-8000</p> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div>	<p>General Project Description The City of New Orleans Department of Public Works is undertaking FEMA-funded street and sidewalk rehabilitation in the BW Cooper, Gert Town, and Dixon neighborhoods. Linfield, Hunter & Junius performed the surveying as a sub to Pivotal Engineering for the redevelopment of the streets and sidewalks for the project. Design improvements within the area include a range of point repairs for failing and damaged surfaces, full reconstruction, and patch mill and overlay of existing streets.</p> <p>Scope and Methodology Linfield, Hunter & Junius performed to date approximately 17 blocks (5, 245 feet) of topographic survey within the neighborhood. LH&J survey duties included locating improvements, establishing a baseline parallel with the right of way, locating visible and non-visible utilities by way of one call markings and maps provided by utility companies. In addition, apparent right of way was established, two temporary benchmarks were provided for each block and cross sections were taken at 50 ft. intervals including top of curb, gutter, and centerline elevations.</p> <p>After Field Work was completed, LH&J delivered plan and profile drawings of each block. Along with location of improvements in plan view, these topographic surveys included profiles of existing street centerline, gutter, and sewer and drainage structures.</p> <p>Results The completed surveys were submitted to Pivotal Engineering for use in their street improvement designs. Currently those designs are under review by the Department of Public Works with construction slated to begin in December 2020</p> <div style="float: right; background-color: #D9E1F2; padding: 10px; border: 1px solid #0070C0; width: 250px;"> <p style="text-align: center; margin: 0;"><u>Relevant Key Features</u></p> <ul style="list-style-type: none"> ✓ Topographic survey ✓ Plan and Profile Survey ✓ Survey Baseline ✓ Temporary Benchmarks ✓ Apparent Right of Way ✓ Visible and Non-Visible Utility Location <p style="text-align: center; margin: 10px 0 0 0;"><u>Relevant Key Personnel</u></p> <ul style="list-style-type: none"> ✓ Mark K. Annino, E.I. ✓ Nathan J. Junius, P.E., P.L.S. ✓ Richard A. Van Wootten, P.E. ✓ Robert E. Nockton, P.E. ✓ Luis F. Sosa, P.E. ✓ Anthony F. Goodgion, P.E. ✓ Daniel D. Bindewald ✓ Paul H. Morales, IV ✓ Darla L. Morales </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020	\$62,000 (Topo Survey)	\$62,000 (Topo Survey)

TEC Professional Services Questionnaire

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Jefferson Highway Survey Deckbar Ave. to Coolidge Street Harahan, LA</p> <p>Ochsner Health Systems 1514 Jefferson Highway New Orleans, LA 70121 Mr. Jay Britsch</p>   	<p>LH&J performed a full topographic survey and boundary survey of the existing right of way of Jefferson Highway between Deckbar Avenue and Coolidge Street. Existing improvements, utilities, limits of paving, fencing, sidewalks, and signage were located. The project was performed in anticipation of a beautification project Ochsner has planned for the corridor.</p> <div style="border: 1px solid gray; padding: 5px; background-color: #f0f0f0;"> <p align="center"><u>Key Relevant Features</u></p> <ul style="list-style-type: none"> ✓ Topographic Survey ✓ Differential Level for Project Benchmarks ✓ Baseline Establishment ✓ Boundary Survey of existing right of way <p align="center"><u>Key Relevant Personnel</u></p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S. ✓ Daniel D. Bindewald ✓ Paul H. Morales, IV </div> 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2/2021	\$70,000	\$70,000

TEC Professional Services Questionnaire

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

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

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 **two full time Registered Professional Land Surveyors** and maintains **four 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.

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.

Linfield, Hunter & Junius, Inc. firm principal Nathan J. Junius, P.E., P.L.S., PTOE is a Registered Professional Civil Engineer and **Registered Land Surveyor** in Louisiana with over twenty (20) years' experience in land surveying.

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

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 engineer in the State of Louisiana. 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 **two full time Registered Professional Land Surveyors** and maintains **four fully staffed survey field crews** who are equipped with modern vehicles and state of the art survey equipment for both conventional and GPS surveying. Our crews have worked in difficult terrain conditions, including coastal marshes, and are equipped for and experienced at performing topographic, boundary, topographic bathymetric, right-of-way, control, and hydrographic surveys as well as performing bench leveling, construction layout surveys and settlement monitoring surveys. Our CADD Drafters are highly experienced in working with both Bentley MicroStation and Autodesk AutoCAD as required. LH&J also utilizes add in modules such as ArcView, Civilsoft and InRoads to

TEC Professional Services Questionnaire

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 – 20 years of land surveying experience
- William J. Muller, P.L.S./Professional Land Surveyor – 40+ 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.

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.

TEC Professional Services Questionnaire

2. Capacity for Timely Completion of the Project

Linfield, Hunter & Junius, Inc. (LH&J) currently employs thirty-seven (37) highly qualified design professionals, and has been providing quality engineering services in Southeast Louisiana for over thirty (30) years.

3. 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.



4. Adversarial Legal Proceedings

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

5. Prior Successful Completion of Projects Requiring Surveying Services 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
- 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

TEC Professional Services Questionnaire

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

6. 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

7. 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.

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

TEC Professional Services Questionnaire

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.

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: President

Date: March 24, 2022

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

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

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0000510	ACTIVE	05/23/1979	03/31/2023	Mr. Nathan John Junius # PE.0031843 - Active

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

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

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
VF.0000532	ACTIVE	06/15/2004	09/30/2022	Mr. Nathan John Junius # PLS.0004958 - Active

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9643 Brookline Avenue | Suite 121 | Baton Rouge, LA 70809-1433
 225-925-6291 | Fax 225-925-6292

N-Y Associates, Inc.
TEC Questionnaire



N-Y TEAM ORGANIZATION CHART



Drainage Master Plan for the
East Bank of Jefferson Parish
Resolution No. 138896



Principals / Project Oversight
N-Y Associates, Inc.
Frank Nicoladis, PE
Michael Nicoladis, EI, MBA

Project Management
N-Y Associates, Inc.
Constantine Nicoladis, PE, Project Manager

**Civil & Hydraulic Engineering
(including H&H Modeling)**
N-Y Associates, Inc.
Patricia R. Claverie, EI, MS*
Fred Mortali, PE*
W. Tully Rhodes, PE*
James Simmons, PE
William Haensel, PE, PLS
Neil Logan, PE
Dennis Voss, NICET

CADD / GIS
N-Y Associates, Inc.
Noah Jackson
Chris LeMay

* H&H Modeling Expertise

TEC PROFESSIONAL SERVICES QUESTIONNAIRE



A. Project Name and Advertisement Resolution Number:
 Drainage Master Plan for the East Bank of Jefferson Parish
 Resolution No. 138896

B. Firm Name & Address where Project work will be performed:
 N-Y Associates, Inc.
 2750 Lake Villa Drive
 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
 Frank Nicoladis, PE, President
 TEL No.: (504) 885-0500
 FAX No.: (504) 885-0595
fnicoladis@n-yassociates.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.
 Constantine F. Nicoladis, PE, Vice President
 TEL No.: (504) 885-0500
 FAX No.: (504) 885-0595
cnicoladis@n-yassociates.com

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

4	Administrative	*	Estimators	**	Specification Writers
3	Architects (Licensed)	--	Geologists	3	Structural Engineers
--	Chemical Engineers	--	Geotechnical Engineers	--	Graduate Engineers
6	Civil Engineers	--	Interior Designers	--	Project Managers
3	Construction Inspectors	--	Landscape Architects	--	Clerical
--	Ecologists	--	Land Surveyor	--	Grant/Funding Specialist
--	Electrical Engineers	--	Mechanical Engineers	***	Sanitary Engineers
1	Engineer Intern (Civil)	--	Environmental Engineers	****	Transportation Engineers
--	Professional Land Surveyors	1	Planners Urban/Regional	3	CAD Operators
				1	Eng. Technicians (Civil)
				25	TOTAL

- * *N-Y senior technical personnel prepare estimates.*
- ** *N-Y senior technical personnel write specifications.*
- *** *N-Y Sanitary Engineers are included in Civil Engineers.*
- **** *N-Y Transportation Engineers are included in Civil and Structural Engineers*

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.

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.

	N/A		
H.	Has this JOINT-VENTURE previously worked together? Please check: YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
I.	List all subcontractors anticipated for this Project. Please note that <u>all subcontractors must submit a fully completed copy of this questionnaire</u> , applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.		
	Name and Address:	Specialty:	Worked with Firm Before (Yes or No):
1.	See Prime's Form		
2.			
3.			
J.	Please specify the total number of support personnel that may assist in the completion of this Project: _____ <u>12</u> _____		

K. List the professional in charge, key persons, specialists, & 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:

Constantine F. Nicoladis, PE - Vice President



Project Assignment:

Project Manager / Senior Civil and Hydraulic Engineer

Name of Firm with which associated:

N-Y Associates, Inc.

Years' experience with this Firm:

35 Years

Education: Degree(s)/Year/Specialization:

Bachelor of Science/1985/Vanderbilt University/Civil and Environmental Engineering

Master of Business Administration/1987/Loyola University

Active registration: Year first registered/discipline:

LA (27095)/1997/Civil Engineering MS (13351)/1997/Civil Engineering TX (92359)/2003/Civil Engineering

FL (052242)/1997/Civil Engineering AL (22315)/1998/Civil Engineering NY (094123)/2014/Civil Engineering

Other experience and qualifications relevant to the proposed Project:

Mr. Nicoladis has 34 years of experience, with particular emphasis on drainage systems (including subsurface drainage, canals and pumping stations), levees, floodwalls, flood control structures, water and sewage utilities, and street and roadway reconstruction projects. He has extensive experience working with public and private clients at the local, state and federal level.

Drainage and Flood Control Projects:

Master Drainage Plan for St. John the Baptist Parish, LA:

As a major subconsultant to another firm, N-Y prepared a master drainage plan for the east and west banks utilizing SWMM and HEC-RAS (32 drainage basins; 125,000 acres total).

1077/1085 Drainage Study; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements for this 12,500-acre area, utilizing HEC-RAS.

Brewster Road/LA 1077 Detention Pond; St. Tammany Parish, LA: H&H Modeling utilizing SWMM & HEC-RAS and Design for a 10-acre detention pond including drainage improvements to facilitate connectivity to the pond and new subsurface drainage along Brewster Road.

Tantella Ranch/McGee Road Drainage Report; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements for a 1,780 acre area on Tantella Ranch Road, utilizing SWMM.

Alton Area Drainage; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements to alleviate street and nuisance flooding in the Alton Subdivision, utilizing SWMM. Design for Phase I of the proposed drainage improvements.

Hoey's Basin Pump to the River Project; Jefferson Parish, LA: Engineering Feasibility, H&H Modeling and Conceptual Cost Estimates evaluating a new drainage pump station in the 2,400 acre Jefferson Parish portion of the 10,000 acre Hoey's Drainage Basin. Alternatives included a 1600 CFS station (with a 13' diameter, 5400 LF discharge force main) expandable to 2400 CFS and a 1000 CFS station with a detention pond for interim stormwater storage.

Drainage Improvements at the Clearview/Earhart Expressway Interchange; Jefferson Parish, LA: Engineering Feasibility Study and Concept Plans for a new 160 CFS triplex drainage pump station, a slotted intake drain across Clearview Parkway and **detention ponds** on the intake side of the pump station, and upgrades to St. Peter's Ditch including a concrete U-flume section.

Duncan Canal Improvements at West Esplanade Avenue; Kenner, LA: A Hydraulics Study and Preliminary & Final Design of a double barrel, 3000 CFS, 340 LF box culvert which will replace the existing bridges crossing the Duncan Canal.

Bunche Village Subdivision Infrastructure Improvements; Jefferson Parish, LA: CDBG funded street and subsurface drainage improvements in the Bunche Village Subdivision.

Maplewood/Paillet Subdivision Infrastructure Improvements; Jefferson Parish, LA: CDBG funded street and subsurface drainage improvements in the Maplewood/Paillet Subdivision.

Improvements to Drainage Canal No. 3; Jefferson Parish, LA: Improvements to Drainage Canal No. 3 from I-10 to the Elmwood Canal consisting of an 1800 LF, 90' wide concrete flume section with side slope paving & 4000 CFS capacity.

Improvements to Suburban Drainage Canal; Sections 1, 2, 3, 4 and 5; Jefferson Parish, LA: A Hydraulic Analysis and Preliminary & Final plans for 3 box culverts at I-10, measuring 11' x 20' each; 4 box culverts at Veterans Blvd., measuring 11' x 21' each; a concrete flume section with a bottom width of 40' and a design flow of 3,000 CFS & a concrete flume section with a bottom width of 74' and a design flow of 3,600 CFS.

SELA-74 – Donner Canal (Algiers Outfall Canal to Pump Station #13); Algiers, LA: Improvements to an existing 5600 LF earthen section of Donner Canal. Segment A includes design of a 2100 LF, 52' wide concrete flume. Segment B includes evaluation of a 2500 LF, 108' bottom width earthen canal, and a 52' wide or 60' wide concrete flume and design of the selected alternative. Segment C includes design of a 970 LF, 100' bottom width widening & deepening of existing earthen channel.

ARFF Perimeter Road, Stage 1 at Louis Armstrong New Orleans International Airport (Duncan Canal Box Culvert); Kenner, LA: A 10,600 LF roadway on top of a reinforced box culvert. The box culvert enclosed approx. 6,300 LF of the Duncan Drainage Canal and consists of a 900 LF segment containing two 9' x 9' reinforced concrete box culverts and a 5,400 LF segment containing a double barrel, 11' h x 44' w reinforced concrete box culvert.

Main Street Drainage Improvements; Plaquemines Parish, LA: New subsurface drainage improvements on Main Street and Avenue "D" including a new 50 CFS drainage pump station discharging to the Mississippi River.

Claiborne Avenue Manifold Canal, from LA Avenue to Jena Street for the Sewerage & Water Board of New Orleans. (SELA Project): A single-barrel, 10'h x 24'w concrete box culvert from Jena St. to the west & a single barrel 10' h x 14' w concrete box culvert from Louisiana Avenue to the east, with a capacity of approx. 2000 CFS in the median of S. Claiborne Avenue (US 90).

Jefferson Avenue Canal I, from South Claiborne Avenue to Dryades Street, for the Sewerage and Water Board of New Orleans (SELA Project): Drainage improvements consisting of a 4400 LF covered reinforced concrete canal along Jefferson Avenue including roadway replacements and major utility relocations.

Jones Creek Area Drainage Improvements; Franklinton, LA: Development of a HEC-RAS H&H model of the 213 acre Jones Creek Drainage Basin. Design for an earthen channel measuring 1500 LF and concrete flume sections measuring 3800 LF to improve flow capacities on Jones Creek and the Jones Creek Lateral.

Downtown Area Drainage Improvements; Franklinton, LA: Development of a HEC-RAS H&H Model of a 26 acre area. Design for improvements to the area's subsurface drainage system, which included 30" to 60" diameter reinforced concrete pipe.

Bayou Segnette Complex Flood Protection: 56' Wide Navigable Sector Gate, Floodwalls, Levee & Pump Station; Jefferson Parish, LA: Replacement of the existing flood protection system from Bayou Segnette Pumping Station to Westwego Pumping Station No. 2 with new protection designed to the USACE Case 1 - 100 year level of protection.

New 1200 CFS Bayou Segnette Drainage Pumping Station for Jefferson Parish, LA: A new 1200 CFS pumping station with two, 600 CFS horizontal pumps driven by diesel engines through gear reducers.

Fronting Protection for Estelle No. 1 (Old) and Estelle No. 2 (New) Pumping Stations; Jefferson Parish, LA: Preparation of the Design Report and Plans & Specifications to provide fronting protection across the entire width of the pumping station discharge areas. The designs consisted of a combination of gate and T-wall monoliths and include positive cutoff for backflow prevention using sluice gates at concrete discharge tubes and butterfly valves at steel discharge pipes.

750 CFS Interim Pump Facility at the East of Harvey Sector Gate Structure; Jefferson Parish, LA: Mr. Nicoladis provided civil engineering services for the Design and Engineering during Construction of a 750 CFS interim pump station facility with pumps and engines provided by the Government. The design included the support structure and lateral bracing for the temporary pumps to be located within the Sector Gate Structure East side gatebay recess, location and support for discharge piping and discharge pipes, diesel engine and fuel storage platform, fuel transfer systems, connecting hydraulic and water lines and their support structure, lighting, generator, and all other mechanical and electrical components.

Memberships & Associations:

- American Society of Civil Engineers
- Society of American Military Engineers
- Water Environment Federation
- American Concrete Institute
- American Council of Engineering Companies

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LPELS)	
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com	
Mr. Constantine Frank Nicoladis		
License/Certificate Type - Number	Expiration Date	
PE.0027095	09/30/2023	
Status: Active		



KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Frank Nicoladis, PE - President

Project Assignment:

Principal and Project Oversight / Civil and Hydraulic Engineer

Name of Firm with which associated:

N-Y Associates, Inc.

Years' experience with this Firm:

53 Years

Education: Degree(s)/Year/Specialization:

Bachelor of Science/1957/Mississippi State University/Civil Engineering

Active registration: Year first registered/discipline:

LA (5924)/1957/Civil Engineering	MS (2468)/1961/Civil Engineering	TX (32329)/1971/Civil Engineering
FL (36371)/1985/Civil Engineering	AR (3373)/1972/Civil Engineering	LA (2862)/1957/Surveying (retired)

Other experience and qualifications relevant to the proposed Project:

Mr. Nicoladis has 63 years of experience as a consulting engineer, with 52 years as President of N-Y. He has served as the Principal-in-Charge for N-Y's projects undertaken for public agencies at the federal, state, and local levels. His primary role is to ensure that the client's expectations of the firm are fully achieved. His primary concerns are seeing that projects are adequately staffed; that the firm's quality control standards are adhered to during the design process; and that the client's schedule and budget are met.

Drainage and Flood Control Projects:

Master Drainage Plan for St. John the Baptist Parish, LA: As a major subconsultant to another firm, N-Y prepared a master drainage plan for the east and west banks utilizing SWMM and HEC-RAS (32 drainage basins; 125,000 acres total).

Hydrologic and Hydraulic Modeling and Analysis for East Baton Rouge Flood Risk Management Project: H&H Modeling, utilizing HEC-RAS 2D, of existing conditions and proposed improvements of the basins, channels and channel improvements of three (3) basins within the Amite River watershed: Blackwater Bayou, Jones Creek and Ward Creek; in order to reduce the extent of flooding in the three basins.

Main Street Drainage Improvements; Plaquemines Parish, LA: New subsurface drainage improvements on Main Street and Avenue "D" including a new 50 CFS drainage pump station discharging to the Mississippi River.

Hoey's Basin Pump to the River Project; Jefferson Parish, LA: Engineering Feasibility, H&H Modeling and Conceptual Cost Estimates evaluating a new drainage pump station in the 2,400 acre Jefferson Parish portion of the 10,000 acre Hoey's Drainage Basin. Alternatives included a 1600 CFS station (with a 13' diameter, 5400 LF discharge force main) expandable to 2400 CFS and a 1000 CFS station with a detention pond for interim stormwater storage.

Duncan Canal Improvements at West Esplanade Avenue; Kenner, LA: A Hydraulics Study and Preliminary & Final Design of a double barrel, 3000 CFS, 340 LF box culvert which will replace the existing bridges crossing the Duncan Canal.

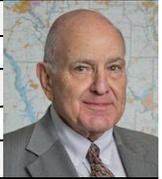
Bunche Village Subdivision Infrastructure Improvements; Jefferson Parish, LA: CDBG funded street and subsurface drainage improvements in the Bunche Village Subdivision.

Maplewood/Paillet Subdivision Infrastructure Improvements; Jefferson Parish, LA: CDBG funded street and subsurface drainage improvements in the Maplewood/Paillet Subdivision.

Improvements to Suburban Drainage Canal; Sections 1, 2, 3, 4 and 5; Jefferson Parish, LA: A Hydraulic Analysis and Preliminary & Final plans for 3 box culverts at I-10, measuring 11' x 20' each; 4 box culverts at Veterans Blvd., measuring 11' x 21' each; a concrete flume section with a bottom width of 40' and a design flow of 3,000 CFS & a concrete flume section with a bottom width of 74' and a design flow of 3,600 CFS.

Improvements to Drainage Canal No. 3; Jefferson Parish, LA: Improvements to Drainage Canal No. 3 from I-10 to the Elmwood Canal consisting of an 1800 LF, 90' wide concrete flume section with side slope paving & a capacity of 4000 CFS.

ARFF Perimeter Road, Stage 1 at Louis Armstrong New Orleans International Airport (Duncan Canal Box Culvert); Kenner, LA: A 10,600 LF roadway on top of a reinforced box culvert. The box culvert enclosed approx. 6,300 LF of the Duncan Drainage Canal and consists of a 900 LF segment containing two 9' x 9' reinforced concrete box culverts and a 5,400 LF segment containing a double barrel, 11' h x 44' w reinforced concrete box culvert.



Alton Area Drainage; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements to alleviate street and nuisance flooding in the Alton Subdivision, utilizing SWMM. Design for Phase I of the proposed drainage improvements.

1077/1085 Drainage Study; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements for this 12,500 acre area, utilizing HEC-RAS.

Brewster Road/LA 1077 Detention Pond; St. Tammany Parish, LA: H&H Modeling utilizing SWMM & HEC-RAS and Design for a **10-acre detention pond** including drainage improvements to facilitate connectivity to the pond and new subsurface drainage along Brewster Road.

Tantella Ranch/McGee Road Drainage Report; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements for a 1,780 acre area on Tantella Ranch Road, utilizing SWMM.

Jefferson Avenue Canal I, from South Claiborne Avenue to Dryades Street, for the Sewerage and Water Board of New Orleans (SELA Project): Drainage improvements consisting of a 4400 LF covered reinforced concrete canal along Jefferson Avenue including roadway replacements and major utility relocations.

Claiborne Avenue Manifold Canal, from LA Avenue to Jena Street for the Sewerage & Water Board of New Orleans. (SELA Project): A single-barrel, 10'h x 24'w concrete box culvert from Jena St. to the west & a single barrel 10' h x 14' w concrete box culvert from Louisiana Avenue to the east, with a capacity of approx. 2000 CFS in the median of S. Claiborne Avenue (US 90).

Jones Creek Area Drainage Improvements; Franklinton, LA: Development of a HEC-RAS hydraulic computer model of the 213 acre Jones Creek Drainage Basin. Design for an earthen channel measuring 1500 LF and concrete flume sections measuring 3800 LF to improve flow capacities on Jones Creek and the Jones Creek Lateral.

Downtown Area Drainage Improvements; Franklinton, LA: Development of a HEC-RAS H&H Model of a 26 acre area. Design for improvements to the area's subsurface drainage system, which included 30" to 60" diameter reinforced concrete pipe.

New 1200 CFS Bayou Segnette Drainage Pumping Station for Jefferson Parish, LA: A new 1200 CFS pumping station with two, 600 CFS horizontal pumps driven by diesel engines through gear reducers.

Bayou Segnette Complex Flood Protection: 56' Wide Navigable Sector Gate, Floodwalls, Levee & Pump Station; Jefferson Parish, LA: The replacement of the existing flood protection system from Bayou Segnette Pumping Station to Westwego Pumping Station No. 2 with new protection designed to the USACE Case 1 - 100 year level of protection.

1000 CFS Addition to Drainage Pumping Station No. 11 for the Sewerage & Water Board of New Orleans: A 10,000 SF pump house, two 500 CFS pumps, and related electrical/mechanical systems and controls. The project included two I-walls and one T-wall along with improvements to the levee along the Gulf Intracoastal Waterway.

Hurricane Protection Alignments, Westbank & Vicinity: A. Reconnaissance-Level Study, B1. WBV-72 Lake Cataouatche Levee, B2. WBV-74 Western Tie-In Closure Structure at Bayou Verret (Sellers Canal); Jefferson and St. Charles Parishes, LA: A. Reconnaissance-level study for hurricane protection alignments, raised to FEMA 100 year future case (2057) level of protection. **B1.** 12,450 LF of earthen levee, 2 concrete access bridges, a drainage feature in the Davis Pond Guide Levee, & a new drainage path for Jefferson Parish's pump station. **B2.** A 56' wide navigable sector gate; by-pass channel; 450 LF of T-wall; 1700 LF of earthen levee; 5 gate sluice structure & permanent access road.

Mississippi River Manchac Levee Enlargement; East Baton Rouge and Iberville Parishes, LA: Raising 15,600 LF of Mississippi River Levee to the authorized grade above the flow line and realignment of the levee centerline to salvage existing concrete slope paving within the existing right-of-way.

Mississippi River LNG Flood Protection Project, LA 39; Bohemia, LA (South of Pointe a la Hache): Flood protection of a proposed LNG facility on the Eastbank of the Mississippi River in Plaquemines Parish. The \$175 million required flood protection is a 9300 LF reinforced concrete, pile supported floodwall with two 30' vehicular access swing gates, pedestrian gates, and a 70' wide stop log access for future equipment. The height of the floodwall is approximately 27' above grade in accordance with the 100 year Base Flood Elevation and USACE HSDRSS.

Memberships & Associations:

- Fellow, Society of American Military Engineers
- Fellow/Life Member, American Society of Civil Engineers
- Fellow, American Council of Engineering Companies
- Life Member, American Waterworks Association
- Life Member, American Public Works Association
- Life Member, Louisiana Engineering Society
- Water Environment Federation
- National Society of Professional Engineers
- American Planning Association
- Who's Who in Engineering (AAES)
- Who's Who in the South and Southwest (Marquis)



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Mr. Frank Nicoladis

License/Certificate Type - Number

PE.0005924

Expiration Date

03/31/2023

Status: **Active**



Jefferson
Parish

State of Louisiana

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Michael F. Nicoladis, EI, MBA - Senior Vice President



Project Assignment:

Principal / Project Management

Name of Firm with which associated:

N-Y Associates, Inc.

Years' experience with this Firm:

37 Years

Education: Degree(s)/Year/Specialization:

Bachelor of Science/1982/Vanderbilt University/Civil Engineering (Magna Cum Laude)

Master of Business Administration/1984/Duke University (Fuqua Scholar)

Active registration: Year first registered/discipline:

LA (8705)/1982/Engineering Intern

Other experience and qualifications relevant to the proposed Project:

Mr. Nicoladis has had a variety of design, construction administration and project management experience since joining the firm in 1984. As Senior Vice President, he is responsible for overseeing the daily operations and administration of N-Y. He is instrumental in new business development, contract negotiations, and scheduling of work. Mr. Nicoladis also serves as a Principal on many projects and plays a major role in overseeing the firm's client management program.

