



ROUTINE ENGINEERING SERVICES FOR
DRAINAGE PROJECTS

SOQ 24-015 | RESOLUTION NO. 144202

ALL SOUTH CONSULTING ENGINEERS, LLC
652 PAPWORTH AVENUE, METAIRIE, LOUISIANA 70005
OFFICE: (504) 322-2783 | FAX: (504) 322-2787

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 24-015 to Provide Routine Engineering Services for **Drainage Projects** – Resolution No. 144202

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:

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

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

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>7</u>	Administrative	<u>0</u>	Estimators	<u>1</u>	Specification Writers
<u>1</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>12</u>	Civil Engineers	<u>0</u>	Interior Designers	<u>4</u>	Project Managers
<u>13</u>	Construction Inspectors	<u>0</u>	Landscape Architects	<u>3</u>	Clerical
<u>0</u>	Ecologists	<u>0</u>	Land Surveyor	<u>10</u>	Grant/Funding Specialist
<u>0</u>	Electrical Engineers	<u>0</u>	Mechanical Engineers	<u>0</u>	Sanitary Engineers
<u>8</u>	Engineer Intern	<u>0</u>	Environmental Engineers		
<u>2</u>	Professional Land Surveyor	<u> </u>		<u>77</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.		
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 **14** key personnel to this project. With a total of **77** staff members, All South has ample additional resources to allocate as necessary.

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:

Timothy P. Bonura, P.E.
Partner/ Principal in Charge

Project Assignment:

Principal in Charge

Name of Firm with which associated:

All South Consulting Engineers, LLC



Years' experience with this Firm:

20

Education: Degree(s)/Year/Specialization:

Bachelor of Science, 1994, Civil Engineering

Active registration: Year first registered/discipline:

2001, Civil, Louisiana License No. 29351; 2009, Civil, Mississippi License No. 18974
2009, Civil, Alabama License No. 30479; 2010, Civil, Georgia License No. 34769

Other experience and qualifications relevant to the proposed Project:

Timothy Bonura, P.E. began his career in 1994 after receiving his Bachelor of Science in Civil Engineering from the University of New Orleans. Having worked in the Civil Engineering business for 10 years, establishing a strong and solid reputation in the metro New Orleans area, Mr. Bonura decided to start his own engineering firm.

In 2004, Mr. Bonura co-founded All South Consulting Engineers, LLC. As Principal, Mr. Bonura is involved in every aspect of the daily operations, which includes designs, project management, business development, client relations, and personally ensures all contractual obligations are fulfilled timely. He is the point of contact for the project owners and ensures that adequate resources are available to all team members.

Over the course of his career, Mr. Bonura has worked with many local, state and federal agencies and provided professional engineering and project management services on more than \$1 billion worth of projects throughout Southeast Louisiana. Mr. Bonura is providing guidance, direction and staffing for current projects. As point of contact between the owner and staff engineers, he ensures the project design and results are compatible with the owners' requested service.

TEC Professional Services Questionnaire

Russell Street Pump Station *Jefferson Parish, Louisiana*

Mr. Bonura provided project oversight and led staff engineers for the design of the Russell St. Pump Station project. The project consists of building a new 200CFS pump station to alleviate local flooding for a neighborhood in River Ridge. The pump station has over a thousand LF of 72" outfall to an existing drainage ditch along Jefferson Hwy and has new culverts feeding the pumpstation consisting of jack and bored 54" pipes under a railroad right-of-way with new 72" culverts upstream of the railroad. Mr. Bonura is also providing oversight for the ongoing design of the full system of pump station drainage improvements.

Westgate Subdivision Drainage Improvements *Jefferson Parish, Louisiana*

Mr. Bonura provided design and administration oversight for the design and coordination of multi-discipline consultants for the drainage improvements for this Jefferson Parish drainage project. The scope of work included the design and construction of two pump stations, the addition of drainage check valves, electrical requirements, structural design for generators and fuel tanks, and partial reconstruction of an existing roadway. Repairs includes approximately 3,200 linear feet of 36" reinforced concrete pipe arch, 8,800 square yards of concrete roadway replacement, relocation of utilities, including, water and sewer house connections, and construction of a 30-cubic foot per second and 25 cubic foot per second pump stations.