Drainage and Flood Control Projects:

Master Drainage Plan for St. John the Baptist Parish, LA: As a major subconsultant to another firm, N-Y prepared a master drainage plan for the east and west banks of St. John (32 drainage basins; 125,000 acres total).

Duncan Canal Improvements at West Esplanade Avenue; Kenner, LA: A Hydraulics Study and Preliminary & Final Design of a double barrel, 3000 CFS, 340 LF box culvert which will replace the existing bridges crossing the Duncan Canal.

Hoey's Basin Pump to the River Project; Jefferson Parish, LA: Engineering Feasibility, H&H Modeling and Conceptual Cost Estimates evaluating a new drainage pump station in the 2,400 acre Jefferson Parish portion of the 10,000 acre Hoey's Drainage Basin. Alternatives included a 1600 CFS station (with a 13' diameter, 5400 LF discharge force main) expandable to 2400 CFS and a 1000 CFS station with a detention pond for interim stormwater storage.

Improvements to Suburban Drainage Canal; Sections 1, 2, 3, 4 and 5; Jefferson Parish, LA: N-Y prepared preliminary plans for 3 box culverts at Interstate 10, measuring 11' x 20' feet each; 4 box culverts at Veterans Boulevard, measuring 11' x 21' each; a concrete flume section with a bottom width of 40' and a design flow of 3,000 CFS and a concrete flume section with a bottom width of 74' and a design flow of 3,600 CFS.

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Bunche Village Subdivision Infrastructure Improvements; Jefferson Parish, LA: CDBG funded street and subsurface drainage improvements in the Bunche Village Subdivision.

Maplewood/Paillet Subdivision Infrastructure Improvements; Jefferson Parish, LA: CDBG funded street and subsurface drainage improvements in the Maplewood/Paillet Subdivision.

ARFF Perimeter Road, Stage 1 at Louis Armstrong New Orleans International Airport (Duncan Canal Box Culvert); Kenner, LA: A 10,600 LF roadway on top of a reinforced box culvert. The box culvert enclosed approx. 6,300 LF of the Duncan Drainage Canal and consists of a 900 LF segment containing two 9' x 9' reinforced concrete box culverts and a 5,400 LF segment containing a double barrel, 11' h x 44' w reinforced concrete box culvert.

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Claiborne Avenue Manifold Canal, from LA Avenue to Jena Street for the Sewerage & Water Board of New Orleans. (SELA Project): A single-barrel, 10'h x 24'w concrete box culvert from Jena St. to the west & a single barrel 10' h x 14' w concrete box culvert from Louisiana Avenue to the east, with a capacity of approx. 2000 CFS in the median of S. Claiborne Avenue (US 90).

Brewster Road/LA 1077 Detention Pond; St. Tammany Parish, LA: H&H Modeling utilizing SWMM & HEC-RAS and Design for a 10-acre detention pond including drainage improvements to facilitate connectivity to the pond and new subsurface drainage along Brewster Road.

1077/1085 Drainage Study; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements for this 12,500 acre area, utilizing HEC-RAS.

Tantella Ranch/McGee Road Drainage Report; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements for a 1,780 acre area on Tantella Ranch Road, utilizing SWMM.

Jones Creek Area Drainage Improvements; Franklinton, LA: Development of a HEC-RAS H&H model of the 213 acre Jones Creek Drainage Basin. Design for an earthen channel measuring 1500 LF and concrete flume sections measuring 3800 LF to improve flow capacities on Jones Creek and the Jones Creek Lateral.

LA 1088 Interchange, Route I-12; St. Tammany Parish: Addition of a fully directional interchange to I-12 at LA 1088. Drainage design included 24", 36", 42", 54", 60" & 72" diameter reinforced concrete & reinforced concrete arch pipes.

New 1200 CFS Bayou Segnette Drainage Pumping Station for Jefferson Parish, LA: Design, bidding, construction administration and resident inspection for a new 1200 CFS pumping station with two, 600 CFS horizontal pumps driven by diesel engines through gear reducers.

Bayou Segnette Complex Flood Protection: 56' Wide Navigable Sector Gate, Floodwalls, Levee & Pump Station; Jefferson Parish, LA: The replacement of the existing flood protection system from Bayou Segnette Pumping Station to Westwego Pumping Station No. 2 with new protection designed to the USACE Case 1 - 100 year level of protection.

Hurricane Protection Alignments, Westbank & Vicinity: A. Reconnaissance-Level Study, B1. WBV-72 Lake Cataouatche Levee, B2. WBV-74 Western Tie-In Closure Structure at Bayou Verret (Sellers Canal); Jefferson and St. Charles Parishes, LA: A. Reconnaissance-level study for hurricane protection alignments, raised to FEMA 100 year future case (2057) level of protection. **B1.** 12,450 LF of earthen levee, 2 concrete access bridges, a drainage feature in the Davis Pond Guide Levee, & a new drainage path for Jefferson Parish's pump station. **B2.** A 56' wide navigable sector gate; by-pass channel; 450 LF of T-wall; 1700 LF of earthen levee; 5 gate sluice structure & permanent access road.

Fronting Protection for Estelle No. 1 (Old) and Estelle No. 2 (New) Pumping Stations; Jefferson Parish, LA: Preparation of the Design Report and Plans & Specifications to provide fronting protection across the entire width of the pumping station discharge areas. The designs consisted of a combination of gate and T-wall monoliths and include positive cutoff for backflow prevention using sluice gates at concrete discharge tubes and butterfly valves at steel discharge pipes.

1000 CFS Addition to Drainage Pumping Station No. 11 for the Sewerage & Water Board of New Orleans: A 10,000 SF pump house, two 500 CFS pumps, and related electrical/mechanical systems and controls. The project included two I-walls and one T-wall along with improvements to the levee along the Gulf Intracoastal Waterway.

Mississippi River Manchac Levee Enlargement; East Baton Rouge and Iberville Parishes, LA: Raising 15,600 LF of Mississippi River Levee to the authorized grade above the flow line and realignment of the levee centerline to salvage existing concrete slope paving within the existing right-of-way.

Interim 2100 CFS Drainage Pumping Station at the 17th Street Canal for the USACE (post-Katrina): Design and Engineering During Construction of the pump platforms, engine buildings and discharge piping for this 2,100 cfs station. The pump station consists of two pump platforms, each consisting of six pumps located on either side of the 17th Street Canal. N-Y was the design engineer of record as a subconsultant to another firm.

Memberships & Associations:

- American Society of Civil Engineers
- Society of American Military Engineers
- American Council of Engineering Companies
- American Public Works Association
- American Concrete Institute
- Tau Beta Pi
- Chi Epsilon
- Who's Who in America (Marquis)
- Who's Who in Science and Engineering (Marquis)
- Who's Who in Finance and Industry (Marquis)



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Mr. Michael F. Nicoladis

License/Certificate Type - Number

EI.0008705

Expiration Date

09/30/2023

Status: **Active**



**Jefferson
Parish**
State of Louisiana

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Patricia R. Claverie, EI, MS



Project Assignment:

Hydrology and Hydraulics Engineer / Lead H&H Modeler

Name of Firm with which associated:

N-Y Associates, Inc.

Years' experience with this Firm:

2 Years / 21 years with Other Firms

Education: Degree(s)/Year/Specialization:

Bachelor of Science/ 2000 / University of New Orleans / Civil and Environmental Engineering

Master of Science / 2003 / University of New Orleans / Engineering Management

Active registration: Year first registered/discipline:

LA (19340)/2000/Civil EIT

Other experience and qualifications relevant to the proposed Project:

Patricia Claverie has 22 years of experience in H&H modeling. She has extensive knowledge of ArcView, PCSWMM, SWMM5, HEC-HMS, and HEC-RAS for drainage improvements and hydraulic design for bridges and culvert design. Her experience also includes planning and engineering services for Sewer Infiltration and Inflow Management using InfoWorks and developing shape files for GIS. Ms. Claverie also is knowledgeable in roadway design, traffic control plans, signage and pavement marking plans, storm water pollution prevention plans, sanitary sewer and water line improvement plans, and hydrologic studies.

hydraulic modeling using the XP-SWMM program for major drainage canals and systems to determine the existing conditions and required drainage improvements, evaluated water surface profiles for existing and proposed improvements, and prepared conceptual plans and preliminary construction cost estimates for various open and covered canals.

Master Drainage Plan for Sewerage and Water Board of New Orleans: The project included providing modeling services using PCSWMM for the Master Drainage Plan Study for the entire area of New Orleans served by the Sewerage and Water Board. The study's purpose was to evaluate the existing drainage system to determine its current capacity, flag all deficiencies, develop plans of improvements to a 10-year design level, and to make budgetary estimates of costs and project these costs over a period of 50-years. Ms. Claverie was responsible for creating the hydraulic model using PCSWMM for both the existing conditions and required drainage improvements for the Algiers and English Turn areas.

Grays Creek, Livingston Parish, LA: Grays Creek is one of the major floodways within the Parish. Grays Creek flows southeastward into the Amite River immediately above Port Vincent. Ms. Claverie was responsible for preparing a Drainage Study for Grays Creek from Florida Boulevard (Hwy 190) to Interstate-12 in Livingston Parish. The purpose of the drainage study was to provide Livingston Parish with guidance in planning drainage infrastructure to meet the needs of the Parish. To do so the volume of runoff from Grays Creek drainage basin from Florida Boulevard (Hwy 190) to Interstate-12 was quantified for a the 2-year, 5-year, 10-year, 25-year, 50-year, and 100-year rain events. Ms. Claverie created an existing condition model in HEC-RAS for Grays Creek. In addition, the following alternatives were evaluated in the HEC-RAS proposed model: widening the channel bottom, fixing the centerline slope, adding concrete slope paving to side banks, and replacing the bridges with culverts. Recommendations for the drainage improvements and for further study downstream were made.

Drainage Experience

➤ **With N-Y**

Coin Du Lestin Road Elevation; Slidell, LA: H&H Modeling utilizing HEC-RAS that illustrates the existing conditions, determines the required roadway elevations to prevent inundation in a 100-year event, evaluates the drainage impacts that will occur due to raising the roadway elevations, and provides a final recommendation.

Replacement of Rural Bridges, LADOTD Districts 08, 58 and 05; Winn, Grant, Natchitoches, Rapides, Vernon, Catahoula, Caldwell, Franklin and Jackson Parishes, LA: H&H Modeling utilizing HEC-RAS for the replacement of fifteen (15) rural bridges crossing creeks and bayous on the State Highway System in LADOTD District 08, 58 and 05.

➤ **With Other Firms**

USACE – Southeast Louisiana Urban Flood Control Program (SELA), Orleans Parish, LA: Ms. Claverie provided construction and program management services for the Sewerage and Water Board (S&WB) of New Orleans on the \$1B drainage improvement program. She coordinated the design and construction work for the S&WB between the USACE and the design A/E firms. She reviewed contract and construction documents for constructability, inputted review comments into Dr. Checks, coordinated acquisitions of rights-of-way and construction easements, and reviewed the design of the relocation of utilities. She performed computer

Statewide Flood Control Applications for Louisiana Avenue and General DeGaulle Canals (SELA), New Orleans, LA: The application included Hydraulic Modeling and AutoCAD drawings. Ms. Claverie was the project engineer and was responsible for running the HEC-RAS hydraulic model, preparing the report and required spreadsheets for the application.

City of Lumberton Drainage Study, Lumberton, TX: This project consisted of a city-wide Comprehensive Drainage Study (CDS), as well as the construction of two detention ponds and the acquisition of 21,200 linear feet of drainage easements along existing outfall channels. Ms. Claverie developed a hydraulic model using HEC-RAS software to design the detention ponds for two of the six drainage basins. The results of the HEC-RAS model helped identify improvements to all six of the drainage basins.

Identify & Prioritize Drainage Improvements for the City of Kenner Drainage System, Kenner, LA: Ms. Claverie aided in the development of a program to identify and prioritize needed drainage system improvements. This project included a hydraulic model, calibration to reflect existing known conditions, finalization of output data from HEC-RAS, development of a master plan report, establishment of construction cost & implementation plan, and funding alternatives.

Sewage Collection, Pumping and Treatment

S&WBNO SSERP Sewer Collection System Hydraulic Model, New Orleans, LA: The project included modeling services using InfoWorks CS for the entire sewerage collection system of the East Bank and West Bank of New Orleans served by the Sewerage and Water Board. The study's purpose is to update the existing drainage systems with new data sets, calibrate and validate the model, run the model for Dry and Wet Weather flows, to identify any observed deficiencies in the collection system and to make budgetary estimates of costs. Ms. Claverie was responsible for updating the sewer model using InfoWorks CS for the existing conditions and proposed improvements for both East Bank and West Bank. She also created ArcGIS maps for the entire service area using ESRI ArcMap.

Wastewater Collection System Modeling, Jefferson Parish, LA: Ms. Claverie updated the data in the ArcView shape files of the collection system based on as-builts, field data of manholes, and data acquired with GPS equipment. She analyzed the data from inspections and capacity tests on numerous lift stations and created a hydraulic model using InfoWorks of the entire collection system to identify causes of inflow and infiltration using InfoWorks software and provided specific recommendations for the required improvements based on the modeling results.

Levee Experience

US Army Corps of Engineers, MVN – Levees Section

New Orleans, LA: Ms. Claverie reviewed plans and prepared specifications for levee and other flood protection projects, analyzed cross sections and topography data, utilized CSV (Cross Section Volume) Program, located and sized borrow pits and calculated quantities for project bid items. She conducted on-site investigations to identify utilities, including pipeline facilities within project limits, which required relocation. Ms. Claverie reviewed contract A-E and in-house construction plans for format and CADD technical accuracy and standards. She also reviewed construction permits applications by others and accompanying plans and specifications to assure compliance with USACE MVN standards and to identify any conflict with current USACE MVN project objectives.

Ms. Claverie worked on the following relevant projects:

- Mississippi River Levees – Alhambra to Modeste – Iberville & Ascension Parishes, Louisiana – Levees Design including Concrete Slope Pavement
- Mississippi River Levees – Eastbank and Westbank Gaps – East Baton Rouge, St. James, St. Charles, Ascension, and Jefferson Parishes, Louisiana – Levees Design including Concrete Slope Pavement
- Lake Pontchartrain, Louisiana and Vicinity, Hurricane Protection Project – Jefferson Parish Reach 5 – 2nd Lift Levee & Bonabel Blvd Floodgate – Levees & Floodwalls Designs, Coastal Erosion Protection
- Larose to Golden Meadow Hurricane Protection Project – Sections A, D, E & F – Lafourche Parish, Louisiana – Levees Studies & Designs
- New Orleans to Venice Hurricane Protection Project – Nairn to Venice – Plaquemines Parish, Louisiana – Levees, Floodwalls & Dikes Designs, Coastal Erosion Protection
- St. Bernard Hurricane Protection Project – Verret to Caernarvon – St. Bernard Parish, Louisiana – Levees & Floodwalls Designs, Coastal Erosion Protection
- West Atchafalaya Basin Protection Levee, Item W-102, Second Levee Enlargement – St. Mary Parish, Louisiana – Levees Design
- West Bank and Vicinity, Hurricane Protection Project, Lake Cataouatche Levee Enlargement – Hwy 90 to Segnette State Park – Jefferson Parish, Louisiana – Levees Design, Coastal Erosion Protection
- West Bank and Vicinity, Hurricane Protection Project, New Westwego Pump Station to Old Orleans Village Pump Station – Second Lift – Jefferson Parish, Louisiana – Levees Design, Coastal Erosion Protection

Memberships & Associations:

- The American Society of Civil Engineers
- The Society of American Military Engineers



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Ms. Patricia Renee' Claverie

License/Certificate Type - Number

EI.0019340

Expiration Date

09/30/2022

Status: **Active**



Jefferson
Parish

State of Louisiana

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Fred Charles Mortali, PE – Civil Engineer



Project Assignment:

Civil and Hydraulic Engineer / Hydrologic & Hydraulic (H&H) Modeling

Name of Firm with which associated:

N-Y Associates, Inc.

Years' experience with this Firm:

12 Years

Education: Degree(s)/Year/Specialization:

Bachelor of Civil Engineering/1989/University of Toledo/Civil Engineering

Active registration: Year first registered/discipline:

LA (35111)/2010/Civil Engineering MS (20103)/2011/Civil Engineering

Other experience and qualifications relevant to the proposed Project:

Mr. Mortali's 27 years of experience includes the design of various types of civil engineering projects including storm drainage, flood control, water, wastewater, and street projects, including particular expertise in drainage studies and H&H modeling.

Jefferson Avenue Canal I, from South Claiborne Avenue to Dryades Street, for the Sewerage and Water Board of New Orleans (SELA Project): Drainage improvements to the Jefferson Avenue Covered Canal I consisting of a 4400 LF covered reinforced concrete canal along Jefferson Avenue including roadway replacements and major utility relocations.

Drainage and Flood Control Projects:

➤ **With N-Y**

1077/1085 Drainage Study; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements for this 12,500 acre area, utilizing HEC-RAS.

Brewster Road/LA 1077 Detention Pond; St. Tammany Parish, LA: H&H Modeling utilizing SWMM & HEC-RAS and Design for a 10-acre detention pond including drainage improvements to facilitate connectivity to the pond and new subsurface drainage along Brewster Road.

Tantella Ranch/McGee Road Drainage Report; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements for a 1,780 acre area on Tantella Ranch Road, utilizing SWMM.

Alton Area Drainage; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements to alleviate street and nuisance flooding in the Alton Subdivision, utilizing SWMM. Design for Phase I of the proposed drainage improvements.

Duncan Canal Improvements at West Esplanade Avenue; Kenner, LA: A Hydraulics Study and Preliminary & Final Design of a double barrel, 3000 CFS, 300 LF box culvert which will replace the existing bridges crossing the Duncan Canal.

Program Management of the Eastbank FEMA Submerged Roads Program; Jefferson Parish, LA: \$83 million of FEMA funded concrete and asphalt street improvements, due to damage sustained during Hurricane Katrina. This project also included as-needed minor drainage improvements.

Main Street Drainage Improvements; Plaquemines Parish, LA: New subsurface drainage improvements on Main Street and Avenue "D" including a new 50 CFS drainage pump station discharging to the Mississippi River.

Tyler Drive Roadway and Drainage Improvements; Slidell, LA: Infrastructure Improvements to Tyler Drive including a new turning lane onto Gause Boulevard.

➤ **With other Firms**

Reynolds Road Drainage Analysis; St. Tammany Parish, LA: Project included **H&H Modeling** and design of a 163 acre stormwater runoff detention area.

Salmen Tract Detention Pond; St. Tammany Parish, LA: Project included **H&H Modeling** and design of a reinforced concrete control structure (14 ft. high by 80 ft. long).

West Covington Cleco Substation; St. Tammany Parish, LA: Project included a 2000 foot access road which crossed a tributary of the Tchefuncte River.

Storm Water Drainage System; Palm Coast, FL: Evaluation of the hydraulics of the Palm Coast storm water drainage system.

Roadway/Canal Culvert & Weir Structure Replacement; Palm Coast, FL: 6 roadway/canal culverts were replaced with reinforced concrete culverts, including the design of retaining walls and control structures.

Memberships & Associations:

- American Society of Civil Engineers
- Society of American Military Engineers

LICENSURE/CERTIFICATIONS: FRED MORTALI, PE



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Mr. Fred Charles Mortali

License/Certificate Type - Number Expiration Date
PE.0035111 **03/31/2024**
Status: **Active**



KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:	
W. Tully Rhodes, PE – Civil Engineer	
Project Assignment:	
Senior Civil and Hydraulic Engineer / H&H Modeler	
Name of Firm with which associated:	

N-Y Associates, Inc.
 Years' experience with this Firm:
18 Years

Education: Degree(s)/Year/Specialization:
Bachelor of Science/1976/Mississippi State University/Civil Engineering
Master of Science/1977/Mississippi State University/Environmental Engineering

Active registration: Year first registered/discipline:
LA (19885)/1984/Civil Engineering MS (8055)/1980/Civil Engineering

Other experience and qualifications relevant to the proposed Project:

Mr. Rhodes is a senior civil and hydraulic engineer with 42 years of experience. His project experience includes work as a project engineer, city engineer, project manager and service area manager. He has been in responsible charge of street, drainage, water and wastewater projects for over 30 years.

Drainage and Flood Control Projects:

Turkey Creek Drainage Analysis; Gulfport, MS: HEC-RAS modeling of a reach of Turkey Creek in Gulfport, MS for the purpose of assessing the impact of flood stage water level on the efficiency of the existing municipal drainage system.

Bayou Bernard Subdivision Design; Gulfport, MS: HEC-RAS modeling of a reach of Bayou Bernard in Gulfport, MS for the purpose of generating a "No Rise" certification related to filling and grading for subdivision design and construction.

Riverwalk Subdivision Design; D'Iberville, MS: HEC-RAS modeling of a reach of the Tchoutacabouffa River in D'Iberville, MS for the purpose of generating a "No Rise" certification related to filling and grading for subdivision design and construction.

Washington Avenue Relocation; Harrison County, MS: Watershed analysis for the Washington Avenue area using Storm Water Management Model (SWMM). This work was associated with the design of the municipal drainage system associated with the relocation of Washington Avenue.

Jackson County Drainage Improvements, Districts No. 1 & 2 for the Natural Resources Conservation Service; Jackson County, MS: Canal clearing including debris and sediment removal from 2 miles of drainage canals in Moss Point and 4 miles of the Cold Springs Road A ditch. (subconsultant)

New Drainage for Elder/Main Area; Biloxi, MS: Design, Bidding and Construction Administration for drainage improvements. This project included 2,341 LF of 12" to 36" reinforced concrete pipe.

Levee Periodic Inspection for Non-Federal Levee Systems in Terrebonne Parish, LA: Levee Safety Inspections for approx. 47 miles of levee and 11 environmental control structures including 22 sluice gates.

Reconstruction of Pine Grove Street and Briarfield Avenue, Phases I and II; Biloxi, MS: Phase I – Design, Bidding and Construction Administration including removal and replacement of 2,050 LF pavement, reinforced concrete drainage pipe, manholes, sidewalks, sewerlines, waterlines, hydrants and driveways. Phase II – Design, Bidding and Construction Administration including removal and replacement of 1950 LF of pavement, reinforced concrete drainage pipe, manholes, sidewalks, sewerline, waterlines, hydrants and driveways.

North Biloxi Infrastructure Repair Program, Area 2, Phase 5; Biloxi, MS: FEMA funded Hurricane Katrina damage repairs to approximately 6700 LF of city streets including pavement replacement & the replacement of sewerlines, waterlines, and storm drainage lines.

Reconstruction of Lee Street; Biloxi, MS: Design, Bidding and Construction Administration for street reconstruction including new water, sewage and drainage utilities.

Easterbrook/St. John Drainage Project; Bay St. Louis, MS: This project included approx. 1500' of storm drains on Easterbrook Street from St. Francis Street to St. John Street & approx. 1500' of storm drains on St. John Street.

Memberships & Associations:

- American Society of Civil Engineers



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Phone (225) 925-6291
www.lapels.com

Mr. William Tully Rhodes

License/Certificate Type - Number

PE.0019885

Expiration Date

09/30/2023

Status: **Active**



KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:
James E. Simmons, PE - Vice President

Project Assignment:
Senior Civil and Structural Engineer

Name of Firm with which associated:
N-Y Associates, Inc.



Years' experience with this Firm:
28 Years

Education: Degree(s)/Year/Specialization:
Bachelor of Science/1977/Louisiana State University/Civil Engineering

Active registration: Year first registered/discipline:
**LA (19891)/1981/Civil Engineering MS (10842)/1990/Civil Engineering TX (92359)/2003/Civil Engineering
 FL (39890)/1988/Civil Engineering NY (094047)/2014/Civil Engineering**

Other experience and qualifications relevant to the proposed Project:

Mr. Simmons has 40 years of progressively responsible engineering experience, with particular emphasis on drainage systems (including canals and pumping stations), levees, floodwalls, flood control structures, sewerage facilities, ports, and industrial facilities, street and paving projects, highways, and bridges.

Drainage and Flood Control Projects:

Coin Du Lestin Road Elevation; Slidell, LA: H&H Modeling utilizing HEC-RAS that illustrates the existing conditions, determines the required roadway elevations to prevent inundation in a 100-year event, evaluates the drainage impacts that will occur due to raising the roadway elevations, and provides a final recommendation.

Replacement of Rural Bridges, LADOTD Districts 08, 58 and 05; Winn, Grant, Natchitoches, Rapides, Vernon, Catahoula, Caldwell, Franklin and Jackson Parishes, LA: H&H Modeling utilizing HEC-RAS and design for the replacement of fifteen (15) rural bridges crossing creeks and bayous on the State Highway System in LADOTD District 08, 58 and 05.

Hydrologic and Hydraulic Modeling and Analysis for East Baton Rouge Flood Risk Management Project: H&H Modeling, utilizing HEC-RAS 2D, of existing conditions and proposed improvements of the basins, channels and channel improvements of three (3) basins within the Amite River watershed: Blackwater Bayou, Jones Creek and Ward Creek; to reduce the extent of flooding in the three basins.

Duncan Canal Improvements at West Esplanade Avenue; Kenner, LA: A Hydraulics Study and Preliminary & Final Design of a double barrel, 3000 CFS, 340 LF box culvert which will replace the existing bridges crossing the Duncan Canal.

Improvements to Suburban Drainage Canal; Sections 1, 2, 3, 4 and 5; Jefferson Parish, LA: N-Y prepared preliminary plans for 3 box culverts at Interstate 10, measuring 11' x 20' feet each; 4 box culverts at Veterans Boulevard, measuring 11' x 21' each; a concrete flume section with a bottom width of 40' and a design flow of 3,000 CFS and a concrete flume section

Hoey's Basin Pump to the River Project; Jefferson Parish, LA: Engineering Feasibility, H&H Modeling and Conceptual Cost Estimates evaluating a new drainage pump station in the 2,400-acre Jefferson Parish portion of the 10,000-acre Hoey's Drainage Basin. Alternatives included a 1600 CFS station (with a 13' diameter, 5400 LF discharge force main) expandable to 2400 CFS and a 1000 CFS station with a detention pond for interim stormwater storage.

West Shore Lake Pontchartrain, WSLP-109 Levees and Floodwalls; St. John the Baptist Parish, LA: 5580 LF of new levee, 280 LF of T-wall crossing over nine (9) pipelines, transition floodwalls tying the T-wall into the levee section, multiple T-wall monoliths up to 15' high designed to current HSDRRS criteria; and a multi-culvert crossing of the interior drainage canal at the access road.

West Shore Lake Pontchartrain, WSLP-114, Levees and Floodwalls; St. Charles and St. John the Baptist Parishes, LA: 3000 LF of new levees and 1840 LF of new floodwalls (T-walls up to 27' high) to current HSDRRS criteria associated with the following four West Shore project Drainage Pumping Stations: Hope Canal Pump Station, Reserve Relief Pump Station, I-55 Floodwall and Pump Station, and Prescott Canal Pump Station.

SELA-74 – Donner Canal (Algiers Outfall Canal to Pump Station #13); Algiers, LA: Improvements to an existing 5600 LF earthen section of Donner Canal. Segment A includes design of a 2100 LF, 52' wide concrete flume. Segment B includes evaluation of a 2500 LF, 108' bottom width earthen canal, and a 52' wide or 60' wide concrete flume and design of the selected alternative. Segment C includes design of a 970 LF, 100' bottom width widening & deepening of existing earthen channel.

Main Street Drainage Improvements; Plaquemines Parish, LA: New subsurface drainage improvements on Main Street and Avenue "D" including a new 50 CFS drainage pump station discharging to the Mississippi River.

Jefferson Avenue Canal I, from South Claiborne Avenue to Dryades Street, for the Sewerage and Water Board of New Orleans (SELA Project): Drainage improvements consisting of a 4400 LF covered reinforced concrete canal along Jefferson Avenue including roadway replacements and major utility relocations.

Claiborne Avenue Manifold Canal, from LA Avenue to Jena Street for the Sewerage & Water Board of New Orleans. (SELA Project): A single-barrel, 10'h x 24'w concrete box culvert from Jena St. to the west & a single barrel 10' h x 14' w concrete box culvert from Louisiana Avenue to the east, with a capacity of approx. 2000 CFS in the median of S. Claiborne Avenue (US 90).

LA 1088 Interchange, Route I-12; St. Tammany Parish: Addition of a fully directional interchange to I-12 at LA 1088. Drainage design included 24", 36", 42", 54", 60" & 72" diameter reinforced concrete & reinforced concrete arch pipes.

New 1200 CFS Bayou Segnette Drainage Pumping Station for Jefferson Parish, LA: A new 1200 CFS pumping station with two, 600 CFS horizontal pumps driven by diesel engines through gear reducers.

Bayou Segnette Complex Flood Protection: 56' Wide Navigable Sector Gate, Floodwalls, Levee & Pump Station; Jefferson Parish, LA: The replacement of the existing flood protection system from Bayou Segnette Pumping Station to Westwego Pumping Station No. 2 with new protection designed to the USACE Case 1 - 100-year level of protection.

Plans and Specifications for a 750 CFS Interim Pump Facility at the East of Harvey Sector Gate Structure; Jefferson Parish, LA for the USACE: Design and Engineering during Construction of a 750 CFS interim pump station facility with pumps and engines provided by the Government. Design included the support structure and lateral bracing for the temporary pumps to be located within the Sector Gate Structure East side gatebay recess, location and support for discharge piping and discharge pipes, diesel engine and fuel storage platform, fuel transfer systems, connecting hydraulic and water lines and their support structure, lighting, generator, and all other mechanical and electrical components.

Hurricane Protection Alignments, Westbank & Vicinity: A. Reconnaissance-Level Study, B1. WBV-72 Lake Cataouatche Levee, B2. WBV-74 Western Tie-In Closure Structure at Bayou Verret (Sellers Canal); Jefferson and St. Charles Parishes, LA: A. Reconnaissance-level study for hurricane protection alignments, raised to FEMA 100-year future case (2057) level of protection. **B1.** 12,450 LF of earthen levee, 2 concrete access bridges, a drainage feature in the Davis Pond Guide Levee, & a new drainage path for Jefferson Parish's pump station. **B2.** A 56' wide navigable sector gate; by-pass channel; 450 LF of T-wall; 1700 LF of earthen levee; 5 gate sluice structure & permanent access road.

Interim 2100 CFS Drainage Pumping Station at the 17th Street Canal for the U. S. Army Corps of Engineers (post-Katrina): Design and Engineering During Construction of the pump platforms, engine buildings and discharge piping for this 2,100 cfs station. The pump station consists of two pump platforms, each consisting of six pumps located on either side of the 17th Street Canal. N-Y was the design engineer of record as a subconsultant to another firm.

Fronting Protection for Estelle No. 1 (Old) and Estelle No. 2 (New) Pumping Stations; Jefferson Parish, LA: Preparation of the Design Report and Plans & Specifications to provide fronting protection across the entire width of the pumping station discharge areas. The designs consisted of a combination of gate and T-wall monoliths and include positive cutoff for backflow prevention using sluice gates at concrete discharge tubes and butterfly valves at steel discharge pipes.

1000 CFS Addition to Drainage Pumping Station No. 11 for the Sewerage & Water Board of New Orleans: A 10,000 SF pump house, two 500 CFS pumps, and related electrical/mechanical systems and controls. The project included two I-walls and one T-wall along with improvements to the levee along the Gulf Intracoastal Waterway.

WBV-09b Hero Canal Closure Structure (Hero Canal Stop Log Structure); Plaquemines Parish, LA for the USACE: Design and Engineering During Construction of a 56 ft. wide, navigable stop log structure; 100 ft. x 1600 ft. by-pass channel; 450 LF of T-wall and 100 LF of earthen levee transition; 70 CFS pump station, a crane platform and a stop log storage platform.

Memberships & Associations:

- American Society of Civil Engineers
- Society of American Military Engineers
- American Concrete Institute

LICENSURE/CERTIFICATIONS: JAMES SIMMONS, PE

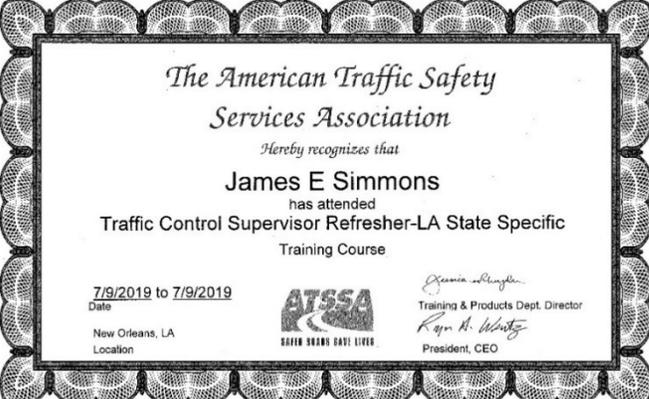


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Mr. James E. Simmons

License/Certificate Type - Number Expiration Date
PE.0019891 09/30/2023

Status: **Active**

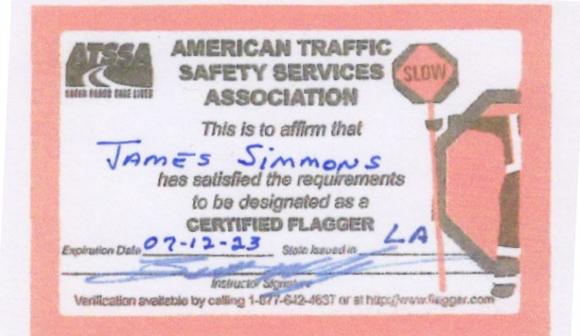


The American Traffic Safety
Services Association
Hereby recognizes that
James E Simmons
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

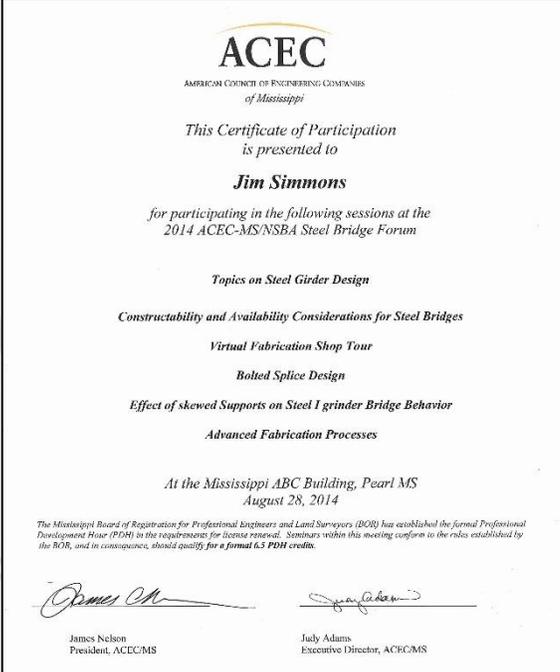
7/9/2019 to 7/9/2019
Date
New Orleans, LA
Location

ATSSA
SAFER BRIDGES. SAFER LIVES.

Joanna Whigham
Training & Products Dept. Director
Ray A. Whitey
President, CEO



AMERICAN TRAFFIC
SAFETY SERVICES
ASSOCIATION
This is to affirm that
James Simmons
has satisfied the requirements
to be designated as a
CERTIFIED FLAGGER LA
Expiration Date 07-12-23 State Issued in LA
Verification available by calling 1-877-642-4637 or at http://www.flagger.com



ACEC
AMERICAN COUNCIL OF ENGINEERING COMPANIES
of Mississippi
This Certificate of Participation
is presented to
Jim Simmons
for participating in the following sessions at the
2014 ACEC-MS/NSBA Steel Bridge Forum
Topics on Steel Girder Design
Constructability and Availability Considerations for Steel Bridges
Virtual Fabrication Shop Tour
Bolted Splice Design
Effect of skewed Supports on Steel I girder Bridge Behavior
Advanced Fabrication Processes
At the Mississippi ABC Building, Pearl MS
August 28, 2014
The Mississippi Board of Registration for Professional Engineers and Land Surveyors (BOR) has established the formal Professional Development Hour (PDH) in the requirements for license renewal. Seminars within this meeting conform to the rules established by the BOR, and in consequence, should qualify for a formal 6.5 PDH credits.

James Nelson
President, ACEC/MS
Judy Adams
Executive Director, ACEC/MS



National Highway Institute
Certificate of Training
James E. Simmons
has participated in
NEPA and Transportation Decision Making
hosted by
LADOTD / LTRC
Location: Baton Rouge, LA Hours of Instruction: 18
Date: August 31 - September 2, 2004
Instructor: Megan Ayala
Director, National Highway Institute
Federal Highway Administration
Coordinator: William M. Edwards
Director, Office of Professional Development
Federal Highway Administration



DESTINATION
ZERO
DEATHS
This certificate of training is presented to
JAMES SIMMONS
In Recognition of Attending
Highway Safety Manual Workshop
Baton Rouge, Louisiana
18.0 Professional Development Hours
Nov 30—Dec 2, 2011
Elizabeth Wemple, PE Eric Tang, PE
Instructor Date



Certificate of Attendance
Local Public Agency Qualification Program
Project Design & Delivery: Developing an LPA Project for Bidding Module
PRESENTED BY
Louisiana Department of Transportation and Development
Louisiana Local Technical Assistance Program
And
The Federal Highway Administration
TO CERTIFY THAT
Jim Simmons
HAS SATISFACTORILY COMPLETED 7 HOURS OF TRAINING
February 24, 2015
Date
New Orleans, Louisiana

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

William Haensel, PE, PLS – Senior Civil Engineer

Project Assignment:

Senior Civil Engineer

Name of Firm with which associated:

N-Y Associates, Inc. (contract consultant)

Years' experience with this Firm:

2 Years / 53 years with Other Firms

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1968 / Civil Engineering**Master of Science Studies / 1968-1974 / Civil Engineering**

Active registration: Year first registered/discipline:

LA (13375)/1972/Civil Engineering

Other experience and qualifications relevant to the proposed Project:

Mr. Haensel has over 50 years of experience including civil and structural engineering design of levees, floodwalls, drainage pumping stations, box culverts, building foundations and bridges. His experience also includes working for the USACE, New Orleans District in the channel stabilization branch where he was responsible for the engineering design and documentation of river revetments and shore protection for the Mississippi and Atchafalaya Rivers.

Roadway & Drainage Experience:**➤ With N-Y**

Replacement of Rural Bridges, LADOTD Districts 08, 58 and 05; Winn, Grant, Natchitoches, Rapides, Vernon, Catahoula, Caldwell, Franklin and Jackson Parishes, LA: The replacement of fifteen (15) rural bridges crossing creeks and bayous on the State Highway System in LADOTD District 08, 58 and 05.

➤ With Other Firms

Fleur de Lis Blvd. Reconstruction: Design and Program Management (Phases I, II, and III); New Orleans, LA: The project consisted of the complete reconstruction of 8,200 linear feet (1.5 miles) of major urban divided roadway. As required by FHWA, a NEPA environmental clearance was prepared, completed, and accepted by LADOTD and FHWA. Because the corridor was bounded by residential development, significant attention was given to pedestrian access, bike paths, and construction sequencing. The project required multiple LADOTD design exceptions because of physical constraints and preservation of trees.

Savannah Drive; Jefferson Parish, LA: The design of new public roadways for access to newly developed property. A stormwater detention analysis was prepared for the street to determine pipe sizes. Design included approximately 850 linear feet of new 15" and 18" reinforced concrete drain lines to serve the area.

Henderson Street (Tchoupitoulas Street to Race Street); New Orleans, LA: The new 1,500 foot long, four lane divided roadway to serve the \$194 million Phase IV of the New Orleans Convention Center. The design included approximately 2,500 linear feet of 15", 18", 24", and 30" diameter reinforced concrete drainpipe, 10,250 square yards of Portland Cement concrete pavement, a new 16" diameter water main, and a new 12" diameter sanitary sewer main all to serve the convention center expansion.

Wilson Avenue Improvements (Dwyer Road to US Hwy 90/Chef Menteur Highway); New Orleans, LA: The design and construction of 2,400 linear feet of roadway to replace an existing four lane divided Portland Cement concrete roadway. Design included new 15", 18", 24", and 30" diameter reinforced concrete drainpipe to upgrade the existing drainage collection system, and new sanitary sewer collection mains and water mains.

West Napoleon Avenue Corridor: Design and Program Management; Jefferson Parish, LA: A 5-mile urban aerial roadway which included a major drainage canal in an urbanized area.

Hickory Ridge Lane and Ferriday Court; Jefferson Parish, LA: The new public roadway access to newly developed property. A stormwater detention analysis was prepared for the streets to determine drainage pipe sizes. Design included approximately 1,800 linear feet of new 15", 18", and 24" diameter reinforced concrete drainage pipe to serve the area. Additionally, new sanitary sewer lines and a community water distribution system was included in the design of the street.

Memberships & Associations:

- American Society of Civil Engineers
- Society of American Military Engineers



LICENSURE/CERTIFICATIONS: WILLIAM HAENSEL, PE, PLS



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

Mr. William B. Haensel Jr.

License/Certificate Type - Number	Expiration Date
PE.0013375	03/31/2024
Status: Active	



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Mr. William B. Haensel Jr.

License/Certificate Type - Number	Expiration Date
PLS.0004338	03/31/2024
Status: Active	

State of Louisiana

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Neil D. Logan, PE – Civil & Structural Engineer



Project Assignment:

Senior Civil and Structural Engineer

Name of Firm with which associated:

N-Y Associates, Inc.

Years' experience with this Firm:

41 Years (contract consultant since 2003)

Education: Degree(s)/Year/Specialization:

Bachelor of Science/1961/Purdue University/Civil Engineering

Active registration: Year first registered/discipline:

LA (14607)/1974/Civil Engineering MS (07040)/1977/Civil Engineering

Other experience and qualifications relevant to the proposed Project:

Mr. Logan has 61 years of engineering experience in the design and construction of flood and surge control projects. His work has included the structural design of floodwalls, drainage pumping stations, levees, and gated flood control structures.

Drainage and Flood Control Projects:

New 1200 CFS Bayou Segnette Drainage Pumping Station for Jefferson Parish, LA: A new 1200 CFS pumping station with two, 600 CFS horizontal pumps driven by diesel engines through gear reducers.

Canal No. 3 Drainage Improvements and Replacement Bridge; Jefferson Parish, LA: Improvements to Drainage Canal No. 3 from I-10 to the Elmwood Canal consisting of an 1800 LF, 90' wide concrete flume section with side slope paving and a capacity of 4000 CFS. The project included a 34'w x 250'l, 2-lane replacement vehicular bridge designed to minimize obstructions to flow and to allow raising the bridge profile for a 100 year flood.

Bayou Segnette Complex Flood Protection - Navigable Sector Gate, Floodwalls, Levee & Pump Station; Jefferson Parish, LA for the USACE: Preparation of the Design Report (Alternatives 1,2,&3); Plans & Specifications, Engineering During Construction and O&M Manual (Alternative 2) for replacing the existing flood protection system from Bayou Segnette Pumping Station to Westwego Pumping Station No. 2 with new protection designed to the USACE Case 1-100 year level of protection.

Westbank & Vicinity, Lake Cataouatche Hurricane Protection Levee; Jefferson and St. Charles Parishes, LA: A reconnaissance-level study for hurricane protection alignments, raised to the FEMA 100 year future case (2057) level of protection. Design and Engineering during Construction of 12,450 LF of earthen levee, 2-concrete access bridges, a drainage feature in the Davis Pond Guide Levee, and a new drainage path for Jefferson Parish's pump station.

Plans and Specifications for a 750 CFS Interim Pump Facility at the East of Harvey Sector Gate Structure; Jefferson Parish, LA for the USACE: Design and Engineering during Construction of a 750 CFS interim pump station facility with pumps and engines provided by the Government.

WBV-74 Western Tie-In Closure Structure at Bayou Verret (Sellars Canal) Navigable Sector Gate, Sluice Gates, Levees and Floodwalls; Jefferson and St. Charles Parishes, LA for the USACE: Design & Engineering During Construction of a 56' wide navigable sector gate; by-pass channel; 450 LF of T-wall; 1700 LF of earthen levee, a 5 gate sluice gate structure and a permanent access road. N-Y was the designer and professional engineer of record for this work as a subconsultant to another firm.

Interim 2100 CFS Drainage Pumping Station at the 17th Street Canal for the USACE (post-Katrina): Design and Engineering During Construction of the pump platforms, engine buildings and discharge piping for this 2,100 cfs station. The pump station consists of two pump platforms, each consisting of six pumps located on either side of the 17th Street Canal.

1000 CFS Addition to Drainage Pumping Station No. 11 for the Sewerage & Water Board of New Orleans: Design, Bidding, Construction Administration and resident inspection services for a 10,000 SF pump house, two 500 CFS pumps, and related electrical/mechanical systems and controls. The project included two I-walls and one T-wall along with improvements to the levee along the Gulf Intracoastal Waterway.

Memberships & Associations:

- American Society of Civil Engineers



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Baton Rouge, LA 70809
Phone (225) 925-6291
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Mr. Neil D. Logan

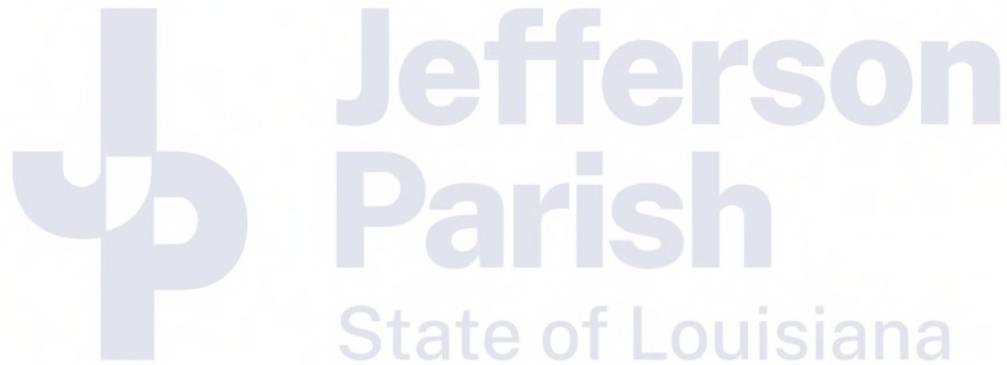
License/Certificate Type - Number

PE.0014607

Expiration Date

03/31/2023

Status: **Active**



KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:
Dennis G. Voss, NICET, Level IV

Project Assignment:
Senior Engineering Technician (Civil)



Name of Firm with which associated:
N-Y Associates, Inc.

Years' experience with this Firm:
48 Years

Education: Degree(s)/Year/Specialization:
Associate Degree/1968/Delgado Junior College/Engineering Technology
2 years, Engineering Studies/1962-1965/University of New Orleans

Active registration: Year first registered/discipline:
National Institute for Certification in Engineering Technology (54584)/1976/Engineering Technician, Level IV

Other experience and qualifications relevant to the proposed Project:

<p>Drainage and Flood Control Projects:</p> <p>Master Drainage Plan for St. John the Baptist Parish, LA: As a major subconsultant to another firm, N-Y prepared a master drainage plan for the east and west banks utilizing SWMM and HEC-RAS (32 drainage basins; 125,000 acres total).</p> <p>1077/1085 Drainage Study; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements for this 12,500 acre area, utilizing HEC-RAS.</p> <p>Brewster Road/LA 1077 Detention Pond; St. Tammany Parish, LA: H&H Modeling utilizing SWMM & HEC-RAS and Design for a 10-acre detention pond including drainage improvements to facilitate connectivity to the pond and new subsurface drainage along Brewster Road.</p> <p>Tantella Ranch/McGee Road Drainage Report; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements for a 1,780 acre area on Tantella Ranch Road, utilizing SWMM.</p> <p>Alton Area Drainage; St. Tammany Parish, LA: H&H Modeling of Existing Conditions and Proposed Improvements to alleviate street and nuisance flooding in the Alton Subdivision, utilizing SWMM. Design for Phase I of the proposed drainage improvements.</p> <p>Drainage Improvements at the Clearview/Earhart Expressway Interchange; Jefferson Parish, LA: Engineering Feasibility Study and Concept Plans for a new 160 CFS triplex drainage pump station, a slotted intake drain across Clearview Parkway and detention ponds on the intake side of the pump station, and upgrades to St. Peter's Ditch including a concrete U-flume section.</p> <p>Duncan Canal Improvements at West Esplanade Avenue; Kenner, LA: A Hydraulics Study and Preliminary & Final Design of a double barrel, 3000 CFS, 340 LF box culvert which will replace the existing bridges crossing the Duncan Canal.</p>	<p>Bunche Village Subdivision Infrastructure Improvements; Jefferson Parish, LA: CDBG funded street and subsurface drainage improvements in the Bunche Village Subdivision.</p> <p>Maplewood/Paillet Subdivision Infrastructure Improvements; Jefferson Parish, LA: CDBG funded street and subsurface drainage improvements in the Maplewood/Paillet Subdivision.</p> <p>Improvements to Suburban Drainage Canal; Sections 1, 2, 3, 4 and 5; Jefferson Parish, LA: N-Y prepared preliminary plans for 3 box culverts at Interstate 10, measuring 11' x 20' feet each; 4 box culverts at Veterans Boulevard, measuring 11' x 21' each; a concrete flume section with a bottom width of 40' and a design flow of 3,000 CFS and a concrete flume section with a bottom width of 74' and a design flow of 3,600 CFS.</p> <p>Improvements to Drainage Canal No. 3; Jefferson Parish, LA: Improvements to Drainage Canal No. 3 from I-10 to the Elmwood Canal consisting of an 1800 LF, 90' wide concrete flume section with side slope paving and a capacity of 4000 CFS.</p> <p>SELA-74 – Donner Canal (Algiers Outfall Canal to Pump Station #13); Algiers, LA: Improvements to an existing 5600 LF earthen section of Donner Canal. Segment A includes design of a 2100 LF, 52' wide concrete flume. Segment B includes evaluation of a 2500 LF, 108' bottom width earthen canal, and a 52' wide or 60' wide concrete flume and design of the selected alternative. Segment C includes design of a 970 LF, 100' bottom width widening & deepening of existing earthen channel.</p> <p>Main Street Drainage Improvements; Plaquemines Parish, LA: New subsurface drainage improvements on Main Street and Avenue "D" including a new 50 CFS drainage pump station discharging to the Mississippi River.</p>
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ARFF Perimeter Road, Stage 1 at Louis Armstrong New Orleans International Airport (Duncan Canal Box Culvert); Kenner, LA: A 10,600 LF roadway on top of a reinforced box culvert. The box culvert enclosed approx. 6,300 LF of the Duncan Drainage Canal and consists of a 900 LF segment containing two 9' x 9' reinforced concrete box culverts and a 5,400 LF segment containing a double barrel, 11' h x 44' w reinforced concrete box culvert.

Jefferson Avenue Canal I, from South Claiborne Avenue to Dryades Street, for the Sewerage and Water Board of New Orleans (SELA Project): Drainage improvements consisting of a 4400 LF covered reinforced concrete canal along Jefferson Avenue including roadway replacements and major utility relocations.

Claiborne Avenue Manifold Canal, from LA Avenue to Jena Street for the Sewerage & Water Board of New Orleans. (SELA Project): A single-barrel, 10'h x 24'w concrete box culvert from Jena St. to the west & a single barrel 10' h x 14' w concrete box culvert from Louisiana Avenue to the east, with a capacity of approx. 2000 CFS in the median of S. Claiborne Avenue (US 90).

LA 1088 Interchange, Route I-12; St. Tammany Parish: Addition of a fully directional interchange to I-12 at LA 1088. Drainage design included 24", 36", 42", 54", 60" & 72" diameter reinforced concrete & reinforced concrete arch pipes.

Jones Creek Area Drainage Improvements; Franklinton, LA: Development of a HEC-RAS H&H model of the 213 acre Jones Creek Drainage Basin. Design, Permitting, Bidding and Construction Administration for an earthen channel measuring approx. 1500 LF and concrete flume sections measuring approx. 3800 LF to improve flow capacities on Jones Creek and the Jones Creek Lateral.