Tudor and Tallulah Drainage Improvements *River Ridge, Jefferson Parish, Louisiana*

Mr. Bonura provided leadership and project oversight of the design of drainage improvements for Tudor Ave and Tallulah Ave. The project included hydrologic and hydraulic analysis for the drainage areas of interest. 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. Hydrologic analysis was performed in HEC-HMS. Peak flows were determined using the EPA SWMM closed storm sewer system analysis software. Using the same design storm and criteria, an analysis of the required drainage capacity was also performed to help identify improvements. All South provided the study and recommendations with cost analysis to improve the systems.

Mary Ridge Court Drainage Analysis *Jefferson Parish, Louisiana*

Mr. Bonura provided leadership and oversight for this project which involved identifying elevations and sizes of pipes, inlets and flow conditions, performing a H&H analysis of the drainage system on Mary Ridge Ct., reviewing the drainage analysis including several possible drainage improvements, preparing plans and specifications and developing construction documents for bid.

Upper Kraak Ditch Subsurface Drainage Improvements *Jefferson Parish, Louisiana*

Mr. Bonura lead a team in responsible charge of developing the design plans, hydraulic analysis and specifications to implement specified improvements to existing drainage outfall culverts (60") from the Kaye St. pump station to Airline Drive within the Upper Kraak Drainage outfall servitude. Mr. Bonura oversaw staff engineers that coordinated the design, plans, specifications, cost estimate, construction administration and field operations for all along with our inspector staff to successful completion of the project closeout resulting in much greater and efficient flow and to extreme satisfaction of the Jefferson Parish agencies officials.

Trapp Canal Drainage *Jefferson Parish, Louisiana*

Mr. Bonura provided leadership and project oversight of this project. He supervised staff engineers in the analysis / design of approximately 14,500 linear feet of drainage canal concrete slope paving, various drain line extensions, and sediment removal within Trapp Canal. Repairs included 54,800 cubic yards of excavation, 46,300 cubic yards of lightweight aggregate (expanded clay) for backfill, 216,000 square feet of vinyl sheet pile, placement of 43,800 tons of rip rap, and the construction of 34,000 square yards of concrete slope paving.

HMGP Canal Crossing – Maureen Lane @ 20 Arpent Canal & Golden Drive @ Intercepting Canal *St. Bernard Parish, LA*

Mr. Bonura led a team and provided oversight and administration for the layout, cost analysis, design, hydraulic analysis, and engineering plan and specification development for replacing 2 existing damaged culvert roadway canal crossings, each with specialty precast segmented grade level bridge crossings. This work was done in coordination with St. Bernard Parish Department of Public Works Engineering and construction staff, and FEMA guidelines. All South developed all typical section, plan-profile, foundation design and special detail sheets, coordinated with the associated utility agency for replacement and adjustments, developed specifications, and provided bid phase services and construction administration.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title: <p>Jens J. Nielsen, Jr., P.E. <i>Partner/ Principal in Charge</i></p>
Project Assignment: <p>Principal in Charge</p>
Name of Firm with which associated: <p>All South Consulting Engineers, LLC</p> 
Years' experience with this Firm: <p>20</p>
Education: Degree(s)/Year/Specialization: <p>Bachelor of Science, 1992, Civil Engineering</p>
Active registration: Year first registered/discipline: <p>1996, Civil, LA License No. 27096 1999, Civil, Mississippi License No. 19001</p>
Other experience and qualifications relevant to the proposed Project: <p>Jens J. Nielsen Jr., P.E. began his career in 1992 after receiving his Bachelor of Science in Civil Engineering from Louisiana State University. Upon graduating, he worked for 12 years with three multi-disciplinary civil engineering firms. During his tenure with these firms, Mr. Nielsen worked as design engineer and construction manager on engineering projects for municipal, private and state projects.</p> <p>After establishing his reputation as an experienced and trusted civil engineer in Southeast Louisiana, Mr. Nielsen was prompted to enhance his career even further. In 2004, Mr. Nielsen co-founded All South Consulting Engineers, LLC. As Principal, he manages the daily operations of the firm, overseeing designs and project management, ensuring time and budgetary commitments are upheld, and maintaining key client relations.</p> <p>Mr. Nielsen has provided QA/QC over the projects that All South Consulting Engineers, LLC has designed. He has additionally provided QA/QC services for the designs of other consultants as project manager of FEMA related projects after Hurricane Katrina for various municipalities.</p> <p>Tudor and Tallulah Drainage Improvements <i>River Ridge, Jefferson Parish, Louisiana</i> Mr. Nielsen provided the evaluation and design of drainage improvements for Tudor Ave and Tallulah Ave in River Ridge. The analysis included hydrologic and hydraulic analysis for the drainage areas of interest. 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. Mr. Nielsen performed Hydrologic analysis was performed in HEC-HMS. Peak flows were determined using the EPA SWMM closed storm sewer system analysis software. Using the same design storm and criteria, an analysis of the required drainage capacity was</p>