Downtown Area Drainage Improvements; Franklinton, LA: Development of a HEC-RAS H&H model of a 26 acre area. Design and construction administration for improvements to the area's subsurface drainage system, which included 30" to 60" diameter reinforced concrete pipe.

New Bayou Segnette Drainage Pumping Station; Westwego, LA: A new 1,200 CFS pumping station with two (2), 600 CFS horizontal pumps driven by diesel engines through gear reducers.

Hoey's Basin Pump to the River Project; Jefferson Parish, LA: Engineering Feasibility, Hydraulic Modeling and Conceptual Cost Estimates evaluating a new drainage pump station in the 2,400-acre Jefferson Parish portion of the 10,000 acre Hoey's Drainage Basin. Alternatives included a 1600 CFS station (with a 13' diameter, 5400 LF discharge force main) expandable to 2400 CFS and a 1000 CFS station with a detention pond for interim stormwater storage.

Fronting Protection for Estelle No. 1 (Old) and Estelle No. 2 (New) Pumping Stations; Jefferson Parish, LA: Preparation of the Design Report and Plans & Specifications to provide fronting protection across the entire width of the pumping station discharge areas.

Bayou Segnette Complex Flood Protection: 56' Wide Navigable Sector Gate, Floodwalls, Levee & Pump Station; Jefferson Parish, LA: Mr. Voss provided civil engineering design for the replacement of the existing flood protection system from Bayou Segnette Pumping Station to Westwego Pumping Station No. 2 with new protection designed to the USACE Case 1 - 100-year level of protection. The Study included Alternative 1 which follows the existing flood protection alignment (T-Wall, I-Walls on levee sections & full levee section alternatives were studied) and Alternative 2 which crosses Bayou Segnette with a 50' wide navigation floodgate (mitered & sector gate alternatives were studied).

Mississippi River LNG Flood Protection Project, LA 39; Bohemia, LA (South of Pointe a la Hache): Flood protection of a proposed LNG facility on the Eastbank of the Mississippi River in Plaquemines Parish. The \$175 million required flood protection is a 9300 LF reinforced concrete, pile supported floodwall with two 30' vehicular access swing gates, pedestrian gates, and a 70' wide stop log access for future equipment. The height of the floodwall is approximately 27' above grade in accordance with the 100 year Base Flood Elevation and USACE HSDRSS standards.

Mississippi River Manchac Levee Enlargement; East Baton Rouge and Iberville Parishes, LA: Raising 15,600 LF of Mississippi River Levee to the authorized grade above the flow line and realignment of the levee centerline to salvage existing concrete slope paving within the existing right-of-way.

Memberships & Associations:

- American Society of Certified Engineering Technicians



**NATIONAL INSTITUTE FOR CERTIFICATION
IN ENGINEERING TECHNOLOGIES®**

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BE IT KNOWN THAT

Dennis G. Voss Sr.

IS HEREBY AWARDED CERTIFICATION AT

Senior Engineering Technician

IN CIVIL ENGINEERING TECHNOLOGY

**BASED UPON SUCCESSFUL DEMONSTRATION OF REQUISITE KNOWLEDGE,
EXPERIENCE AND WORK PERFORMANCE AS SET FORTH BY THIS INSTITUTE.**

Certification Valid Through 12/01/2023

CERTIFICATION NUMBER 54584

CHAIRMAN OF THE NICET BOARD OF GOVERNORS

A DIVISION OF THE NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

Certificate of Attendance

presented to

Dennis Voss

for attending the

**Roundabout Design Workshop
Level 1**

and for having been awarded 12 Professional Developmental Hours

October 14-15, 2008

Baton Rouge, Louisiana

Sandra Romero
Authorized By

LTRC
Louisiana Transportation Research Center

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:	
Chris LeMay, CADD/GIS	
Project Assignment:	
CADD/GIS Technician	
Name of Firm with which associated:	
N-Y Associates, Inc.	
Years' experience with this Firm:	
2 Year / 20 Years with Other Firms	
Education: Degree(s)/Year/Specialization:	
Associate of Science/Computer-Aided Drafting	
Active registration: Year first registered/discipline:	
N/A	

Other experience and qualifications relevant to the proposed Project:

<p>Drainage and Flood Control Projects:</p> <p>➤ With N-Y</p> <p>Jefferson Parish Water System Assessment; Jefferson Parish, LA: An assessment of the Jefferson Parish water system to prioritize projects for replacement of critical water pipeline infrastructure. The assessment will provide actionable recommendations for pipe renewal and will serve as the foundation for an improved waterline evaluation, renewal and management system.</p> <p>West Shore Lake Pontchartrain, WSLP-109, Levees and Floodwalls; St. John the Baptist Parish, LA: 5580 LF of new levee, 280 LF of T-wall crossing over nine (9) pipelines, transition floodwalls tying the T-wall into the levee section, multiple T-wall monoliths up to 15' high designed to current HSDRRS criteria; and a multi-culvert crossing of the interior drainage canal at the access road.</p> <p>WSLP-114, Westshore Lake Pontchartrain Levees and Floodwalls; St. Charles and St. John the Baptist Parishes, LA: 3000 LF of new levees and 1840 LF of new floodwalls (T-walls up to 27' high) to current HSDRSS criteria associated with the following 4 West Shore project.</p> <p>Roadways and Bridges:</p> <p>➤ With N-Y</p> <p>Five (5) New "Waskey-type" Bridges associated with the West Shore Lake Pontchartrain Flood Protection System, WSLP-114; St. Charles and St. John the Baptist Parishes, LA: Design of five (5) new "Waskey-type" access bridges ranging in length from 60 feet to 160 feet using precast deck panels, precast pile bent caps, and precast barrier rails supported on precast concrete piles. The bridges vary in width: 24-foot, 16 foot and 12-foot clear width, gutter to gutter. The bridges are being designed for an AASHTO HS20 truck load (HL-93 loading).</p> <p>Carney Road Realignment and New Bridge; East Baton Rouge Parish, LA: A new alignment of approx. 1 mile of Carney Road and a new 3-span bridge crossing Bayou Baton Rouge using LADTOD LG girders. The new roadway and bridge will both include two, 11' travel lanes and 8' shoulders/bicycle lanes meeting East Baton Rouge's Complete Streets requirements.</p>	<p>➤ With Other Firms</p> <p>Viola Street Widening; St. Tammany Parish, LA: CAD drawings for the street milling, overlay and widening of lanes throughout Viola Street in St. Tammany Parish.</p> <p>HMGP Elevation of Parish Roads, Coast Guard Road; Plaquemines Parish, LA: CAD drawings for the proposed 2-foot elevation and stabilization for Coast Guard Road using AutoCAD Civil 3D and Storm & Sanitary Analysis software from surveys, shapefiles, parcels and Hydrologic & Hydraulic (H&H Studies). Mr. LeMay also worked on creating a proposed gravity pipe network for stormwater improvements.</p> <p>Concrete Pavement Repair and Replacement; St. Bernard Parish, LA: CAD drawings from hand sketches, field notes and manufacturer specs. Mr. LeMay assisted in the design and construction of Portland cement concrete pavement repairs in the Chalmette Vista and Buccaneer Villa neighborhoods of St. Bernard Parish.</p> <p>Asphalt Roadway Restoration; St. Bernard Parish, LA: CAD drawings for the mill and overlay of existing asphalt roadways, base repairs and replacements, and repair or replacement of adjacent curb and gutter, driveways, and sidewalks at various locations.</p> <p>Other Experience:</p> <p>Hurricane Katrina Roadway Restoration; St. Bernard Parish, LA: Mr. LeMay coordinated, managed and scheduled the Field Layout Services and Field Drawings from the draft copies to the final CAD drawings. He logged data for records and created spreadsheets. Mr. LeMay assisted in the creation of databases and GIS layers from existing parish data and data collected from field efforts. All GIS layers were built from the ground up since no previous GIS information existed. The layers that were created included sewer, drainage, water, streets and centerlines, buildings, subdivisions, fire zones, landmarks, and zones.</p>
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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:



Name & Title:	Noah Jackson, CADD
Project Assignment:	Senior CADD Technician
Name of Firm with which associated:	N-Y Associates, Inc.
Years' experience with this Firm:	4 Years / 19 Years with Other Firms
Education: Degree(s)/Year/Specialization:	Associates Degree/1985/Engineering Technology
Active registration: Year first registered/discipline:	N/A

Other experience and qualifications relevant to the proposed Project:

Drainage and Flood Control Projects:

Replacement of Rural Bridges, LADOTD Districts 08, 58 and 05; Winn, Grant, Natchitoches, Rapides, Vernon, Catahoula, Caldwell, Franklin and Jackson Parishes, LA: H&H Modeling utilizing HEC-RAS and design for the replacement of fifteen (15) rural bridges crossing creeks and bayous on the State Highway System in LADOTD District 08, 58 and 05.

WSLP-109, Westshore Lake Pontchartrain Levees and Floodwalls; St. Charles Parish, LA: The work includes: 5580 LF of new levee, 280 LF of T-wall crossing over nine (9) pipelines, transition floodwalls tying the T-wall into the levee section, multiple T-wall monoliths up to 15' high designed to current HSDRRS criteria; and a multi-culvert crossing of the interior drainage canal at the access road.

WSLP-114, Westshore Lake Pontchartrain Levees and Floodwalls; St. Charles and St. John the Baptist Parishes, LA: 3000 LF of new levees and 1840 LF of new floodwalls (T-walls up to 27' high) to current HSDRRS criteria associated with the following 4 West Shore project.

Roadways and Bridges:

Comite River Diversion Project – US Highway 61 Railway Bridges; East Baton Rouge Parish, LA: Design for new north bound and south bound bridges for the US Highway 61 crossing. The northbound and southbound bridges will each have a five (5) span precast prestressed girder and concrete deck, including bridge abutments, bents, superstructure and sub-structure with a 30-foot scour requirement. All work is being performed to LADOTD standards and is being reviewed by the LADOTD.

Carney Road Realignment and New Bridge; East Baton Rouge Parish, LA: A new alignment of approx. 1 mile of Carney Road and a new 3-span bridge crossing Bayou Baton Rouge using LADOTD LG girders. The new roadway and bridge will both include two, 11' travel lanes and 8' shoulders/bicycle lanes meeting East Baton Rouge's Complete Streets requirements.

Five (5) New "Waskey-type" Bridges associated with the West Shore Lake Pontchartrain Flood Protection System, WSLP-114; St. Charles and St. John the Baptist Parishes, LA: Design of five (5) new "Waskey-type" access bridges ranging in length from 60 feet to 160 feet using precast deck panels, precast pile bent caps, and precast barrier rails supported on precast concrete piles. The bridges vary in width: 24-foot, 16 foot and 12 foot clear width, gutter to gutter. The bridges are being designed for an AASHTO HS20 truck load (HL-93 loading).

New Wastewater Treatment Plant for the St. Bernard Port, Harbor and Terminal District; St. Bernard Parish, LA: A new 20,000 GPD Package Wastewater Treatment Plant which includes a prefabricated steel treatment plant; electrical service and controls; re-routing the pump station force main to the new plant; effluent gravity line to a small pond; chlorine gas feed to the treatment plant; and site work.

Eastbound West Metairie Replacement Bridge over the Soniat Canal; Jefferson Parish, LA: The forty-foot spans used prestressed, precast Quad Beams, which are 18" x 18" using 8500 psi concrete and are tensioned with 0.6 diameter strands. The piles are approx. 82' in length and are 18" square, prestressed, precast concrete.

Other Experience:

Sewerage and Water Board of New Orleans Resiliency Complex; New Orleans, LA: Renovation of the existing Head House Building for use as a Safe House with renovations and structural modifications to meet the FEMA P-361 criteria for wind speeds up to 190 mph; A new "Infill Building" between the existing Head House and Engineering Complex designed to meet FEMA P-361 criteria for wind speeds up to 190 mph; and Hardening of the adjacent Engineering Complex (windows, doors and roof) to meet current IBC wind speeds up to 150 mph.

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>Master Drainage Plan for St. John the Baptist Parish, LA</p> <p>Owner: St. John the Baptist Parish Department of Public Works 1801 West Airline Highway LaPlace, LA 70068</p> <p>Contact: Jaclyn Hotard Parish President (985) 652-9569</p> <div data-bbox="165 1199 466 1388" style="border: 1px solid black; padding: 5px; margin-top: 20px;"> <p><u>N-Y Personnel:</u> F. Nicoladis, PE C. Nicoladis, PE M. Nicoladis, EI, MBA D. Voss, NICET</p> </div>	<p>As a major subconsultant to another firm, N-Y prepared a master drainage plan for the east and west banks of St. John the Baptist Parish (32 drainage basins; 125,000 acres total). Components of the plan included field surveys; mapping of the existing drainage system; determination of locations of proposed new levees; Hydrologic and Hydraulic Modeling of the existing major drainage basins, secondary drainage systems and proposed improvements using SWMM computer modeling; determining the effects of the proposed drainage improvements to the Parish's flood insurance program; preparing construction cost estimates and evaluating financing alternatives.</p> <div data-bbox="987 516 1511 785" style="text-align: right;">  <p style="text-align: center;">St. John the Baptist Parish Study Area</p> </div> <p>N-Y also provided design for drainage improvement projects resulting from this Master Plan including:</p> <ol style="list-style-type: none"> a. Woodland Canal Bank Stabilization b. Reserve Relief Drainage Pumping Station c. Drainage Improvements to Hope Canal and South Apple Street (in association with another firm) d. Drainage Improvements to Lasseigne River Forest and Woodland Canals (in association with another firm) e. Drainage Improvements to Dufrene and LaPlace Plantation Canals (in association with another firm) f. Riverlands Drainage Improvements g. Persimmon Street Pumping Station h. Persimmon Street and Joan of Arc Area Drainage Improvements <div data-bbox="586 1379 1523 1785" style="display: flex; flex-wrap: wrap;"> <div style="width: 33%; text-align: center;"></div> <div style="width: 33%; text-align: center;"></div> <div style="width: 33%; text-align: center;"></div> <div style="width: 33%; text-align: center;"></div> <div style="width: 33%; text-align: center;"></div> <div style="width: 33%; text-align: center;"></div> </div>	
<p>Completion Date (Actual or Estimated):</p> <p style="text-align: center;">2005</p>	Estimated Cost:	
	<p>Entire Project:</p> <p style="text-align: center;">\$250 million est.</p>	<p>Work for which Firm was Responsible:</p> <p style="text-align: center;">50%</p>

PROJECT NO. 2

Project Name, Location and Owner's contact information:

Nature of Firm's Responsibility:

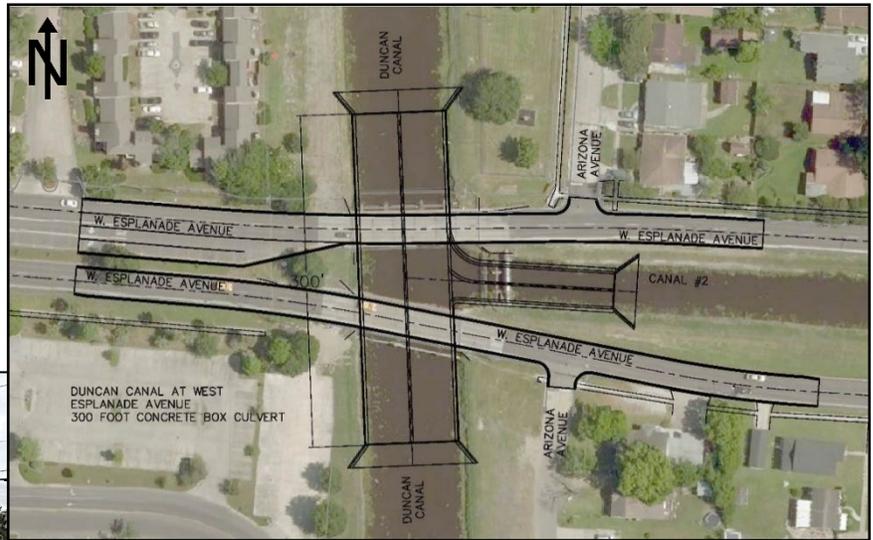
Improvements to Duncan Canal and West Esplanade Avenue; Kenner, LA

Owner:
 City of Kenner
 1801 Williams Boulevard
 Kenner, LA 70062

Contact:
 Tom Schreiner, Deputy CAO Public Works and Capital Projects
 (504) 468-7515

A Hydraulics Study using HEC-RAS and LADOTD Standards, and Preliminary and Final Design of a *38'w x 13'h double barrel, 3000 CFS, 340 LF reinforced concrete box culvert* which will replace the existing bridges and improve stormwater flow in the Duncan Canal at its intersection with Canal No. 2 at West Esplanade Avenue. N-Y also designed a *160 LF, 14'w x 8'h double barrel reinforced concrete box culvert* in Canal No. 2, which intersects with the Duncan Canal.

The project also includes the reconstruction of approximately 700 LF of eastbound and westbound W. Esplanade Avenue and included a topographic & title survey, geotechnical investigation, traffic engineering, environmental assessment and landscape architecture and beautification/enhancements.



N-Y Personnel:
 F. Nicoladis, PE
 C. Nicoladis, PE
 M. Nicoladis, EI, MBA
 F. Mortali, PE
 J. Simmons, PE
 D. Voss, NICET

Completion Date (Actual or Estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$13 million	100%

PROJECT NO. 3

Project Name, Location and Owner's contact information:

Nature of Firm's Responsibility:

**Hoey's Basin: Pump to the River
Jefferson Parish, LA**

**Owner:
Jefferson Parish
1221 Elmwood Park Blvd.
Harahan, LA 70123**

**Contact:
Mark Drewes, PE
(504) 736-6783**

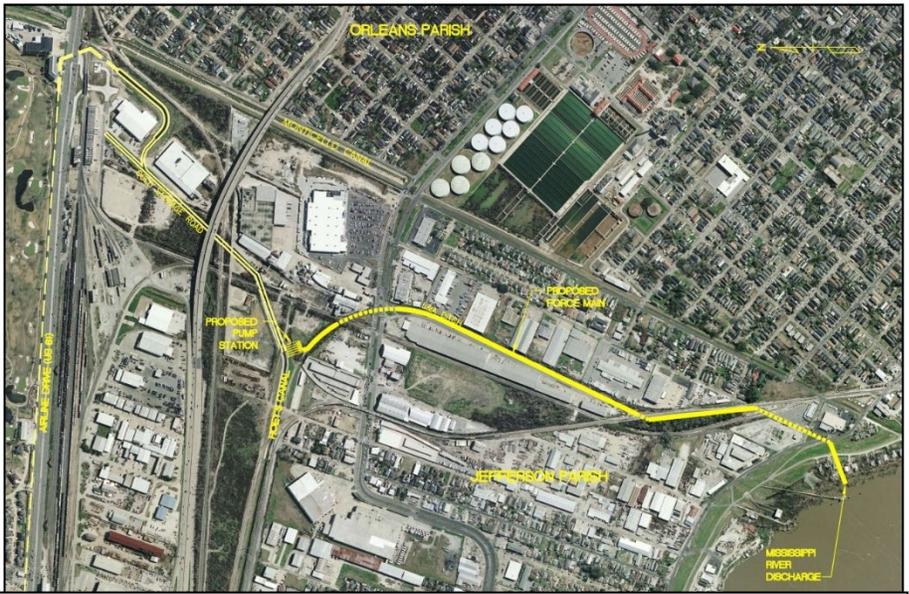
Engineering Feasibility, **Hydrologic and Hydraulic Modeling** and Conceptual Cost Estimates evaluating a proposed new \$150 million drainage pump station in the Jefferson Parish, 2,400 acre portion of the 10,000 acre Hoey's Drainage Basin.

This pump station would pump stormwater south beneath Jefferson Highway and River Road and over the Mississippi River levee. The pump station would provide additional capacity and redundancy for Drainage Pump Station No. 6 and the 17th Street Canal, which discharge into Lake Pontchartrain, and thereby more rapidly drain the entire Hoey's Basin.

Alternatives included i.) a 1,600 CFS station (with a 13 foot diameter, 5400 LF discharge force main) expandable to 2,400 CFS and ii.) a 1,000 CFS station with a detention pond for interim stormwater storage.

N-Y Personnel:

- F. Nicoladis, PE
- M. Nicoladis, EI, MBA
- J. Simmons, PE
- C. Nicoladis, PE
- D. Voss, NICET



SITE PLAN

Completion Date (Actual or Estimated):

Estimated Cost:

2007

Entire Project:

Work for which Firm was Responsible:

\$150 Million

100%

PROJECT NO. 4

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
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Improvements to Suburban Drainage Canal, Sections 1, 2, 3, 4, and 5; Metairie, LA

SELA Project

Owner:
 Jefferson Parish
 1221 Elmwood Park Blvd.
 Harahan, LA 70123

Contact:
 Jose Gonzalez, PE
 Director of Public Works
 (504) 736-6783

N-Y Personnel:
 F. Nicoladis, PE
 C. Nicoladis, PE
 M. Nicoladis, EI, MBA
 J. Simmons, PE
 N. Logan, PE
 D. Voss, NICET

- A. **SECTIONS 1, 2, 3, 4, AND 5:** N-Y provided preliminary design from West Napoleon Avenue to Veterans Boulevard, which included a **Hydraulic Analysis to determine water surface elevations** and geotechnical studies to determine slope stability. N-Y prepared preliminary plans for 3 box culverts at Interstate 10, measuring 11' x 20' feet each; 4 box culverts at Veterans Boulevard, measuring 11' x 21' each; a concrete flume section with a bottom width of 40' and a design flow of 3,000 CFS and a concrete flume section with a bottom width of 74' and a design flow of 3,600 CFS.
- B. **SECTION 2:** Final plans, bidding, construction administration, and resident inspection for the 40' (bottom) wide, 1,540 LF concrete flume section from West Napoleon Ave. to Interstate 10 with a capacity of 3,000 CFS.
- C. **SECTION 3:** Final plans, bidding, construction administration, and resident inspection for slope paving Suburban Canal through the 450' I-10 right-of-way with helical anchors for slope stabilization, sheet pile transitions and a design flow of 4,000 CFS.
- D. **SECTION 4:** Final plans, bidding, construction administration, and resident inspection for a 58' (bottom) wide, 1,837 LF concrete flume section from Interstate 10 to Veterans Boulevard with a capacity of 4,000 CFS.
- E. **SECTION 5:** Final plans, construction administration, and resident inspection for removal of two existing bridges and installation of a triple barrel, 16' h x 60' w box culvert, with a design flow exceeding 6,000 CFS, through the 355' right-of-way at Veterans Boulevard, including box culvert transitions from Canal No. 3.



Section 2: Completed Construction



Section 4: Completed Construction

Completion Date (Actual or Estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
A. 1993	A. \$26 million	100%
B. 1996	B. \$4.5 million	
C. 2002	C. \$6 million	
D. 1998	D. \$4.5 million	
E. 2004	E. \$9 million	

PROJECT NO. 5

Project Name, Location and Owner's contact information:

Nature of Firm's Responsibility:

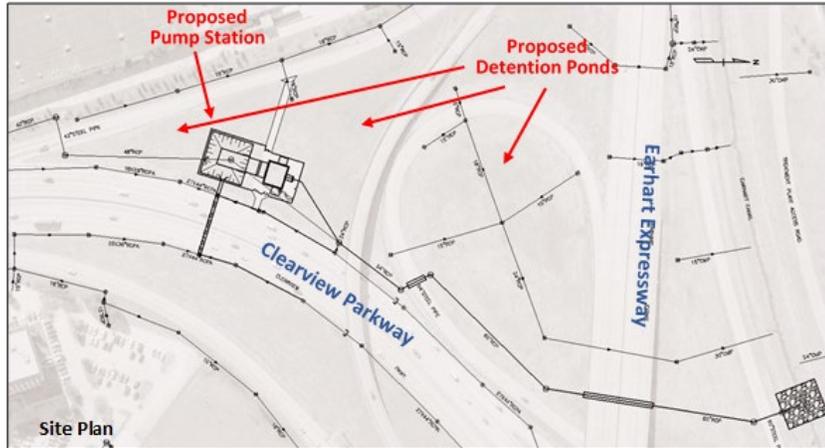
Engineering Feasibility Study for Drainage Improvements at the Clearview/Earhart Expressway Interchange; Jefferson Parish, LA

Engineering Feasibility Study **with H&H Modeling**, Concept Plans, and Cost Estimates to alleviate chronic flooding on Clearview Parkway in the vicinity of the Earhart Expressway. The study recommended the installation of a new 160 cfs triplex drainage pump station, a slotted intake drain across Clearview Parkway (LA 3152) and **stormwater detention ponds** on the intake side of the pump station, and upgrades to St. Peter's Ditch including a concrete U-flume section.

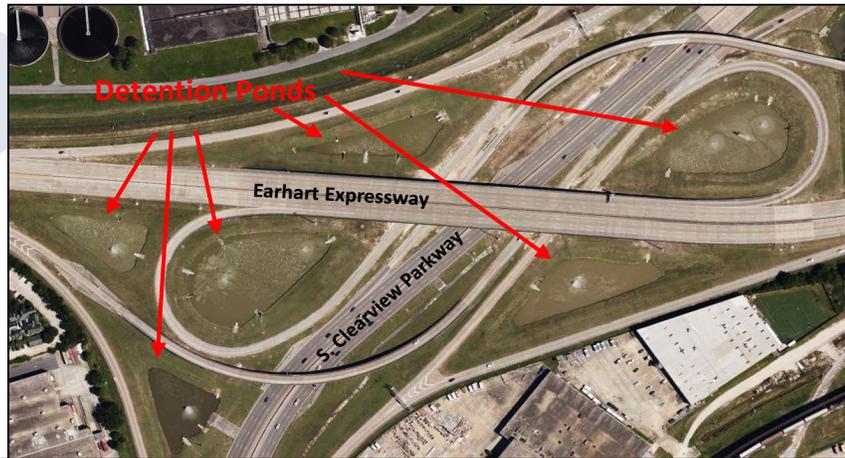
Owner:
 Jefferson Parish
 1221 Elmwood Park Blvd.
 Jefferson, LA 70123

Contact:
 Mark Drewes,
 Director of Public Works
 (504) 736-6783

N-Y Personnel:
 F. Nicoladis, PE
 C. Nicoladis, PE
 M. Nicoladis, EI, MBA
 D. Voss, NICET



Feasibility Study



Aerial Photo of Study Area

Completion Date (Actual or Estimated):

Estimated Cost:

2003 (study)

Entire Project:

Work for which Firm was Responsible:

\$10 million

100%

PROJECT NO. 6

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
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Drainage Master Planning, Hydraulic Modeling and Design; St. Tammany Parish, LA

- A. Coin Du Lestin Estates Road Elevations
- B. Brewster Road/LA 1077 Detention Pond
- C. Alton Subdivision Drainage Improvements
 - i. Alton Drainage Study
 - ii. Alton Drainage Design, Phase 1

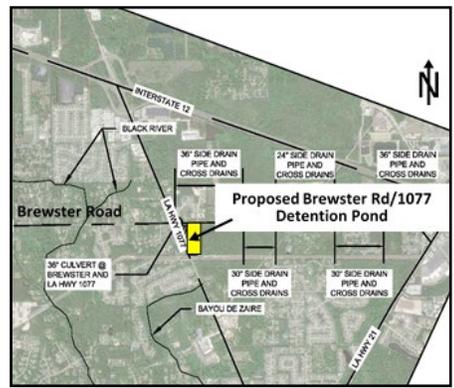
Owner:
 St. Tammany Parish
 21490 Koop Drive
 Mandeville, LA 70471

Contact:
 Donna O'Dell, PE
 (985) 898-2552

N-Y Personnel:
 F. Nicoladis, PE
 C. Nicoladis, PE
 M. Nicoladis, EI, MBA
 F. Mortali, PE
 P. Claverie, EI, MS
 D. Voss, NICET

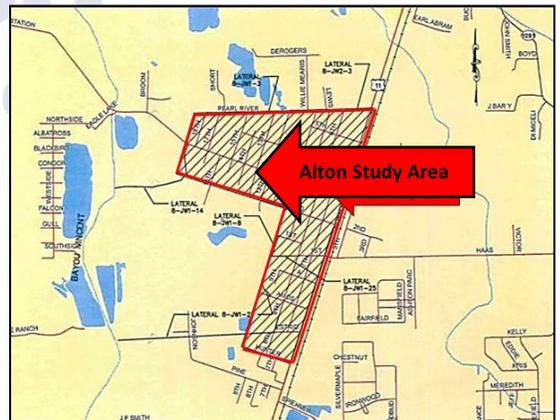
A. Coin Du Lestin Estates Road Elevations
 N-Y evaluated raising several roadways in the Coin Du Lestin Estates subdivision in eastern St. Tammany Parish by creating a Hydraulic and Hydrology Model (H&H Model). The **H&H Model utilizes HEC-RAS** and illustrates the existing conditions, determines the required roadway elevations to prevent inundation in a 100-year event, evaluates the drainage impacts that will occur due to raising the roadway elevations, and provides a final recommendation.

B. Brewster Road/LA 1077 Detention Pond
Hydrologic & Hydraulic Modeling utilizing SWMM and HEC-RAS of existing conditions and proposed improvements to evaluate the benefits and verify the pond design criteria. Design for a +/- 10-acre detention pond located on undeveloped land in the vicinity of the intersection of Brewster Rd and LA Hwy 1077 within the upper portion of the Bayou De Zaire watershed in unincorporated Madisonville. The project also includes drainage improvements to facilitate connectivity to the pond including cross drains, side drains, storm drains, and potential new subsurface drainage along Brewster Road.



C. Alton Subdivision Drainage Improvements
 i. **Alton Drainage Study**
Hydrologic and Hydraulic Modeling utilizing SWMM of Existing Conditions and Proposed Improvements (including new subsurface drainage and open channel flow) to alleviate street and nuisance flooding in the Alton Subdivision North of I-12 and West of US Hwy 11.

This area is part of the Bayou Vincent watershed, a tributary to Bayou Bonfouca. Land use is largely residential with some commercial and industrial. A SWMM model was created to study the drainage issues based on both existing conditions and proposed improvements for a 10, 25, 50 and 100 Year Storms. In the conclusion of the study, N-Y suggested that the construction of the proposed solutions be completed in two phases. Phase I of the project includes the improvements to the major outfalls along Third Street from 12th Street to the outfall at Drainage Lateral 8-JW1-14, as well as drainage Laterals 8-JW1-8, 8-JW1-27 and 8th Street from Amos to the outfall at 8-JW1-27.



- ii. **Alton Drainage Design, Phase 1**
Design for Phase 1 of the proposed drainage improvements included:
 - New subsurface drainage including reinforced concrete arch pipe and 176 LF of 4' x 4' pre-cast, reinforced concrete boxes along N. 3rd Avenue between N. 12th Street and west of N. 18th Street.
 - Ditch widening along N. 10th Street between N. 1st Avenue and Amos Street
 - 858 LF of 9' x 3' pre-cast, reinforced concrete boxes and reinforced concrete arch pipe along N. 8th Avenue between Amos Street and south of Estride Avenue.

Completion Date (Actual or Estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
A. 2022	A. \$2 million	100%
B. 2022	B. \$8.1 million	
C. i. 2016; ii. 2018 (design)	C. \$1.5 million	

PROJECT NO. 7

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
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Drainage Master Planning, Hydraulic Modeling and Design; St. Tammany Parish, LA

A. 1077/1085 Drainage Study

B. Tantella Ranch/McGee Road Drainage Study

Owner:
 St. Tammany Parish
 21490 Koop Drive
 Mandeville, LA 70471

Contact:
 Donna O'Dell, PE
 (985) 898-2552

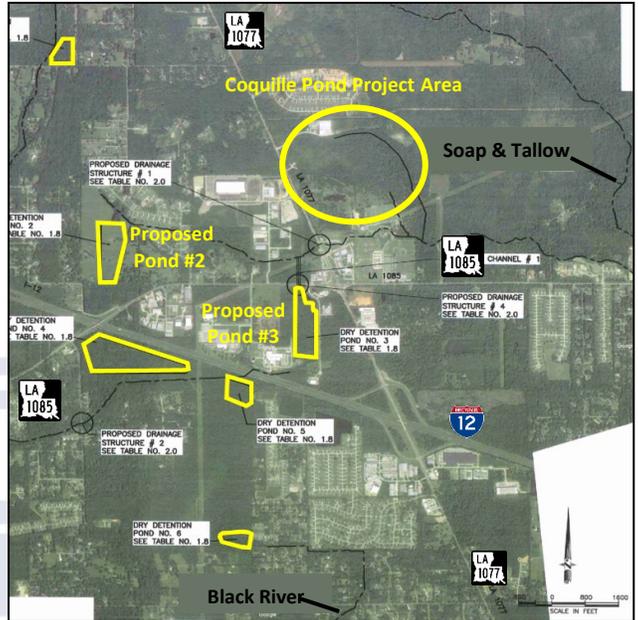
N-Y Personnel:
 F. Nicoladis, PE
 C. Nicoladis, PE
 M. Nicoladis, EI, MBA
 F. Mortali, PE
 D. Voss, NICET

A. 1077/1085 Drainage Study
Hydrologic and Hydraulic Modeling utilizing SWMM and HEC-RAS, of Existing Conditions and Proposed Phased Improvements for this 12,500-acre area which includes the following three (3) adjoining watershed areas in northwestern St. Tammany Parish.

- **East Bedico Creek (7,254 acres)**
 - includes Fox Branch and Tributary No. 3 tributaries
- **Soap and Tallow Creek (4,412 acres)**
 - includes Tallow Creek, Tallow Creek No. 3 and Tuscany tributaries
- **Black River (833 acres)**

The Proposed Improvements will reduce flood inundation and water surface elevations and include six (6) new stormwater detention ponds, enlargement of existing culverts and new culverts.

The 1077/1085 Drainage Study identified the need for storm water detention ponds and other drainage improvements in the Coquille Pond project area to mitigate future flooding during rain events. N-Y provided hydrologic and hydraulic modeling, conceptual design and cost estimates for proposed detention ponds in the study area which are similarly sized and would provide similar benefits to the proposed 30-acre Coquille Pond.



B. Tantella Ranch/McGee Road Drainage Study
Hydrologic and Hydraulic Study utilizing SWMM, to evaluate the water surface elevation for a 1,783 acre area on Tantella Ranch Road including seven (7) outfalls.

The purpose of the project was to evaluate the impact and the water surface elevation reduction of a proposed detention pond. The parcel is approximately 90 acres and is located between the Silver Lake Subdivision and LA Hwy 1077. The impact of extending the existing channel from Tantella Ranch Road towards the Tchefuncte River a distance of approximately 2700 feet was evaluated and a proposed culvert addition on Tantella Road was also included in the model.

Completion Date (Actual or Estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
A. 2016	A. \$17.8 million	100%
B. 2017	B. \$8.1 million	

PROJECT NO. 8

Project Name, Location and Owner's contact information:

Nature of Firm's Responsibility:

**Main Street Drainage Improvements
Plaquemines Parish, LA**

A Hydrologic and Hydraulics Study utilizing SWMM; and Design, Bidding, Construction Administration and Resident Inspection for new subsurface drainage improvements on Main Street and Avenue "D" including a new 50 CFS drainage pump station discharging to the Mississippi River. The project also includes Environmental Clearance and Permitting.

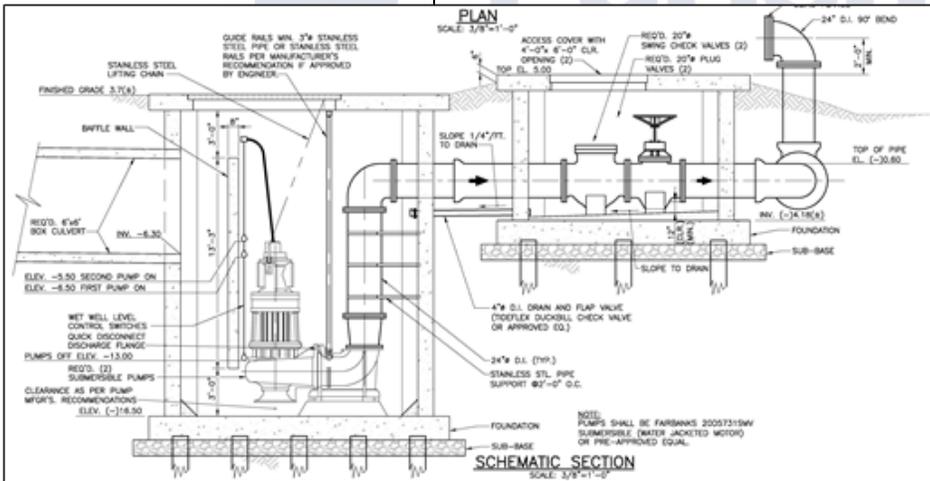
Owner:
Plaquemines Parish Government
102 Avenue G
Belle Chasse, LA 70037

Contact:
Mr. Ken Dugas, PE
Director of Engineering
(504) 297-5343

Key Personnel:
F. Nicoladis, PE
C. Nicoladis, PE
F. Mortali, PE
J. Simmons, PE
D. Voss, NICET



Valve Box and Drainage Pump Station



**Completion Date
(Actual or Estimated)**

Estimated Cost:

Entire Project:

Work for which Firm was Responsible:

2022

\$2.5 million

100%

PROJECT NO. 9

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
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Hydrologic and Hydraulic Modeling and Analysis for East Baton Rouge Flood Risk Management Project; East Baton Rouge, LA

Owner:
USACE, NOD
7400 Leake Avenue
New Orleans, LA 70118

Contact:
 Clyde Barre
 (504) 862-2128

N-Y Personnel:
 F. Nicoladis, PE
 J. Simmons, PE
 M. Nicoladis, EI, MBA

Hydrologic and Hydraulic Modeling, utilizing HEC-RAS 2D, of existing conditions and proposed improvements of the basins, channels and channel improvements for the East Baton Rouge Flood Risk Management Project which includes three (3) basins within the Amite River watershed: Blackwater Bayou, Jones Creek and Ward Creek. The purpose of this project is to reduce the extent of flooding in the three basins.

N-Y and its subconsultant were responsible for determining stage and inundation differences in the three basins between the existing conditions and proposed channel improvements which include clearing and snagging, concrete lining and channel enlargement. The individual models of the three basins were performed for eight rainfall frequency events for existing conditions and proposed improvements and were then combined into a single "basin-wide" hydraulic model for both existing conditions and proposed improvements. N-Y, as Prime Consultant, worked with a major subconsultant to accomplish this work.



**Ward Creek Watershed
(45 square miles)**



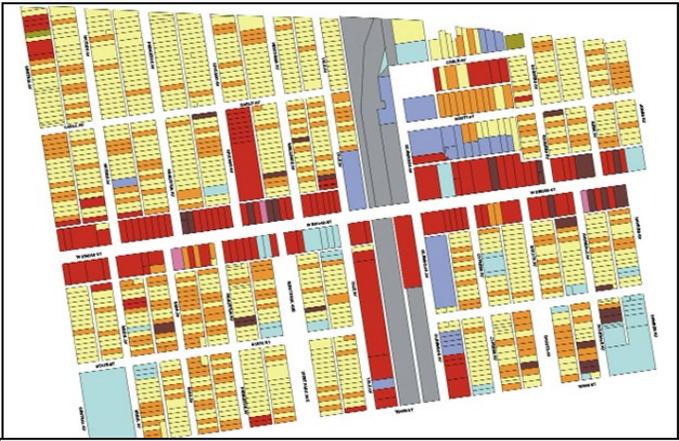
**Blackwater Bayou Watershed
(16 square miles)**



**Jones Creek Watershed
(24 square miles)**

Completion Date (Actual or Estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2019	\$225 K	25%

PROJECT NO. 10

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Town of Franklinton, LA Drainage Improvements</p> <p>A. Downtown Area Drainage Improvements</p> <p>B. Jones Creek Area Drainage Improvements</p> <p>Owner:</p> <p>A. Town of Franklinton 301 11th Avenue Franklinton, LA 70438</p> <p>B. LADOTD 1201 Capitol Access Rd. Room 302 Baton Rouge, LA 70802</p> <p>Contact: Mark Chenevert, PE (225) 379-1591</p> <div data-bbox="142 1491 444 1675" style="border: 1px solid black; padding: 5px; margin-top: 20px;"> <p>N-Y Personnel: F. Nicoladis, PE M. Nicoladis, EI, MBA C. Nicoladis, PE D. Voss, NICET</p> </div>	<p>A. Downtown Area Drainage Improvements Development of a HEC-RAS hydraulic model of a 26-acre area of Downtown Franklinton, Louisiana.</p> <p>Design and construction administration for improvements to the area's subsurface drainage system, which included 30" to 60" diameter reinforced concrete pipe.</p> <div data-bbox="711 478 1390 957" style="text-align: center;">  <p>SITE MAP OF DOWNTOWN FRANKLINTON, LA</p> </div> <p>B. Jones Creek Area Drainage Improvements Development of an HEC-2 hydraulic model of the 213-acre Jones Creek Drainage Basin. Design, Permitting, Bidding and Construction Administration for an earthen channel measuring approximately 1,500 LF and concrete flume sections measuring approximately 3,800 LF to improve flow capacities on Jones Creek and the Jones Creek Lateral.</p> <p>This project included the preparation of a Statewide Flood Control Program Application and 404 permit from the Vicksburg District Corps of Engineers. The project was seventy-five (75%) percent funded by the State of Louisiana.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="620 1348 1036 1621" style="text-align: center;">  </div> <div data-bbox="1065 1423 1487 1734" style="text-align: center;">  </div> </div>	
<p>Completion Date (Actual or Estimated):</p> <p>A. 1995 B. 2000</p>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
	<p>A. \$600,000 B. \$1.4 million</p>	<p>100%</p>

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:	
		N-Y has no on-going legal proceedings with Jefferson Parish.

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

SECTION N. TABLE OF CONTENTS

- I. EXECUTIVE SUMMARY
- II. MINIMUM QUALIFICATIONS
- III. EVALUATION CRITERIA
 - 1. Professional Training and Experience
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 - 4. Adversarial Legal Proceedings
 - 5. Prior Successful Completion of Projects
 - 6. Size of Firm
 - 7. Past Performance
- IV. QUALITY ASSURANCE PROGRAM
- V. THE N-Y ADVANTAGE

II. MINIMUM QUALIFICATIONS

1. One Principal who is a Professional Engineer who shall be registered as such in Louisiana:
 - Frank Nicoladis, PE
LA PE No. 5924, Expires 03/31/2023
64 Years of Experience
2. A Professional in Charge of the project who is a Professional Engineer who shall be registered as such in Louisiana with a minimum of five (5) years experience in the disciplines involved:
 - Constantine F. Nicoladis, PE
LA PE No. 27095, Expires 09/30/2023
35 Years of Experience
3. One Employee who is a Professional Engineer registered as such in Louisiana in the field or fields of expertise required for the project (A sub-consultant may meet the requirement only if the advertised project involves more than one discipline):
 - Fred Mortali, PE
LA PE No. 35111, Expires 03/31/2022
29 Years of Experience
 - W. Tully Rhodes, PE
LA PE No. 19885, Expires 09/30/2023
43 Years of Experience
 - James Simmons, PE
LA PE No. 19891, Expires 09/30/2023
45 Years of Experience
 - Neil Logan, PE
LA PE No. 14607, Expires 03/31/2023
61 Years of Experience
 - William Haensel, PE, PLS
LA PE No. 13375, Expires 03/31/2024
55 Years of Experience

I. EXECUTIVE SUMMARY

Although N-Y Associates, Inc. is sometimes mistaken for "New York", N-Y is actually a fifty-three (53) year-old family owned, multi-discipline firm founded and headquartered in Jefferson Parish. Offering extensive local experience, N-Y has been providing engineering, architecture, planning and project management services to federal, state, regional, parish and city agencies throughout southern Louisiana since 1969.

N-Y's staff includes civil, hydraulic and structural engineers; project managers; architects; urban planners; construction inspectors and technical support personnel, each of whom offers experience providing professional services on drainage and flood control projects throughout Jefferson Parish and the metro area.

N-Y has worked extensively throughout Jefferson Parish since its inception. Our public agency clients include the Parish, the Jefferson Parish School Board, the City of Kenner, LADOTD, and the Regional Planning Commission. This longevity has provided N-Y with extensive knowledge of the design criteria, system of approvals, and construction methods unique to infrastructure in this area.

II. EVALUATION CRITERIA

1. Professional Training and Experience

➤ Personnel

N-Y possesses highly qualified & experienced personnel, who have the experience, educational background, and are licensed/certified to provide Routine Engineering Services for Drainage Projects in Jefferson Parish. The professional qualifications, integrity, reliability and commitment of our personnel has earned N-Y an excellent reputation among our clients.

Constantine F. Nicoladis, PE, a Vice President and Civil Engineer, will serve as Project Manager. He has 35 years of experience and is in responsible charge of the design and construction engineering of the firm's municipal and parish drainage work. Mr. Nicoladis extensive experience includes major subsurface drainage improvements, drainage canals, box culverts, utilities relocation and roadway reconstruction in Jefferson and Orleans Parishes.

Mr. Nicoladis' experience includes serving as N-Y's Project Manager for Duncan Canal Improvements at West Esplanade Avenue in Kenner, which includes design of a 340 LF box culvert which will replace the existing bridges crossing the Duncan Canal. He recently served as Project Manager for N-Y's Street and Drainage Reconstruction Projects for the City of New Orleans, including the Veterans Administration Medical Center (VAMC) and University Medical Center (UMC) Infrastructure Improvements; as well as S. Galvez and Canal Streets. Additionally, he served as Project Manager for the \$25 million South Claiborne Avenue Manifold Canal and the \$55 million Jefferson Avenue Covered Canal I for the Sewerage and Water Board of New Orleans.

Mr. Nicoladis will be supported by a team of senior engineers and support personnel with over 30 years average experience, as outlined below. Most of these professionals have been with N-Y over fifteen (15) years.

- **Patricia Claverie, EI, MS:** Hydrology and Hydraulics Engineer who has a B.S. in Civil Engineering, M.S. in Engineering Management and has 22 years of experience in H&H modeling. She has extensive knowledge of ArcView, PCSWMM, SWMM5, HEC-HMS, and HEC-RAS for drainage improvements and hydraulic design for bridges and culvert design. Her experience also includes planning and engineering services for Sewer Infiltration and Inflow Management using InfoWorks and developing shape files for GIS. Ms. Claverie also is knowledgeable in roadway design, traffic control plans, signage and pavement marking plans, storm water pollution prevention plans, sanitary sewer and water line improvement plans, and hydrologic studies.

- **Fred Mortali, PE:** Civil & Hydraulic Engineer with a Bachelor of Engineering in Civil Engineering and 29 years experience. Mr. Mortali recently served as the Program Manager for the Design and Construction of \$83 million of FEMA funded concrete and asphalt street improvements for the East Bank of Jefferson Parish. He was responsible for the overall program implementation including the oversight of five (5) design engineers and approx. twenty (20) construction contractors, as well as providing the Parish with the necessary documentation for FEMA's Project Worksheets.

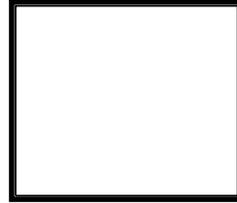
- **W. Tully Rhodes, PE:** Senior Civil & Hydraulic Engineer, with a B.S. in Civil Engineering and M.S. in Environmental Engineering and 43 years experience. Mr. Rhodes has been in responsible charge of street, drainage, wastewater and water projects for over 30 years and has worked almost exclusively as a project manager on parish, county and municipal infrastructure projects.

- **James Simmons, PE:** Vice President and Civil Engineer who has a B.S. in Civil Engineering and 45 years of related experience. Mr. Simmons experience includes N-Y's work in Jefferson Parish on drainage and roadway projects, including Improvements to Suburban Drainage Canal; Improvements to Drainage Canal No. 3; New Bayou Segnette Drainage Pump Station; Improvements to Destrehan Ave., Phases I and II; Improvements to West Esplanade Ave., from Bonnabel Blvd. to Cleary Ave.; Improvements to Veterans Blvd., from David Dr. to Roosevelt Blvd.; and Improvements to West Napoleon Ave., from Cleary Ave. to Houma Blvd.

- **Dennis Voss, NICET:** Senior Engineering Technician with 56 years' experience. He has been certified by the National Institute for Certification in Engineering Technology as a Level IV Technician. Mr. Voss has provided Civil Engineering Design services for virtually every drainage project that N-Y has undertaken in Jefferson Parish.

N-Y is considered a leader in the engineering field. Our professional staff members keep abreast of the latest technological advances and are active members in a variety of professional organizations including:

- **American Society of Civil Engineers**
- **Society of American Military Engineers**
- **Council of Engineering Companies of Louisiana**
- **Louisiana Engineering Society**
- **American Council of Engineering Companies**
- **American Public Works Association**
- **National Society of Professional Engineers**
- **American Concrete Institute**



Southeast Louisiana Urban Flood Control Program (SELA) Master Drainage Plan for the USACE – Orleans Parish, LA

Ms. Claverie updated the hydraulic models on the Eastbank of New Orleans utilizing XP-SWMM and HEC-RAS program with existing subsurface data provided from a 1984 study. Ms. Claverie also utilized GIS programs to develop flood maps for the 10-year storm, 50-year storm events and 100-year storm events. She was responsible for feasibility study reports to identify projects, management plans, development of construction costs, estimates for construction schedules and related services.

Hydrologic and Hydraulic modeling capabilities included the use of USACE HEC-RAS software and standard Hydrology and Hydraulic software such as XP-SWMM, and UNET. GIS capabilities include the Environmental Systems Research Institutes (ESRI's) Arc/Info and ArcView, (with the Hydraulic and Hydrologic modeling extensions), and Integraph MGE and Geomedia. CADD capabilities include MicroStation and AutoCAD. This modeling effort was coordinated closely with the USACE, New Orleans District, Hydraulics Branch and met the strict guidelines for project approval and funding.

The output from these models (for existing conditions and for proposed improvements) showed areas subject to flooding for 10, 50, 100 and 500 year predicted storm events. This information was incorporated with GIS data furnished by the City of New Orleans to determine economic benefits of proposed improvements. This effort was coordinated closely with the New Orleans District's Planning Division Economic Branch and with the District's Engineering Division and the Systems and Programming GIS team. Ms. Claverie developed relocation cost estimates as input for the Feasibility Study Report and Project Management Plan.

Ms. Claverie was involved in the development of GIS topographic maps for the extent of the boundary of the City of New Orleans. These maps were incorporated with previously completed and planned hydrologic models to determine the effectiveness of proposed improvements. The digital mapping was used as input to compute storage volumes in an ESRI compatible (third party acceptable) volume computation GIS program. These volume routines were identified and accepted by the SELA engineering staff. The map data was furnished as either Arc/Info coverage or ArcView 3.0 or higher shapefile(s). This data was created on the 1-foot contour interval.

Topology (clean and build or acceptable third-party algorithms) and database attribution (elevation, area) were created from existing digital contour data. The digital data was in AutoCAD 12.9 drawing exchange files (DXF) format. This consists of highly fragmented but attributed contour line data. Also included were the attributed spot elevations as point data types. Prior to the volume computation routines and eventual incorporation with the Hydrologic models, large-scale plots were furnished and accepted for accuracy by the USACE. All digital data referenced the NGV29 (1985 epoch) vertical datum and the NAD83 State Plane Coordinate System Louisiana South Zone horizontal datum.

In addition to the projects shown in Section L of this form, N-Y also has the following relevant project experience:

New Bayou Segnette Drainage Pumping Station; Jefferson Parish, LA

Design, bidding, construction administration and resident inspection for a new 1,200 CFS pumping station with two (2), 600 CFS horizontal pumps driven by diesel engines through gear reducers. The new station was built adjacent to the existing station and was designed to USACE standards.



Westwego Pumping Station No. 2; Jefferson Parish, LA



Design, bidding, construction administration, and resident inspection for the procurement and installation of an additional (third) 320 CFS electric powered, vertical pump. (SELA Project)

Bayou Segnette Complex Flood Protection: Navigable Sector Gate, Floodwalls, Levee and Pump Station; Jefferson Parish, LA

Preparation of the Design Report (Alternatives 1, 2 & 3); Plans and Specifications, Engineering During Construction and O&M Manual (*Alternative 2 below) for replacing the existing flood protection system from Bayou Segnette Pumping Station to Westwego Pumping Station No. 2 with new protection designed to the USACE Case 1 - 100-year level of protection. N-Y was the Design Subconsultant and Design Professional Engineer of Record. The Study included:



Alternative 1 which would follow the existing flood protection alignment (T-Wall, I-Walls on levee sections and full levee section alternatives were studied);

Alternative 2 (the selected Alternative) which crosses Bayou Segnette with a 56' wide navigable sector gate (mitered & sector floodgate alternatives were studied) and continues southeast to the existing flood protection alignment using a combination of 1600 LF of concrete T-walls and 800 LF of earthen levees; and

Alternative 3 which would connect the existing and proposed floodwalls located just north of Westwego Pumping Station No. 2 (a new 5000 CFS drainage pumping station, a mitered or sector navigable floodgate and a combination earthen/floodwall closure were studied).

WBV-74 Western Tie-In Closure Structure at Bayou Verret (Sellars Canal) Navigable Sector Gate, Sluice Gates, Levees and Floodwalls; Jefferson and St. Charles Parishes, LA

Design and Engineering During Construction of a 56 ft. wide, navigable sector gate; by-pass channel; 450 LF of T-wall; 1700 LF of earthen levee, a 5-gate sluice gate structure and a permanent access road. N-Y also reviewed the O&M Manual, which was written by the USACE.



Hurricane Protection Alignments, Westbank and Vicinity, Lake Cataouatche Hurricane Protection Levee; Jefferson and St. Charles Parishes, LA



Reconnaissance-Level Study for Hurricane Protection Alignments: A reconnaissance-level study for hurricane protection alignments, raised to the FEMA 100-year future case (2057) level of protection. The feasibility of case (2057)

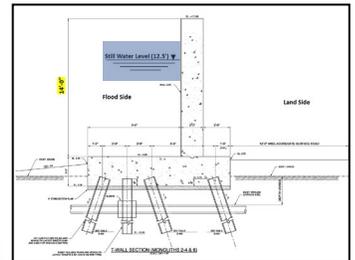
level of protection. The feasibility of interim protection was determined for the selected alternative which completed a western tie-in of the Westbank and Vicinity, Lake Cataouatche Hurricane Protection Project.

WBV-72 Lake Cataouatche Hurricane Protection Levee:

Design and Engineering During Construction of 12,450 LF of earthen levee, 2-concrete access bridges, a drainage feature in the Davis Pond Guide Levee, and a new drainage path for Jefferson Parish's pump station. N-Y was the Design Subconsultant and Design Professional Engineer of Record.

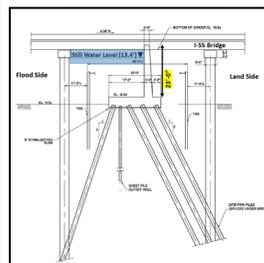
West Shore Lake Pontchartrain, WSLP-109 Levees and Floodwalls; St. John the Baptist Parish, LA

A new levee and T-wall and associated work as part of the West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction Project. The work includes:



- 5580 LF of New Levee
- 280 LF of T-wall crossing over nine (9) pipelines
- Transition Floodwalls tying the T-wall into the Levee Section
- Multiple T-wall Monoliths up to 15' high designed to current HSDRRS criteria
- A multi-culvert crossing of the interior drainage canal at the access road

West Shore Lake Pontchartrain, WSLP-114 Levees and Floodwalls; St. John the Baptist & St. Charles Parishes, LA



As a subconsultant to another firm, N-Y is responsible for designing **3000 LF of new levees and 1840 LF of new floodwalls (T-walls up to 27' high)** to current HSDRRS criteria associated with the following four (4) West Shore project

Drainage Pumping Stations:

- Hope Canal Pump Station
- Reserve Relief Canal Pump Station
- I-55 Floodwall and Pump Station
- Prescott Canal Pump Station

N-Y is also designing five (5) new "Waskey-type" access bridges ranging in length from 60 feet to 160 feet using precast deck panels, precast pile bent caps, and precast barrier rails supported on precast concrete piles.

Fronting Protection for Estelle No. 1 (Old) and Estelle No. 2 (New) Pumping Stations for the USACE, New Orleans District

Preparation of the Design Report, Plans & Specifications, and Engineering & Periodic Inspection during Construction to provide **fronting protection across the entire width of the pumping station discharge areas**. The designs consist of a combination of gate and T-wall monoliths and include positive cutoff for backflow prevention using sluice gates at concrete discharge tubes and butterfly valves at steel discharge pipes.



Drainage Pumping Station No. 11; New Orleans, LA



Design, bidding, construction administration, and resident inspection services for a 10,000 SF pump house, two, 500 CFS pumps, and related electrical/ mechanical systems and controls. The project

included two (2) I-walls and one T-wall, along with improvements to the levee along the Gulf Intracoastal Waterway.

Improvements to Drainage Canal No. 3; Jefferson Parish, LA

An 1,800 LF, 90' wide concrete flume section with side slope paving and a capacity of 4,000 CFS. The project also includes a 34'w x 250'l, 2-lane bridge replacement with 50 ft. spans.



ARFF Perimeter Road, Stage 1 at Louis Armstrong New Orleans International Airport; Kenner, LA



Design, bidding and construction administration of a 10,600 LF roadway including a 4,300 LF segment composed of P.C.C. with a 6" crushed limestone base course on a sand embankment with geotextile fabric and a 6,300

LF segment composed of 8" P.C.C. on a 6" asphalt binder course on top of a reinforced box culvert. The purpose of the roadway is to provide access for emergency vehicles at New Orleans International Airport.

Improvements to Subsurface Drainage for the Maplewood/Paillet Subdivision; Jefferson Parish, LA

Design, bidding, construction administration and resident inspection for CDBG funded subsurface drainage and street improvements in the Maplewood/Paillet



Subdivision along Gretna Boulevard between Gardere Canal and Redwood Street, Maplewood Street between Gretna Boulevard and 3rd Street, 9th Street between Gardere Canal and Redwood Street, and Dogwood and Redwood Streets between 9th Street and Doliac Street.

Improvements to Subsurface Drainage for the Bunche Village Subdivision; Jefferson Parish, LA



Design, bidding, construction administration and resident inspection for CDBG funded subsurface drainage and street improvements in the Bunche Village Subdivision along Meadow

Street and Myrtle Street between Ivy Street and Mistletoe Street.

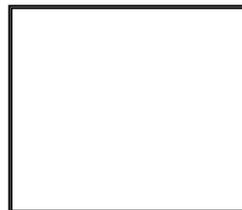
SELA 74 – Donner Canal (Algiers Outfall Canal to Pump Station #13); Algiers, LA

Design of improvements to an existing 5600 LF earthen section of Donner Canal, from Algiers Outfall Canal to Pump Station #13. N-



Y's responsibilities include the flume, transition sections and earthen canal design sections, tie into existing features; street removal, replacement, and/or repair (if required); and drainage culvert tie-ins.

Jefferson Avenue Covered Canal, South Claiborne Ave. to Dryades St.; New Orleans, LA



H&H Modeling and Design for a 4400 LF covered reinforced concrete canal to improve stormwater flow including roadway replacements and major utility relocations. A 1400 LF, 1500 CFS segment is 14'w x 10'h and a

3000 LF, 1100 CFS segment is 14'w x 8'h.

South Claiborne Avenue Manifold Canal, Jena Street to Louisiana Avenue; New Orleans, LA



A single barrel, 10h x 24'w concrete box culvert from Jena Street to the west and a single barrel 10'h x 14' w concrete box culvert from Louisiana Avenue to the east, with a capacity of approx. 2,000 CFS, placed in the

median of S. Claiborne Avenue (U.S. 90) and extending approx. 2,500 LF.

6. SIZE OF FIRM

N-Y's current staff of professional and support personnel are capable of performing the tasks anticipated from this contract. N-Y has the capacity to effectively perform this work with its existing staff and meet any schedules set by the Parish.

7. PAST PERFORMANCE

➤ Cost

N-Y has earned a reputation for consistently designing projects whose construction costs are within budget requirements. This record of successful construction cost control is maintained by an aggressive in-house program of monitoring each project during the concept, preliminary, & final design phase as well as during the construction phase.

The N-Y staff has considerable experience in the analysis and review of cost projections so that cost control is coordinated, and effective as evidenced by most of our recent projects where the actual bid by the general contractor has been within a few percentage points of N-Y's estimate and the owner's programmed budget.

Our goal is to be *pro-active* to avoid and mitigate unforeseen conflicts and to address potential problems before they occur. As a result, disputes and change orders can be minimized and projects can be completed on time and within budget.

➤ Quality of Work

The quality of our services in the area of planning, design, and construction administration services has been consistently commended by our clients, including projects for the federal government and Jefferson Parish. Most of the firm's clients are repeat clients. N-Y has been working with many clients since it was established 50 years ago.

➤ Compliance with Performance Schedules

N-Y has an established performance record of successfully completing design and/or construction phase services, including the coordination of the services of outside consultants, in accordance with schedules which have been approved by our clients. As a testament to its professionalism and successful project execution, N-Y has been repeatedly selected to provide professional services for many of its clients, including:

- **Jefferson Parish:** N-Y has been providing engineering services in Jefferson Parish continuously for over forty-five (45) years. *Provided after this section are Letters of Recommendation from Mark Drewes, Director of Engineering and Reda Youssef, former Director of Capital Projects attesting to the exceptional services provided by N-Y.*
- **Louisiana Department of Transportation and Development:** *N-Y has been providing professional services continuously for LADOTD since 1975* for the following types of projects: *Stage 0:* Feasibility Studies, Line & Grade Studies, Environmental Inventories and Corridor Studies; *Stage 1:* Environmental Assessments; Environmental Impact Statements; and Construction Plans and Specifications for Roadway, Highway and Bridge Projects.
- **City of New Orleans, Department of Public Works:** *N-Y has been providing professional engineering services continuously for roadway enhancement and reconstruction projects for NODPW since 1980.* Over the past thirty-five (35) years, N-Y has prepared plans and specifications and provided construction engineering and resident inspection for the reconstruction of over twenty (20) miles of concrete and asphalt urban streets in the City of New Orleans.
- **U.S. Army Corps of Engineers, New Orleans District:** N-Y met all its interim and final deadlines on over thirty (30) post-Katrina Task Orders for the USACE, New Orleans District. *As a testament to the USACE's confidence in N-Y, N-Y was one of only four firms in the New Orleans District that was awarded a new five-year, General Engineering Services Indefinite Delivery contract in 2016 which is ongoing. Provided after this section is a Past Performance Questionnaire and federal ACASS Ratings received by the USACE, New Orleans District.*

N-Y has not had any significant problems with time delays or cost overruns, except in the case of owner-requested and/or owner-approved changes to the original scope of work. **Ninety-five percent (95%) of our work is for government agencies.**

➤ **Public Contracts**

N-Y has an excellent professional reputation with all of its clients in the south Louisiana area. The firm has provided services to virtually every public agency in the metropolitan area as well as various State and Federal agencies.

Regional Clients:

- **Jefferson Parish, Department of Public Works**
- **Jefferson Parish, Department of Capital Projects**
- **Jefferson Parish School Board**
- City of Kenner
- St. Bernard Parish Government
- St. Bernard Port, Harbor and Terminal District
- St. Bernard Parish School Board
- St. Tammany Parish Government
- St. Tammany Parish School Board
- City of Slidell
- Plaquemines Parish Government
- City of New Orleans, Capital Projects Administration
- City of New Orleans, Department of Public Works
- Sewerage and Water Board of New Orleans
- New Orleans Aviation Board
- Housing Authority of New Orleans
- Orleans Levee District
- Orleans Parish School Board
- Port of New Orleans
- Port of South Louisiana
- St. Mary Parish Library Board
- St. Charles Parish Library Board
- St. Charles Parish, Department of Public Works
- St. John the Baptist Parish Dept. of Public Works

State Clients:

- LA Department of Transportation and Development
- Division of Administration, Facility Planning & Control
- LA Department of Education, Recovery School District

Federal Clients:

- **United States Army Corps of Engineers**
- United States Department of Labor
- United States Coast Guard
- Naval Support Activity, New Orleans Division
- Southern Division, Naval Facilities Engineering Command
- United States Postal Service
- United States Fish and Wildlife Service
- United States Department of Veterans Affairs
- Federal Emergency Management Agency

III. QUALITY CONTROL/ASSURANCE PROGRAM

N-Y considers quality control/assurance and technical review a critical component of our client service philosophy. N-Y's repeated selection by government agencies and private sector clients attests to the quality and consistency of our work. **N-Y has established a Quality Control/Assurance Plan which is customized to meet the individual client's needs and is overseen on each project by the Principal and Project Manager.**

We recognize that a Quality Control/Assurance Plan is only effective if a project is staffed by experienced, responsible, and motivated professionals. N-Y's Quality Control/Assurance Plan includes carefully organizing the project team with the Project Manager as team leader and communicating effectively with all persons involved in the design and review processes.

- During the initial phase of the Quality Control/Assurance process, each team member is provided with the Scope of Work to become familiar with the job and formulate any questions or concerns that they may have. Next, the team gathers for a thorough review of the supplied Scope of Work. During this review process, the team collaborates to achieve a clear understanding of the Scope of Work in its entirety. This process takes place as an open forum in which members ask questions that they may have for clarification, with each member being able to contribute their own expertise. Questions that are unable to be answered collectively as a team are documented and compiled into a list for discussion with the Owner. This meeting clarifies and/or resolves any outstanding issues upfront.
- Next, we address the assurance of compliance with any government technical manuals or documents that govern or control design activities that will be performed. A review of each of these documents is carried out, ensuring that each is the most current version. Each element of work to be performed is reviewed for compliance with these documents.

Project timelines are created to adequately assess each phase of the project. Each phase contains key milestones, as well as completion schedules to confirm that due dates are adhered to. By utilizing these project timelines, Quality Control/Assurance issues are resolved in an efficient and timely manner and not allowed to continue into subsequent phases of the project.

- At the start of the design process, the applicable disciplines and quality assurance reviews are planned. Manhours specifically dedicated to quality assurance reviews are allocated to the project budget. Adequate time is budgeted in the project schedule for the review process and any modifications that may be required. The Quality Control/Assurance Plan is reviewed and approved by the Project Manager. The work product and submittal items of all disciplines are then reviewed prior to each submittal by **Independent Technical Reviewers (ITR)** in each discipline who are not directly involved with the project. The Project Manager also checks and reviews final work products prior to submittals to the client.
- The Principal and the Project Manager receive management information system reports of project progress. Regularly scheduled staff meetings are held, in which projects are reviewed for conformance with predetermined completion schedules. If required, schedules and staffing are promptly adjusted to ensure deadlines are met without any sacrifice in quality.

This multi-level system of quality assurance checks and balances, including detailed reviews by Independent Technical Reviewers, submittal review by the Project Manager, and program monitoring and implementation by the Principal, is the core of N-Y's Quality Control/Assurance Plan.

N-Y's Quality Control/Assurance Plan also extends to each of our subconsultant firms. We insist not only that the leaders of each discipline become involved in the planning and design process, but also the principals of each firm. This raises the level of accountability of our subconsultant firms' team members. N-Y's Quality Control/Assurance Plan will be implemented in parallel with its sub-consultants', incorporating the best attributes of each, to ensure a seamless division of responsibility between the firms.

N-Y maintains, as always, its goal of adherence to client's schedules and budgets. We are constantly striving to improve our Quality Control/Assurance Plan to deliver the highest quality plans and specifications possible and to minimize changes to construction contracts.

IV. THE N-Y ADVANTAGE

N-Y Associates, Inc. is dedicated to providing high-quality, timely, and cost-effective professional services, strongly believing in a management system that recognizes its client's needs. N-Y strives to ensure an excellent working relationship is established with each of its clients by:

- Personally assisting the client from the very early planning stages of the project to the completion of construction;
- Having principals become personally involved in keeping the lines of communication open with the client;
- Assigning experienced project managers who offer innovative and proven solutions to meet the client's needs;
- Making every effort to ensure our resources are efficiently utilized to meet a project's schedule and adhere to a project's budget;
- Managing, Designing and/or Constructing projects that meet or exceed the client's expectations in functionality, low-maintenance, quality, and longevity.

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

Signature: 

Print Name: Michael F. Nicoladis

Title: Senior Vice President

Date: 3/23/2022

Principal Engineering, Inc.
TEC Questionnaire



TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Professional Engineering and Supplemental Services for a Drainage Master Plan for the East Bank of Jefferson Parish -- Resolution No. 138896

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



1011 N. Causeway Blvd., Suite 19
Mandeville, LA 70471

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:

Henry I. DiFranco, Jr., PE
President
1011 N. Causeway Blvd., Suite 19
Mandeville, LA 70471
(985) 624-5001 | henry@pi-aec.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.

Dwayne Marlborough, PE
Senior Civil Engineer
1011 N. Causeway Blvd., Suite 19
Mandeville, LA 70471
(985) 624-5001 | dwayne@pi-aec.com

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

<u>3</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u>1</u> Architects (Licensed)	<u> </u> Geologists	<u>1</u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u>3</u> Graduate Engineers
<u>5</u> Civil Engineers	<u> </u> Interior Designers	<u>2</u> Project Managers
<u>6</u> Construction Inspectors	<u> </u> Landscape Architects	<u>2</u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u>1</u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u>2</u> Engineer Interns	<u> </u> Environmental Engineers	
<u> </u> Professional Land Surveyors	<u>6</u> CADD/Engineering Techs	<u>32</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. This is not a Joint-Venture.
N/A

2. N/A

H. Has this JOINT-VENTURE previously worked together? Please check: N/A
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):
N/A		

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

10

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:

**Andre C. Monnot, PE
Vice President & Project Manager**

Project Assignment:

Professional in Charge of Project/Project Manager/H&H Modeling – meets requirement of a professional in charge of the project who is a licensed, registered professional engineer in the State of Louisiana with a minimum of five (5) years' experience.

Name of Firm with which associated:



Years' experience with this Firm:

12 Years (7 with others)

Education: Degree(s)/Year/Specialization:

BSCE/2002/Civil Engineering

Active registration: Year first registered/discipline:

Professional Engineer – 2007, Civil, Louisiana, #33626

Other experience and qualifications relevant to the proposed Project:

Mr. Monnot has a diverse range of engineering and management experience in both the public sector as a military engineer and as a private consultant. He has recently demonstrated experience in large-scale drainage modeling and planning, shoreline processes and shoreline protection. He has significant experience performing Master Drainage Plans utilizing XP-STORM, EPA-SWMM, HEC Delft3D Flow, Delft3D-Wave (SWAN), HEC-RAS, HEC-2, WSPRO, HY-8, RiverCAD, HEC-6T, CulvertMaster, MIKE URBAN, HEC-1, HEC-HMS, StormCAD, PondPack, FlowMaster, HydraFlow, LADOTD, HYDRO6020, AutoCAD Storm & Sanitary Analysis, and custom GIS-based applications for hydraulics and hydrology.

TEC Professional Services Questionnaire

Mr. Monnot continued...

Ozone Woods Drainage Improvements (H&H Modeling Report), St. Tammany Parish Gov't, LA

Mr. Monnot was the lead engineer for this project that included the H&H Modeling of the Ozone Woods Drainage basin in St. Tammany Parish, that consisted of detailed topographic survey, build of a calibrated existing condition hydrologic & hydraulic model in the EPA SWMM software platform for the 10-yr and 100-yr recurrence rainfall event, and modeling of improvement alternatives (~600 acres). Hydrologic and Hydraulic analysis of widespread area was performed to achieve desired water surface elevations through the pipe and ditch network. Design criteria for improvement modeling was established for the 10-yr event as storm water runoff contained within the ditch banks, and for the 100-yr event as generally below the finished floor elevation of structures. Two improvement alternatives, each satisfying one of the design criteria were developed, and the construction cost estimated. Given fiscal constraints, a reduced-criteria alternative was developed at lower construction cost; named the Modified 10-yr Improvement Alternative.

Lakefront Wetlands Restoration Permitting, City of Mandeville, LA

Mr. Monnot completed the permitting process for this Lake Pontchartrain shoreline project, including CUP authorization from DNR, section 404 permit from the USACE, Water Quality Certification from LADEQ, Class E Land Lease from LA State Lands Office, and U.S. Coast Guard Authorization. This included mitigation for submerged aquatic vegetation and implementation of construction noise reduction requirements to protect Gulf Sturgeon fingerlings and Manatee as required by NOAA.

St. Charles Parish – East Bank Master Drainage Plan, St. Charles Parish Gov't, LA

Mr. Monnot was the lead engineer for the development of an East Bank Master Drainage plan for St. Charles Parish for the Montz, Norco, New Sarpy and Ormond drainage basins (~5,000 acres). Mr. Monnot utilized XP-STORM, EPA SWMM and AutoDesk's Storm and Sanitary Analysis software platform to conduct H&H modeling for the 25-yr and 100-yr design storms (NOAA Atlas 14). The hydraulic model for this effort was developed using various datasets such as field surveys, GIS information and prior flood/drainage studies performed by the Parish. As a result, Principal provided various drainage improvement recommendations for the 25-yr and 100 yr storm event.

Waggaman Area Drainage Master Plan (H&H Modeling), Jefferson Parish Gov't, LA

Principal conducted an H&H study of the entire Lake Catouache drainage basin to determine which control projects will yield upstream flooding relief for residents, and open vacant property for development. Mr. Monnot was the project coordinator and responsible for overseeing plan preparation and quality control. Client: Jefferson Parish Gov't.

Mid-Barataria Sediment Diversion (MBSD) – CPRA (Client), Plaquemines Parish, LA

The Mid-Barataria Sediment Diversion project is one of the largest sediment capture and transport projects being undertaken under this aggressive program to rebuild the coast of Louisiana. Principal developed criteria to govern the alternative screening & selection, design, and detailing of armoring on the MRLs, headworks, and channel. Principal used H&H model result parameters (including inverted siphon diameters, profiles, weir geometry and elevations, approach geometry, outfall geometry, required blow-off locations and diameters) and operational requirements to develop concept-level plan and profile drawings of the inverted siphon conveyances and structures. Mr. Monnot is the lead PM for Principal Engineering and is providing hydraulic and structural engineering design for the project.

Waggaman Railroad Jack & Bore Drainage Improvements & R/R Crossing Study, Jefferson Parish Gov't, LA

Mr. Monnot was the lead Engineer where he was responsible for design of a new multiple 60-inch culvert crossing under the Union Pacific and BNSF Railroad embankment in Waggaman, Jefferson Parish. An additional 600 cfs will be drained to the south of the embankment during the 10-year event, relieving flooding in the local area. Nearly 7000 linear feet of drainage canal was enlarged to contribute and distribute flow to/from this new crossing. Construction cost: \$2.5M. Principal also performed an H&H Study to evaluate the area and all existing railroad crossings to recommend these improvements. Principal Engineering was responsible for Engineering drainage analysis, design and construction document preparation, bidding and construction administration and inspection.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Henry I. DiFranco, PE President & Principal Engineer
Project Assignment:
Project Principal/Contract Manager/QA/QC– Meets the requirement of one (1) principal who is a registered professional engineer in the State of Louisiana.
Name of Firm with which associated:

Years' experience with this Firm:
17 years (13 with others)
Education: Degree(s)/Year/Specialization:
BSCE/1991/Civil Engineering MBA/1998/Business Administration
Active registration: Year first registered/discipline:
Professional Engineer – 1997, Civil, Louisiana, #27448
Other experience and qualifications relevant to the proposed Project:
<p>Mr. DiFranco is the President of PRINCIPAL Engineering, Inc. and has over 30 years of experience in local, state and federal public works infrastructure engineering and management. Mr. DiFranco served as the Director of Public Works & Utilities for a local Parish and held numerous positions as a Parish Public Works Engineer (Jeff Parish) and Consulting Engineer over the past 30 years. As a Public Works Director/Engineer, he oversaw numerous drainage studies to include the SELA program (modeling) and a Parish wide Master Drainage Plan for St. John Parish. As a consultant, he worked on Master Drainage Plans and SDIPs for Jefferson Parish and numerous additional drainage projects that involved H&H Modeling. He is currently a Lt Colonel in the USAF Reserve serving as a Civil Engineer officer with the Air Force Civil Engineer Center and he is a veteran of Operation Iraqi Freedom and Noble Eagle. <i>Furthermore, Mr. DiFranco is the former Chairman of the St. Tammany, Levee, Drainage and Conservation District (Governor Appointed; 2014 – 2021), where he has been instrumental in the planning, scope writing and implementation for the development of a Coastal Master Plan for St. Tammany Parish.</i></p>

TEC Professional Services Questionnaire

Mr. DiFranco continued...

St. Charles Parish – East Bank Master Drainage Plan, St. Charles Parish Gov't, LA

Mr. DiFranco performed QA/QC for the development of an East Bank Master Drainage plan for St. Charles Parish for the Montz, Norco, New Sarpy and Ormond drainage basins (~5,000 acres). His team utilized XP-STORM, EPA SWMM and AutoDesk's Storm and Sanitary Analysis software platform to conduct H&H modeling for the 25-yr. and 100-yr. design storms (NOAA Atlas 14). The hydraulic model for this effort was developed using various datasets such as field surveys, GIS information and prior flood/drainage studies performed by the Parish. As a result, Principal provided various drainage improvement recommendations for the 25-yr. and 100 yr. storm event.

Old Mandeville Shoreline & Tidal Projection, City of Mandeville, LA

A drainage analysis and tidal/wave modeling were performed in an effort to protect areas along the Old Mandeville Lakefront from flooding during tidal/wave and rainfall events. Mr. DiFranco prepared the scope of work, reviewed all reports and models submitted by the design consultant, attended public meetings, and served as a liaison for the owner.

Ozone Woods Drainage Improvements (H&H Modeling Report), St. Tammany Parish Gov't, LA

Mr. DiFranco performed QA/QC for this the H&H Modeling Phase of the Ozone Woods Drainage Improvement project that consisted of detailed topographic survey, build of a calibrated existing condition hydrologic & hydraulic model in the EPA SWMM software platform for the 10-yr and 100-yr recurrence rainfall event, and modeling of improvement alternatives (~600 acres). Hydrologic and Hydraulic analysis of widespread area was performed to achieve desired water surface elevations through the pipe and ditch network. Design criteria for improvement modeling was established for the 10-yr event as storm water runoff contained within the ditch banks, and for the 100-yr event as generally below the finished floor elevation of structures. Two improvement alternatives, each satisfying one of the design criteria were developed, and the construction cost estimated. Given fiscal constraints, a reduced-criteria alternative was developed at lower construction cost; named the Modified 10-yr Improvement Alternative.

St. Tammany Parish Coastal Master Plan, St. Tammany Parish Gov't, LA

As the Chairman of the STLDCD, Mr. DiFranco developed the scope of work and is managing the collection and organizing of existing flood control assets and project data in the St. Tammany coastal zone; perform gap analysis to identify areas that are vulnerable to tidal surge, flooding and wetland loss/reduction; review current models to determine data gaps; develop conceptual coastal project alternatives, including costs; perform benefit/cost analyses; coastal engineering and design, as prioritized by the parish.

Waggaman Area Drainage Master Plan (H&H Modeling), Jefferson Parish Gov't, LA

Mr. DiFranco scoped and managed a H&H modeling study of the entire Lake Catouache drainage basin to determine which control projects will yield upstream flooding relief for residents, and open vacant property for development.

USACE IDIQ A/E Design and Construction Management - W912P8-09-D-0014, New Orleans, La, USACE New Orleans District, LA

Mr. DiFranco provided A/E design and construction management services for USACE flood control projects within the New Orleans district under a \$90M IDIQ Contract.

Airline Park Blvd. Drainage Improvements & Drainage Pump Station, Jefferson Parish Gov't, LA

The project includes the construction of a new drainage pump station at Airline Park and West Metairie Canal. Principal analyzed area hydrology and performed hydraulic calculations to establish/verify proposed subsurface pipe sizes and to design a 45 cfs drainage pump station.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Dwayne Marlborough, P.E. Senior Engineer
Project Assignment:
Civil Engineer - meets the minimum requirement of one (1) employee who is a registered professional engineer in the State of Louisiana in the applicable discipline involved.
Name of Firm with which associated:

Years' experience with this Firm:
2 years (26 years with others)
Education: Degree(s)/Year/Specialization:
Bachelor of Science in Civil Engineering - 1993
Active registration: Year first registered/discipline:
Professional Engineer/2001/Civil/Louisiana, #29318
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Marlborough has over twenty-five years of experience in the civil and structural engineering design field. He has extensive experience in civil/structural engineering to include various types of flood control infrastructure design. He has designed numerous drainage projects to include structural and coastal protection efforts. Experienced in civil design, site, and structural design, developing and interpreting plans, cost estimating and on-site construction inspection and reporting. Mr. Marlborough has worked on the St. Charles East Bank Master Drainage Plan, the Mid-Barataria Sediment Diversion as well as the Ozone Woods Drainage Improvement Projects.</p>

TEC Professional Services Questionnaire

Mr. Marlborough continued...

Mid-Barataria Sediment Diversion (MBSD) – LA CPRA (Client), Plaquemines Parish, LA

The Mid-Barataria Sediment Diversion project is one of the largest sediment capture and transport projects being undertaken under this aggressive program to rebuild the coast of Louisiana. Principal developed criteria to govern the alternative screening & selection, design, and detailing of armoring on the MRLs, headworks, and channel. Principal used H&H model result parameters (including inverted siphon diameters, profiles, weir geometry and elevations, approach geometry, outfall geometry, required blow-off locations and diameters) and operational requirements to develop concept-level plan and profile drawings of the inverted siphon conveyances and structures. Mr. Marlborough is providing structural engineering for the project. The drainage structure includes 900 LF of six (6) 96-inch steel pipes with a variety of T-walls, wing walls and a 29-foot siphon wall.

Lower Lafitte (Orange Street Basin) Tidal Protection, Town of Jean Lafitte, LA

Principal is responsible for the design of new required earthen levees, including a description of the process for constructing required improvements to raise existing earthen levees to a top of levee elevation of 8.5 MSL, the design of new required Concrete-Capped Steel Sheet Pile Floodwalls to top of cap elevation 7.5 MSL. Also responsible for the determination of required rights-of-way, access easements, and limits-of-construction for the levees and floodwalls. Mr. Marlborough is providing structural engineering for the project.

Read Blvd. West Group C, New Orleans, LA (RR153), City of New Orleans DPW, LA

Acting as a Project Manager for the construction phase of this \$10.0 M project. The scope of this project includes subsurface drainage improvements, concrete roadway re-design and replacement, and water main improvements.

St. Charles Parish – East Bank Master Drainage Plan, St. Charles Parish Gov't, LA

Mr. Marlborough assisted with the development of an East Bank Master Drainage plan for St. Charles Parish for the Montz, Norco, New Sarpy and Ormond drainage basins (~5,000 acres). The engineering team utilized XPSTORM, EPA SWMM and AutoDesk's Storm and Sanitary Analysis software platform to conduct H&H modeling for the 25-yr and 100-yr design storms (NOAA Atlas 14). The hydraulic model for this effort was developed using various datasets such as field surveys, GIS information and prior flood/drainage studies performed by the Parish. As a result, Principal provided various drainage improvement recommendations for the 25-yr and 100 yr storm event. Mr. Marlborough was instrumental in assisting with the development of alternative solutions, incorporation into their existing flood control system and preparing cost estimates for the proposed improvements.

Ozone Woods Drainage Improvements (H&H Modeling Report), St. Tammany Parish Gov't, LA

Mr. Marlborough provided civil engineering drainage support for this project that included the H&H Modeling of the Ozone Woods Drainage basin in St. Tammany Parish, that consisted of detailed topographic survey, build of a calibrated existing condition hydrologic & hydraulic model in the EPA SWMM software platform for the 10-yr and 100-yr recurrence rainfall event, and modeling of improvement alternatives (~600 acres). Hydrologic and Hydraulic analysis of widespread area was performed to achieve desired water surface elevations through the pipe and ditch network. Design criteria for improvement modeling was established for the 10-yr event as storm water runoff contained within the ditch banks, and for the 100-yr event as generally below the finished floor elevation of structures. Two improvement alternatives, each satisfying one of the design criteria were developed, and the construction cost estimated. Given fiscal constraints, a reduced-criteria alternative was developed at lower construction cost; named the Modified 10-yr Improvement Alternative. Mr. Marlborough developed alternatives and cost estimates based on the design criteria.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Brien Croff, P.E.

Project Assignment:

Project Engineer Assistant

Name of Firm with which associated:**Years' experience with this Firm:**

1 (others, 6)

Education: Degree(s)/Year/Specialization:

Bachelor of Science/2015/Civil Engineering

Active registration: Year first registered/discipline:

**Professional Engineer – 2022/Civil/Louisiana/License No. 0046408
2020/Civil/Ohio/License No. 86190**

Member of: Ohio EPA Certified Wastewater Treatment Operator

Other experience and qualifications relevant to the proposed Project:

Mr. Croff will have responsibility for planning, reports, and reviews. Brien has experience in project management, design drafting, hydraulic modeling and analysis, and technical report writing specifically in the areas of water supply and wastewater infrastructure.

Experience in Program/Contract Management:

- Data Analysis and Management
- Environmental, Biological and Infrastructure Surveys
- Environmental Studies and Reports
- Water Resources Planning
- Meeting/Reporting Requirements

PROJECT EXPERIENCE:**Mid Barataria Sediment Diversion | CPRA, Belle Chasse, LA (PRINCIPAL Engineering, Inc.)**

Project Engineer assistant for the design and cost estimate for a siphon in the Barataria Basin for the Mid-Barataria Sediment Diversion project for the State of Louisiana. This project consists of the analysis and design of different siphon structures to be integrated into the guide levees as well as the cost feasibility of alternatives.



TEC Professional Services Questionnaire

Mr. Croff Continued...

Mid Barataria Sediment Diversion continued...

Elements of design include reinforced concrete design and construction, using deep soil mixing for founding the structures and large-diameter pipelines, and access roads to and across the primary structures.

Fontainebleau State Park Force Main, City of Mandeville (PRINCIPAL Engineering, Inc.)

Mr. Croff is assisting with the design of this project in addition to completing the Coastal use permit application, permit drawings in progress, & submission of preliminary design draft as of early Jan. 2022. PRINCIPAL is performing Engineering Design and producing plans and specifications suitable for public bid, to replace the sanitary force main between City Lift Station 3, and the east bank of Bayou Castine. Design Submittals include 60%, 95% Pre-Final, and 100% Final. Engineer shall revise documents in accordance with City comments. Technical scope shall be according to the revised Pontchartrain Restoration Program (PRP) Work Plan.

St. Charles East Bank Master Drainage Plan-Phase I | St. Charles Parish Gov. (PRINCIPAL Engineering, Inc.)

Phase I of the East Bank Master Drainage Plan for St. Charles Parish for the Montz, Norco, New Sarpy, and Ormond drainage basins (~5,000 acres of study area). Modeling platforms employed included XPSTORM, EPA SWMM, and Auto Desk's Storm and Sanitary Analysis. H&H modeling for the 25-yr and 100-yr design storms (NOAA Atlas14) was accomplished, and an integrated program of improvement projects developed for the design criteria. Datasets incorporated were drainage network GIS information validated against field survey; prior flood/drainage studies performed for the Parish in these areas, Lidar topography, public input and anecdotal evidence, present and historical aerial photography, and anticipated future flood control project effects (namely, West Lakeshore). The recommended program of Phase I projects total \$148M in construction cost, consisting of pumping station, conveyance, and detention improvements. (Completed: 2021)

Quentin Road EQ Basin and Pump Station Improvements, Eastlake, Ohio

On this project, Mr. Croff was the design engineer. Responsibilities included developing a basis of design, drafting of construction plans, cost estimate, permit applications, and specifications. The purpose of the project was to construct a 1-million-gallon equalization storage basin on the site of an existing sewage pump station, as well as improvements to the existing pump station. The cost of the project was \$2.2 million.

Troy Oaks Pump Station – Geauga County, Ohio

On this project, Mr. Croff had the role of County project manager during design and construction. The purpose of the project was to decommission an existing wastewater treatment plant and construct a 75,000 gpd pump station in its place, which would discharge to another nearby treatment facility. The cost of the project was \$1.8 million.

List of Recently Worked / Working Projects:

- Third Street Drainage – **Jefferson Parish**
- Stall Ditch Drainage – **Jefferson Parish**
- Jung & Falcone Lift Station Improvements – **Jefferson Parish**
- Rachel St. Pump Station – Lafitte Levee Dist.
- Effluent Pipeline Extension – City of Mandeville

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

**Donald M. Alette, PE
Senior H&H Engineer**

Project Assignment:

Hydraulic & Hydrologic (H&H) Engineer

Name of Firm with which associated:**Years' experience with this Firm:**

8 years (38 years with others)

Education: Degree(s)/Year/Specialization:

**BSCE/1975/Civil Engineering
MBA/1983/Business Administration**

Active registration: Year first registered/discipline:

Professional Engineer – 1981, Civil, Louisiana #19521

Other experience and qualifications relevant to the proposed Project:

Mr. Alette is a hydraulic engineer with over forty years of experience in hydraulic analysis and the design of hydraulic structures for civil works projects as an employee of the US Army Corps of Engineers, New Orleans District. Mr. Alette was assigned to projects involving practically every hydraulics, hydrologic, coastal, and environmental design or study procedure that had been used within the New Orleans District during the past 34 years. At Principal, Mr. Alette performs a variety of H&H Drainage Modeling Studies and Reports and performs QA/QC prior to final product delivery.

TEC Professional Services Questionnaire

Mr. Alette Continued...

RELATED EXPERIENCE

Waggaman Area Drainage Master Plan-H&H Modeling, Jefferson Parish Gov't, LA

As hydraulic engineer was primarily responsible for performing a drainage master plan for the Waggaman Areas on the Westbank of Jefferson Parish. USACE HEC-HMS and HEC RAS was used to develop existing and improved state models, determining what combination of flood control projects will yield upstream flooding relief for residents, and open additional vacant property for development. This included various combinations of pump station alternatives along with major conveyance improvements and retention areas.

US Army Corps of Engineers, New Orleans District, Navigation Structure Designs, USACE New Orleans, LA

As Lead Hydraulic Engineer and Senior Hydraulic Engineer, was the manager and primary point of contact at the New Orleans District for 2 physical model studies performed by the Engineer Research and Development Center (Vicksburg, MS) for navigation through a floodgate and for a lock filling/emptying system with culverts. Developed the entire input for design documents for two lock projects, including documentation of all hydraulic and hydrologic analyses and development of stages for load cases for use by other design offices.

US Army Corps of Engineers, New Orleans District Comite River Diversion Study, USACE Baton Rouge, LA

As Senior Hydraulic engineer was primarily responsible for resolving numerous local sponsor concerns relating to hydraulic design of the Comite River Diversion project. Was manager of a physical model study performed by the Engineer Research and Development Center to refine the spillway design for the Lilly Bayou Structure. Coordinated the design of the drop structures required for this project, including the necessary H&H modeling (using HEC-RAS and HEC-1) for establishment of the headwater and tailwater conditions at each structure.

US Army Corps of Engineers, New Orleans District – Mississippi River and Tributaries (MR&T) Project

As Lead Hydraulic Engineer and Senior Hydraulic Engineer, coordinated the development of the MR&T Project Flood Flowline Report for the Atchafalaya Floodway System published in 1987, including use of HEC-2 to compute the flowline elevations along all of the rivers and floodways in the Atchafalaya Floodway System. Served as a technical advisor for the very rigorous (HEC-RAS and HEC-6T) analyses for, and preparation of, the MR&T Project Flood Flowline Report for the Atchafalaya Floodway System published in 2010. Reviewed plans and specifications for numerous levee and floodwall projects along the MR&T levee system.

US Army Corps of Engineers, New Orleans District – Davis Pond Freshwater Diversion Structure

As Supervisory Hydraulic Engineer, coordinated the completion of all the H&H analyses (using HEC-1, HEC-2 and several other methodologies) required to design the structure as well as the inlet and outlet channels and ponding area. Coordinated the preparation of the H&H input for the design document for this project.

Mid-Barataria Sediment Diversion – LA CPRA (Client), Plaquemines Parish, LA

The Mid-Barataria Sediment Diversion project is one of the largest sediment capture and transport projects being undertaken under this aggressive program to rebuild the coast of Louisiana. Principal developed criteria to govern the alternative screening & selection, design, and detailing of armoring on the MRLs, headworks, and channel. Principal used H&H model result parameters (including inverted siphon diameters, profiles, weir geometry and elevations, approach geometry, outfall geometry, required blow-off locations and diameters) and operational requirements to develop concept-level plan and profile drawings of the inverted siphon conveyances and structures. Mr. Alette is providing hydraulic engineering support for the project.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title: Natalya Munger, P.H., E.I. H&H Engineering Technician
Project Assignment: Professional Hydrologist, E.I. Drainage Design
Name of Firm with which associated: 
Years' experience with this Firm: 1 (others, 22)
Education: Degree(s)/Year/Specialization: Master's Degree/1995/Civil Engineering
Active registration: Year first registered/discipline: American Institute of Hydrology/Professional Hydrologist (P.H.) No. 11-H-3005 E.I. Louisiana No. 0030985
Other experience and qualifications relevant to the proposed Project: <p>Ms. Munger received her degree in civil engineering with minors in surface water hydrology and surveying (Accreditation Board for Engineering and Technology [ABET] accredited). Furthermore, Ms. Munger has professional qualifications as a professional hydrologist (surface water) from the American Institute of Hydrology and has received professional qualifications as a Certified Engineer Intern. Ms. Munger holds computer skills that enhance her credentials even further. Her computer skills include but are not limited to <i>AutoCAD</i>, <i>LA DOTD HYDROWINT</i>, <i>PCSWMM</i>, <i>FHWA WSPRO</i>, <i>HEC-18</i>, and <i>HEC-RA</i>.</p> <p>Natalya Munger will be the key engineer and professional hydrologist for hydrologic and hydraulic (H&H) and specialized modeling and overall environmental compliance.</p>

TEC Professional Services Questionnaire

Ms. Munger continued...

Prior Related Contract Roles:

- H&H Modeling
- Environmental and Risk Assessment Modeling
- Water Resources Planning

PROJECT RELATED EXPERIENCE:

St. Charles Parish East Bank Master Drainage Plan | St. Charles Parish, LA

Ms. Munger assisted in the preparation of Phase I of the East Bank Master Drainage Plan for the Montz, Norco, New Sarpy, and Ormond drainage basins. The model for this effort was developed through analysis of various datasets provided by the parish using XPSTORM, EPASWMM, and AutoDesk's Storm and Sanitary Analysis, resulting in detailed drainage improvement recommendations. (2020-2021)

Subsurface Drainage Design City of New Orleans Department of Public Works, Multiple Locations | New Orleans, Louisiana (ILSI Engineering, Inc.)

Ms. Munger prepared subsurface drainage design and hydraulic analysis using LADOTD HYDR6000 and HYDR6020 for multiple phases of New Orleans Department of Public Works project. Her work also included providing data points showing similar size and complexity. (2018 to 2020)

Southeast Louisiana Drainage Projects in Jefferson Parish | Jefferson Parish Department of Capital Projects | U.S. Army Corps of Engineers, Jefferson, Louisiana (BCG Engineering & Consulting)

Ms. Munger prepared design and construction cost credit reports for Southeast Louisiana Drainage Projects in Jefferson Parish. So far, 59 contracts have been issued under this program for drainage improvements, which included drainage canals, pumping stations, and bridges on both sides of the Mississippi River. The total program cost was \$650 million. (2012 to 2017)

Florida Avenue Development Federal Emergency Management Agency (FEMA) Eligible Road Repair | City of New Orleans Department of Public Works, New Orleans, LA (BCG Engineering & Consulting)

Ms. Munger prepared construction drawings and scoping reports for the Florida Avenue Development for road improvement projects that were eligible for FEMA funding. (2015 to 2018)

English Turn Drainage, City of New Orleans Sewerage and Water Board | New Orleans, LA (ILSI Engineering, Inc.)

Ms. Munger prepared a hydraulic model using PCSWMM for English Turn Subdivision to improve the capacity of the existing canals in the Algiers Sub-Basin and to increase the capacity of the nearby pump station. (2019)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Michael Melendez
Senior Engineering Technician

Project Assignment:

CADD & H&H Modeling

Name of Firm with which associated:**Years' experience with this Firm:**

15 Years (5 years with others)

Education: Degree(s)/Year/Specialization:

AS/1999/Computer Aided Design Drafting

Active registration: Year first registered/discipline:

none

Other experience and qualifications relevant to the proposed Project:

Mr. Melendez has an Associate's Degree of Occupational Science in Computer Aided Drafting from Southeast College of Technology. His coursework included drafting classes for architectural, mechanical, civil, piping, and electrical. During his studies, he maintained a 4.0 GPA and graduated with honors. His professional qualities include the ability to analyze a problem and present an accurate resolution. He is also detail oriented and focuses on quality and accuracy. Mr. Melendez is a seasoned Engineering Technician with the ability to perform engineering design and construction plan development in a professional and proficient manner. He has the technical know-how to produce a plan set in conformance with design standards for any type of Public Works Infrastructure improvement project with little up-front guidance. He is also proficient in all aspects of H&H modeling to include XPS storm, XPSWMM, StormCad, Civil 3D, GIS, and many software programs to include project cost estimating and scheduling.

TEC Professional Services Questionnaire

Mr. Melendez continued...

Mr. Melendez was the lead Engineering CAD or Engineering Technician on the following projects:

Lower Lafitte (Orange Street Basin) Tidal Protection, Town of Jean Lafitte, LA

Principal is responsible for the design of new required earthen levees, including a description of the process for constructing required improvements to raise existing earthen levees to a top of levee elevation of 8.5 MSL, the design of new required Concrete-Capped Steel Sheet Pile Floodwalls to top of cap elevation 7.5 MSL. Also responsible for the determination of required rights-of-way, access easements, and limits-of-construction for the levees and floodwalls.

Mid-Barataria Sediment Diversion – LA CPRA (Client), Plaquemines Parish, LA

The Mid-Barataria Sediment Diversion project is one of the largest sediment capture and transport projects being undertaken under this aggressive program to rebuild the coast of Louisiana. Principal developed criteria to govern the alternative screening & selection, design, and detailing of armoring on the MRLs, headworks, and channel. Principal used H&H model result parameters (including inverted siphon diameters, profiles, weir geometry and elevations, approach geometry, outfall geometry, required blow-off locations and diameters) and operational requirements to develop concept-level plan and profile drawings of the inverted siphon conveyances and structures.

St. Charles Parish – East Bank Master Drainage Plan (H&H Modeling), St. Charles Parish Gov't, LA

Mr. Melendez assisted with H&H models for the development of an East Bank Master Drainage plan for St. Charles Parish for the Montz, Norco, New Sarpy and Ormond drainage basins. He utilized XPSTORM, EPA SWMM and AutoDesk's Storm and Sanitary Analysis software platform to to conduct H&H modeling for the 25-yr and 100-yr design storms (NOAA Atlas 14). The hydraulic model for this effort was developed using various datasets such as field surveys, GIS information and prior flood/drainage studies performed by the Parish. Modeling these areas will allow for an analysis to help prevent future street and house flooding on the Eastbank. As a result, Principal provided various drainage improvement recommendations for the 25-yr and 100-yr storm event.

Waggaman Area Drainage Master Plan (H&H Modeling), Jefferson Parish Gov't, LA

Principal conducted an H&H study of the entire Lake Catouache drainage basin to determine which control projects will yield upstream flooding relief for residents, and open vacant property for development.

Airline Park Blvd. Drainage Pump Station, Jefferson Parish Gov't, LA

The project includes the construction of a new drainage pump station at Airline Park and West Metairie Canal. Principal analyzed area hydrology and performed hydraulic calculations to establish/verify proposed subsurface pipe sizes and to design a 45 cfs drainage pump station.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Eric Glynn, E.I.
Project Assignment:
Engineer Intern; Project Engineer Assistant
Name of Firm with which associated:

Years' experience with this Firm:
<1
Education: Degree(s)/Year/Specialization:
Bachelor of Science in Mechanical Engineering/2020/University of New Orleans.
Active registration: Year first registered/discipline:
2021/Engineer Intern (E.I.); Louisiana No. 0035028
Other experience and qualifications relevant to the proposed Project:
Mr. Glynn is currently assisting with modeling, site visits, plan markups, etc. etc. for PRINCIPAL on the following projects:
<ul style="list-style-type: none">• St. Charles Parish East Bank Drainage Master Plan – St. Charles Parish• Ozone Woods Drainage - St. Tammany Parish• Lake Vista Group E - Department of Public Works New Orleans• Pointe a la Hache Pump Station Rehabilitation – Plaquemines' Parish Gov.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Logan Richard, Engineering Technician
Project Assignment:
CAD Design
Name of Firm with which associated:

Years' experience with this Firm:
1
Education: Degree(s)/Year/Specialization:
Bachelor of Science/2019/Engineering Technology
Active registration: Year first registered/discipline:
NA
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Richard has a Bachelor of Science in Engineering Technology. He has experience in the production of CADD designs for intricate coastal and drainage projects. Mr. Richard's strong work ethic and attention to detail does not go unnoticed by the PRINCIPAL <i>Engineering, Inc.</i> team.</p> <p>Logan Richard will be performing computer-aided design and drafting of figures and conceptual designs.</p> <p>PROJECT EXPERIENCE:</p> <p>St. Charles Parish East Bank Master Drainage Plan St. Charles Parish, La</p> <p>Mr. Richard assisted with the production of a recommended improvement report for Phase I of the East Bank Master Drainage Plan for St. Charles Parish for the Montz, Norco, New Sarpy, and Ormond drainage basins (approximately 5,000 acres of study area). This entailed assisting the engineering staff in the design of accurate drainage models for each drainage basin in the Autodesk® Storm and Sanitary Analysis (SSA) program. Models were created for both 25-year and 100-year storms & drainage improvement plans (& alternatives) were produced for each. (2021)</p>

TEC Professional Services Questionnaire

Logan Richard Continued...

Grand Isle Pump Station Jefferson Parish Government | Grand Isle, La (Principal Engineering, Inc.)

Mr. Richard assisted the engineering team by creating computer-aided drawings of project plans. The project objective is to construct a drainage pumping station at the site of an old pumping station, now out of service, at the north end of Chighizola Lane at the levee in Grand Isle, Louisiana. The station is to be constructed on an elevated timber platform, near the perimeter levee. Discharge will be through a short pipeline, through the levee, to the marsh north of the town. Access to the station deck will be by metal stairs from the levee access road. Pump hydraulics will be optimized for maximum flow given the town standard motor size (25 horsepower and 16 inches in diameter). A large diameter corrugated metal pipe culvert adjacent to the station will be replaced due to deterioration. The project requires a three-phase service, electric motor and diesel standby generator with manual transfer switch. (2021 to Present)

Delambert Pump Station Rehabilitation |St. Bernard Parish Government, St. Bernard Parish, La

Mr. Richard assisted the engineering team by creating computer-aided drawings for the sewer lift station rehabilitation project. (2021 to Present)

Ozone Woods Drainage |St. Tammany Parish Government, St. Tammany Parish, La

Mr. Richard assisted the engineering team by creating computer-aided drawings and exhibits for the drainage renovations to be conducted within the neighborhood of Ozone Woods. (2021 to Present)

Winchester National Cemetery |U.S. Department of Veterans Affairs, Winchester, Virginia

Mr. Richard assisted the engineering team by creating computer-aided drawings for the renovations to the existing buildings and utilities on cemetery grounds. (2021)

List of Most Recent Projects Worked/Working:

- Grand Isle Pump Station – **Jefferson Parish**
- Third Street Drainage – **Jefferson Parish**
- Woodmere Youth Center – **Jefferson Parish**
- Woodmere Playground – **Jefferson Parish** / Meyer Engineers
- Harbor Breakwater Repair – City of Mandeville
- Fontainebleau SP Force Main – City of Mandeville
- Grafton Dr. Pavement Rehab – Slidell
- Eastbank Drainage Master Plan – St. Charles Parish
- EB Treatment Plant Roof – St. Charles Parish
- Delambert Pump Station Rehab – St. Bernard Parish

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:	
St. Charles Parish – East Bank Master Drainage Plan St. Charles Parish, LA St. Charles Parish Department of Public Works 100 River Oaks Drive Destrehan, LA 70047 Miles Bingham, DPW Phone: (985) 783-5102	PRINCIPAL performed a Phase I East Bank Master Drainage plan for St. Charles Parish for the Montz, Norco, New Sarpy and Ormond drainage basins (~5,000 acres of study area). Phase I is 100% complete and the Parish is engaging Principal for a Phase II to include additional East Bank drainage basins. Principal utilized XPSTORM, EPA SWMM and AutoDesk's Storm and Sanitary Analysis software platform to to conduct H&H modeling for the 25-yr and 100-yr design storms (NOAA Atlas 14). The hydraulic model for this effort was developed using various datasets such as field surveys, GIS information and prior flood/drainage studies performed by the Parish. As a result, Principal provided various drainage improvement recommendations for the 25-yr storm event.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021	\$700K (Engineering Fee – Phase I)	100%

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Fairfield & Oakland Drainage System Improvements H&H Modeling St. Charles Parish, LA St. Charles Parish Department of Public Works 100 River Oaks Drive Destrehan, LA 70047 Miles Bingham, DPW Phone: (985) 783-5102	This project involved analyzing the existing drainage basin of the Fairfield and Oakland subdivisions and preparing an Evaluation and Conceptual Design report, and design plans for two new drainage pump stations. The existing system consists of two drainage pump stations with a combined capacity of 90 cubic feet per second pumping capacity and a drainage area of 140 acres. Principal prepared an H&H model utilizing USACE HEC RAS & HMS software to evaluate the existing conditions to identify deficiencies within the conveyance and pumping systems. The current effort includes the preliminary design of new pump stations with the preparation of construction documents for a new discharge pipeline. Principal Engineering is responsible for Engineering Design & Construction Documents, Bidding, Construction Administration & Resident Inspection.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Original Project – March 2014 Current Project – Ongoing	\$8.0M	100%

PROJECT NO. 3

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
<p>Ozone Woods Drainage Improvements (H&H Modeling Report) St. Tammany Parish, LA</p> <p>St. Tammany Parish, LA Department of Engineering 21454 Koop Drive Mandeville, LA 70471 Daniel Hill, Director Phone: (985) 898-2552</p>	<p>The H&H Modeling Phase of Ozone Woods Drainage Improvements consisted of detailed topographic survey, build of a calibrated existing condition hydrologic & hydraulic model in the EPA SWMM software platform for the 10-yr and 100-yr recurrence rainfall event, and modeling of improvement alternatives (~600 acres). Hydrologic and Hydraulic analysis of widespread area was performed to achieve desired water surface elevations through the pipe and ditch network. Design criteria for improvement modeling was established for the 10-yr event as storm water runoff contained within the ditch banks, and for the 100-yr event as generally below the finished floor elevation of structures. Two improvement alternatives, each satisfying one of the design criteria were developed, and the construction cost estimated. Given fiscal constraints, a reduced-criteria alternative was developed at lower construction cost; named the Modified 10-yr Improvement Alternative.</p>	
<p>Completion Date (Actual or estimated)</p>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021	\$300,000 (fee)	100%

PROJECT NO. 4

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Waggaman Railroad Jack & Bore Drainage Improvements & R/R Crossing Study Jefferson Parish, LA</p> <p>Jefferson Parish Department of Drainage PM - Mitchell T. Theriot, P.E, Director 1221 Elmwood Park Blvd., Suite 907 Jefferson, La. 70123 Phone: (504) 736-6751</p>	<p>PRINCIPAL was responsible for design of a new multiple 60-inch culvert crossing under the Union Pacific and BNSF Railroad embankment in Waggaman, Jefferson Parish. An additional 600 cfs will be drained to the south of the embankment during the 10-year event, relieving flooding in the local area. Nearly 7000 linear feet of drainage canal was enlarged to contribute and distribute flow to/from this new crossing. Construction cost: \$2.5M. Principal also performed an H&H Study to evaluate the area and all existing railroad crossings to recommend these improvements. Principal Engineering was responsible for Engineering drainage analysis, design and construction document preparation, bidding and construction administration and inspection.</p>	
<p>Completion Date (Actual or estimated):</p>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
January 2017	\$3,000,000	100%

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Mid-Barataria Sediment Diversion (BA-153) Plaquemines Parish, LA State of Louisiana Coastal Protection and Restoration Authority Sub-Consultant to AECOM Bruce Lelong, PE, AECOM (504) 799-1334	PRINCIPAL developed criteria to govern the alternative screening & selection, design, and detailing of armoring on the MRLs, headworks, and channel. Design Criteria was according to USACE EM guidance, experience from past MR diversion projects, and judgement applied to the MBSD project; and provided in written narratives and or/lists. Principal used H&H model result parameters (including inverted siphon diameters, profiles, weir geometry and elevations, approach geometry, outfall geometry, required blow-off locations and diameters) and operational requirements to develop concept-level plan and profile drawings of the inverted siphon conveyances and structures. Principal performed civil and structural engineering for the drainage structures of the inverted siphon that included 900 LF of 6-96-inch steel pipes with various T-Walls, Wing Walls, and intake/discharge structural headwalls (29-ft high) to 85% design completion.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022 (Est.)	\$900,000,000 \$50,000,000 (Principal Portion)	100% scope above 5% of total contract

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
U.S Army Corps of Engineers A/E Design & CPS IDIQ Contract #W912P8-09-D-0014 US Army Corps of Engineers New Orleans District (HPO) 7400 Leake Ave New Orleans, LA 70118 Al Naomi (AECOM) Phone: (504) 799-1322	PRINCIPAL provided design and construction services support for multiple levee and flood protection projects under seven separate task orders including; LPV 109.02A (South Point to CSX), LPV 111.01 (CSX to Michoud Canal) and LPV 109.02B (I-10 Ramp). Principal's duties were primarily to assist in the design process, prepare ROW drawings and misc. design support for the preparation of the construction documents for levee, flood wall and drainage pump station projects. Principal was also given two separate Task Orders to provide a Project Engineer and Field Inspector (QAR) for Construction Phase Services to the USACE New Orleans District for floodwall construction and elevation of hurricane protection levees to the 2011 100-yr level. This work was spread over four projects totaling over \$50M in construction cost.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2013	\$500,000 (sub-fee)	100%

PROJECT NO. 7

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Waggaman/Avondale Area Drainage Master Plan- H&H Modeling Jefferson Parish, LA Jefferson Parish Department of Drainage PM - Mitchell T. Theriot, P.E, Director 1221 Elmwood Park Blvd., Suite 907 Jefferson, La. 70123 Phone: (504) 736-6751	PRINCIPAL completed a drainage H&H model to study the drainage conveyance and drainage pump stations in the Waggaman/Avondale area to include evaluating inadequate drainage crossings under the railroad tracks between the Mississippi River Levee and Hwy 90. The project required the collection of topographic survey data and the input of data into an existing conditions hydraulic model. A hydrologic model was constructed to simulate an actual rainfall event. USACE HEC-HMS and HEC RAS were used as the modeling software. A H&H study was conducted of the entire basin draining to Lake Catouache. Nearly 29 miles of open channel flow were modeled, contributing an estimated 13,500 cfs to the outfall. USACE HEC-HMS and HEC RAS was used to develop existing and improved state models, determining what combination of flood control projects will yield upstream flooding relief for residents, and open additional vacant property for development. This included various combinations of pump station alternatives along with major conveyance improvements.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2015	\$500,000 (fee)	100%

PROJECT NO. 8

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Subsurface Drainage Improvement Program (SDIP)- H&H Modeling Jefferson Parish, LA Jefferson Parish Department of Drainage PM - Mitchell T. Theriot, P.E, Director 1221 Elmwood Park Blvd., Suite 907 Jefferson, La. 70123 Phone: (504) 736-6751	PRINCIPAL performed and developed H&H models to evaluate repetitive loss/flooding areas within existing neighborhood subsurface drainage systems as a sub consultant. The models were created using a combination of and analyzing GIS, LiDAR, and topographic survey data for pipe sizes and invert elevations. The project included the creation of an existing condition model, calibration of the model, evaluating existing conditions to propose alternative solutions for a dry street and one passable lane condition and the development of a report with recommended solutions and cost estimates for delivery to the Parish. The project utilized EPA 5.0 SWMM hydraulic modeling software. Principal was also selected to perform engineering design for the Orleans Village Drainage Improvement Project which was one of the several study areas under this project. That project includes 2800 linear feet of drainage pipe installation up to 60" in diameter for a cost of \$3.0M.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2012	\$300,000 (sub-fee)	100%

PROJECT NO. 9

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Orleans Village Drainage Improvements Jefferson Parish, LA Jefferson Parish Department of Drainage PM - Mitchell T. Theriot, P.E, Director 1221 Elmwood Park Blvd., Suite 907 Jefferson, La. 70123 Phone: (504) 736-6751	PRINCIPAL prepared design drawings and construction specifications for the upsizing of subsurface drainage conveyance piping in a residential area of Jefferson Parish. The project scope was a result of the work performed under the SDIP program where H&H interior conveyance modeling was performed, and solutions were recommended to the Administration. Over 2800 linear feet of pipe was replaced, up to 60" in diameter. Over 2600 linear feet of roadway was replaced during the installation of the new drain lines. The project had a construction cost of ~\$2.5M. Principal Engineering was responsible for Engineering Design & Construction Documents; Bidding, Construction Administration & Resident Inspection	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2016	\$2.5M	100%

PROJECT NO. 10

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Airline Park Blvd Drainage & New Drainage Pump Station Jefferson Parish, LA Jefferson Parish Department of Drainage PM - Mitchell T. Theriot, P.E, Director 1221 Elmwood Park Blvd., Suite 907 Jefferson, La. 70123 Phone: (504) 736-6751	PRINCIPAL analyzed area hydrology and performed hydraulic calculations to establish/verify proposed subsurface pipe sizes and completed hydrodynamic computer modeling of the system to adequately address limited hydraulic storage available for a new 45 cfs drainage pump station (10-yr water surface elevation at outfall is higher than the street). This project also includes reconstruction of 2500 L.F. two-lane, two-way concrete roadway with parking lanes, removal and replacement of mainline subsurface drainage, maintenance of traffic through detour of west-bound W. Metairie Ave (arterial with over 20,000 ADT) to facilitate construction, replacement of concrete side streets at the intersections, replacement of water and sewer house connections, and adjustment/replacement of existing manholes, catch basins, water facilities, and sewer facilities as necessary. Analyzed area hydrology, performed hydraulic calculations to establish subsurface pipe sizes and inlet spacing	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2018 (Construction)	\$4.5M	100%

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

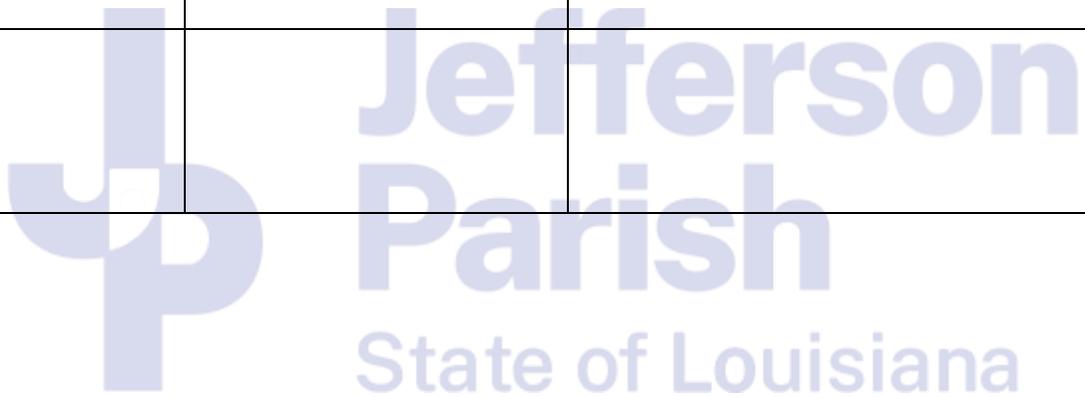
Parties:

Plaintiff:

Defendant:

Status/Result of Case:

1. N/A - NONE		
2.		
3.		
4.		



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

PRINCIPAL *Engineering, Inc.* (PRINCIPAL) is a full-service consulting Architecture, Engineering and Construction services (A/E/C) firm specializing in the following disciplines: ***Architectural, Civil, Environmental, Structural, Electrical and Mechanical and Construction Engineering Services***. Founded in 2004, we have been successfully providing professional services to federal, state, parish, and city government agencies since our inception. Over **90 percent** of our work is from governmental agencies.

PRINCIPAL is pleased to report that we are solvent and in a solid financial condition. We have a healthy cash flow, no outstanding debts and a favorable cash reserve. In addition to our capital reserves, PRINCIPAL has a significant cash line of credit which gives us the capacity to deploy resources when and where needed to meet the needs of our clients. We have the capacity, capability, and experience to **evaluate and design drainage infrastructure improvements** for Jefferson Parish and we have successfully completed numerous public infrastructure engineering projects for Jefferson Parish to include a Master Drainage Plan for the Avondale/Waggaman drainage basin and we worked on the Storm Drainage Improvement Program (SDIP) for the Parish. PRINCIPAL's President and Vice President are former active-duty military engineering officers and current reserve forces military engineering officers that have past successful experience working on CONUS and OCONUS US Army and US Air Force DOD Facility and Civil Works Projects.

PRINCIPAL is a verified Service-Disabled Veteran Owned Small Business (SDVOSB) with the Center for Veterans Enterprise (CVE) and PRINCIPAL is also a certified Disabled Veteran and Hudson Initiative Small Business and a Small and Emerging Business Enterprise with the Louisiana Department of Economic Development.

PRINCIPAL *Engineering, Inc.* is fully licensed and insured to perform architectural and engineering services in the State of Louisiana. The firm is registered as a corporation with the State of Louisiana, Office of the Secretary of State and is licensed as an Engineering Firm with the **Louisiana Professional Engineering and Land Surveying Board; License no. 3168** and the **Louisiana Board of Architectural Examiners; License No. AE 0232**. In addition, we are currently licensed to practice professional engineering in **twenty-five states**.

PRINCIPAL Engineering® is a federally registered service mark.

Response to Selection Criteria

1. Professional Training and Experience

Since 2004, Principal Engineering has performed A/E services for nearly every municipal government agency in the New Orleans Metropolitan area and all are repeat clients. As a result, PRINCIPAL has a proven history of local public infrastructure engineering and construction success as well as established local relationships that have been built on these accomplishments. In addition, PRINCIPAL's president is a past local Public Works and Utilities Director and Public Works Engineer and is the former Chairman of the St. Tammany Levee, Drainage and Conservation District where local community involvement continued. PRINCIPAL is very familiar and has intimate knowledge of the Jefferson Parish Drainage Basins; therefore, PRINCIPAL can easily navigate and facilitate communication with all the stakeholders involved with any Master Drainage Plan Effort. Presently, PRINCIPAL prepared an EAST BANK MASTER DRAINAGE PLAN for St. Charles Parish where we have 100% completed Phase I which included four major drainage basins. As a result of our work, St. Charles Parish has selected us for Phase II which will include H&H Modeling of the remaining East Bank Drainage Basins. Furthermore, PRINCIPAL employs a former USACE employee that has deep institutional knowledge regarding H&H modeling to include federal policies, programs, procedures, and design criteria with regard to civil works infrastructure improvement endeavors.

PRINCIPAL employs engineers that are fully capable of conducting complex engineering and design for Drainage Master Plan endeavors. Our engineers utilize state-of-the-art modeling and GIS applications in all phases of water resources planning and engineering, including hydrodynamic, hydrologic, hydraulic, wave mechanics, and water quality analysis. **Our Team's software competency includes Delft3D Flow, Delft3D-Wave (SWAN), HEC-RAS, HEC-2, WSPRO, HY-8, RiverCAD, HEC-6T, CulvertMaster, EPA-SWMM, MIKE URBAN, HEC-1, HEC-HMS, StormCAD, PondPack, FlowMaster, HydraFlow, LADOTD, HYDRO6020, XPStorm 19.1, AutoCAD Storm & Sanitary Analysis, and custom GIS-based applications for hydraulics and hydrology.**

Key Personnel Training & Experience

- **Henry DiFranco, PE**, is **President** of Principal Engineering, Inc. and has over 30 years of experience in local, state and federal public works engineering and management. Mr. DiFranco served as the **Director of Public Works & Utilities** for a local Parish and held numerous positions as a Parish Public Works Engineer (Jeff Parish) and Consulting Engineer over the past **30 years**. He is also a **Lt Colonel in the USAF Reserve** serving as a **Civil Engineer officer** with the Air Force Civil Engineer Center and is a **veteran of Operation Iraqi Freedom and Noble Eagle**. Furthermore, Mr. DiFranco is the **former Chairman of the St. Tammany, Levee, Drainage and Conservation District (Governor Appointed - 2014 to 2021)**, where he has been instrumental in the planning, scope writing and implementation for the development of a *Coastal Master Plan for St. Tammany Parish*.
- **Andre Monnot, PE**, is **Vice President** of Principal Engineering, Inc. and has a diverse range of planning, engineering design and management experience in both the public sector, as a military engineer, and as a private consultant. He has demonstrated experience in large-scale H&H drainage modeling and planning, shoreline processes and shoreline protection. He has been the lead engineer for the CPRA's Mid Barataria Sediment Diversion project and the *Lake Pontchartrain Shoreline Protection and Restoration* for the City of Mandeville. Mr. Monnot was the **ENGINEER IN CHARGE** of the Jefferson Parish Avondale/Waggaman Area Master Drainage Plan, Waggaman Railroad Jack & Bore, Orleans Village (SDIP) project and he is currently the lead on the *St. Charles East Bank Master Drainage Plan*.
- **Dwayne Marlborough, PE**; over twenty-five years of experience in public works engineering infrastructure improvement projects. He most recently performed hydraulic and structural engineering analysis for the Mid-Barataria Sediment Diversion (MBSD) project that included the design of large diameter culvert crossings, T-Wall flood control and intake structures and wing walls. He is experienced in numerous software applications and has worked on major flood control projects in south Louisiana. In addition, he provided cost estimating analysis for recommended flood control and drainage improvement projects for Principal Engineering's **Master Drainage Plan** alternative improvements presented to St. Charles Parish
- **Brien Croff, PE**; Mr. Croff has experience in project management, design drafting, hydraulic modeling and analysis, and technical report writing specifically in the areas of water supply and wastewater infrastructure. He will support the project planning and conceptual design of coastal and water resource projects as well as site visits as needed.
- **Natalya Munger, PH, EI**; received her degree in civil engineering with minors in surface water hydrology and surveying (Accreditation Board for Engineering and Technology [ABET] accredited). Furthermore, Ms. Munger has professional qualifications as a professional hydrologist (surface water) from the American Institute of Hydrology and has received professional qualifications as a Certified Engineer Intern. Ms. Munger holds computer skills that enhance her credentials even further. Her computer skills include but are not limited to AutoCAD, LA DOTD HYDROWINT, PCSWMM, FHWA WSPRO, HEC-18, and HEC-RA. PRINCIPAL Engineering, Inc. is honored to have Mr. Munger's background/experience as a vital contribution to our team.

2. Capacity for Timely Completion

Based on a review of our current and projected workload, our current staff has the capacity to add new projects to our current design workload. Principal strives to carefully schedule our workload and we would not bring on any assignment if we did not have the capacity, experience, or resources to complete the project within the client's anticipated schedule. We work closely with the client to develop a schedule that meets their needs for completion. A snapshot of some of our current Jefferson Parish workload, current phase and recent project additions include the following:

Current JPG Design/CPS Workload:

- ◆ JPG – N. Pierce & Versailles Sewer LS – Construction – 20% Complete
- ◆ JPG – Marrero WWTP Imp – Construction – 95% Complete
- ◆ JPG – Lafitte & Pritchard Sewer LS – Bidding/Contract Phase – 95% (contract signing)
- ◆ JPG – Jung Blvd & Falcone St. – Design – 90% Complete
- ◆ JPG – Smart Growth – Whitney Ave Bike Lane – Design – 95% Design Submitted
- ◆ JPG – Cleary & Bright Playground Gym Reno – Record Drawing – 60% Complete
- ◆ JPG – Destrehan Sewer Lift Station – Design – 30% Review Submitted
- ◆ JPG – Grand Isle Pump Station – Design – 90% Complete
- ◆ JPG – CA for David Drive Imp – Construction – 50% Complete
- ◆ JPG – Laketown Boat Launch – Design – 90% Complete
- ◆ JPG – Laketown Rock Jetty – Design – 20% Complete
- ◆ JPG – Woodmere Playground – Design 90% Complete (Sub to Meyer)
- ◆ JPG – Third Street Drainage – Design – 60% Complete
- ◆ JPG – Stall Ditch Drainage – Design – 50% Complete
- ◆ JPG – Bucktown Marsh Overlook Structure – Design – 55% Complete
- ◆ JPG – Woodmere Youth Center Renovations – Contract Phase

3. Location of the Principal Office Performing Work

Our St. Tammany Parish, LA office, located at **1011 N. Causeway Blvd., Suite 19, Mandeville, LA** is the office where the work will be performed.

4. Adversarial Legal Proceedings

Principal Engineering, Inc. has no past or current litigation with Jefferson Parish Government, and we have no history of litigation with any governmental/municipal client.

5. Prior Successful Completion of Projects of this Type and Nature

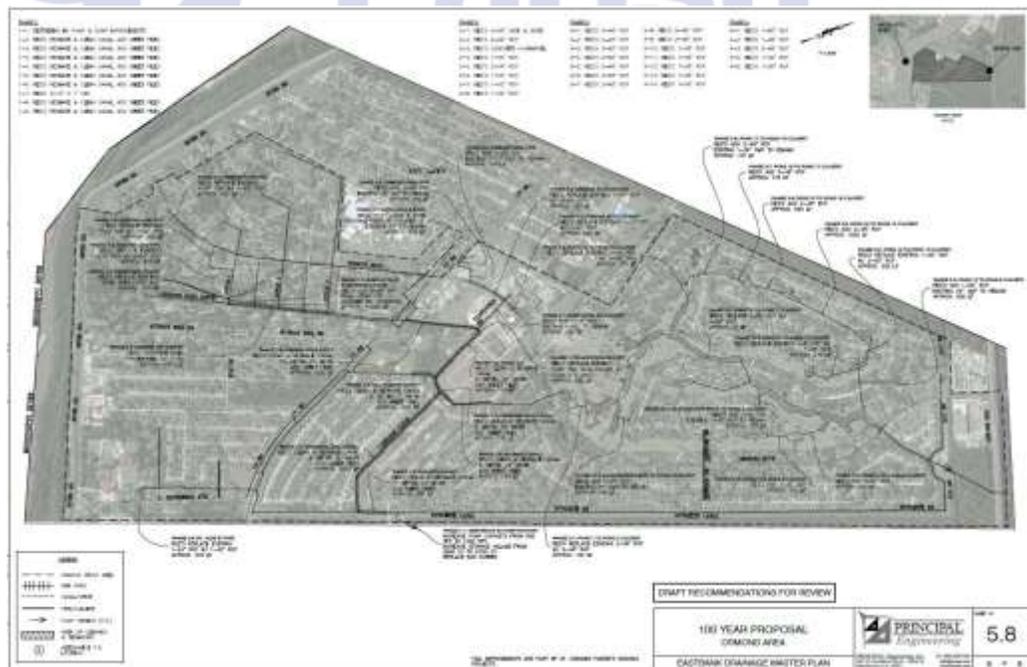
As our project qualifications indicate, we have very recently completed a Phase I East Bank Master Drainage Plan for St. Charles Parish Government. In addition, Principal performed Master Drainage Plan work directly for Jefferson Parish and has performed numerous H&H studies for a variety of drainage improvement projects. References for our projects as presented in the TEC Questionnaire are provided for each of the listed projects. A partial list of local governmental clients is also provided below, and we welcome the selection committee to contact our references.

5. (Continued)

As an example of Principal Engineering’s recent work for St. Charles Parish Gov’t on their East Bank Master Drainage Plan, below are “example” exhibits from the 100% report submitted:



Existing Condition 100 yr Flood Maps – Ormond Drainage Basin (Above)



100 Year Proposed Improvements – Ormond Drainage Basin (Above)

6. Size of the Firm

Principal Engineering has a staff of thirty-two professional and technical employees, including engineers and engineering technicians with specialization in the evaluation, design and construction document preparation for drainage infrastructure projects. Our team includes a staff of 5 licensed professional engineers, 2 engineer interns and 3 BS graduates in engineering technology as well as 2 H&H Specialized Professionals.

7. Past Performance

Principal Engineering has an excellent professional reputation with all our governmental agency clients. Principal has provided services to nearly every public agency in the New Orleans metropolitan area as well as various State and Federal agencies. Every Governmental client is and has been a repeat customer. A partial list of our New Orleans regional area clients includes the following:

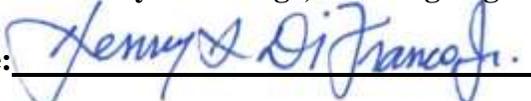
- ◆ City of New Orleans, Department of Public Works
- ◆ City of Kenner, Department of Public Works
- ◆ City of Covington, Department of Engineering
- ◆ City of Mandeville, Department of Public Works
- ◆ City of Hammond, Department of Engineering
- ◆ Jefferson Parish, Department of Public Works
- ◆ Jefferson Parish, Department of Ecosystem & Coastal Management
- ◆ Tangipahoa Parish, Department of Engineering
- ◆ Jefferson Parish School Board
- ◆ St. Tammany Parish, Department of Engineering
- ◆ St. Tammany Parish, Department of Environmental Services
- ◆ Town of Abita Springs
- ◆ City of Slidell, Department of Engineering
- ◆ Plaquemines Parish Government, Department of Public Works
- ◆ St. Bernard Parish Government, Department of Public Works
- ◆ Sewerage and Water Board of New Orleans
- ◆ Housing Authority of Jefferson Parish
- ◆ St. Charles Parish, Department of Public Works
- ◆ St. John the Baptist Parish Department of Public Works & Public Utilities

Furthermore, Principal Engineering has past and current engineering experience working with the following state and federal agencies; U.S. Army Corps of Engineers, Department of Veterans Affairs, Coastal Protection and Restoration Authority and the Department of Transportation and Development.

In Closing:

We will provide the highest quality of personalized, professional, and state of the art technology to our clients. PRINCIPAL is committed to assisting our clients by offering inventive solutions to evaluate, plan, design, construct and/or restore the infrastructure under their jurisdiction and to provide professional engineering services to safeguard life, health, and property of the residents that they serve.

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

Signature:  Print Name: Henry I. DiFranco, Jr.

Title: President Date: March 19, 2022