TEC Professional Services Questionnaire

also performed to help identify improvements. All South provided the study and recommendations with cost analysis to improve the systems.

Mary Ridge Court Drainage Analysis *Jefferson Parish, Louisiana*

Mr. Nielsen was in charge with identifying elevations and sizes of pipes, inlets and flow conditions, performing a H&H analysis of the drainage system on Mary Ridge Ct., reviewing the drainage analysis including several possible drainage improvements, preparing plans and specifications and developing construction documents for bid.

Highway 434 Retention Lake St. Tammany Parish, Louisiana

Mr. Nielsen provided QA/QC and administration oversight for a detailed hydrologic and hydraulic model of a drainage sub-basin located on Hwy 434 in St. Tammany Parish for the purposes of providing a retention lake. This retention lake will be used to provide storm water retention for the Highway 434 Transportation Center, Learning Center and new High School properties.

Donaldsonville Drainage Improvements *Donaldsonville, Louisiana*

Mr. Nielsen worked with a team to plan and design drainage improvements for the BLFWD in the City of Donaldsonville. The project included identifying the drainage area that flows into Bayou Lafourche, survey, engineering & design of multiple pump station and/or drainage outfall sites to manage drainage into the Bayou. Mr. Nielsen also assisted the BLFWD in coordinating this work with the City, and with the funding agencies.

Slidell Infrastructure Repairs (Schneider, Bayou Vincent, W-14) *Slidell, Louisiana*

Mr. Nielsen provided project management duties for both design and construction services for the construction of roadway, sewer and drainage improvements. Construction consisted of 5,146 SY of concrete pavement, 52,858 SY of asphalt pavement, 5,602 feet of storm drainage pipe and 23,141 feet of sewer line repairs. Mr. Nielsen performed all QC functions, reviewed all daily construction inspection reports and final review of pay requests.

DPW Capital Improvements Program – Audubon, Uptown, West Riverside, Black Pearl, East Carrollton *New Orleans,*

Mr. Nielsen provided project management duties for surveying, engineering design, construction administration and resident inspection for the FEMA eligible roadway improvements throughout the neighborhoods in Orleans Parish. Infrastructure improvements in this project include repairs to sewer, potable water, and pavement. As project manager, Mr. Nielsen performed Quality control reviews throughout the project, attended design meetings, performed all technical in-house reviews, managed construction administrative services and completed construction closeout

Chalmette Vista Subdivision Master Drainage Plan *St. Bernard Parish, Louisiana*

This project entailed development of a master drainage plan for the Chalmette Vista Subdivision, located in St. Bernard Parish, Louisiana. The existing drainage system was evaluated by development of a computer model of the drainage system using Bentley's Storm & Sewer CADD drainage modeling software. The model was then used to analyze multiple proposed improvement projects in order to maximize the reductions in flooding in the most cost-effective way. The results of the analysis were prioritized into proposed projects for the Parish to implement as funding became available.

Plaza Drive Corridor Master Drainage Plan *St. Bernard Parish, Louisiana*

This project entailed development of a master drainage plan for the Plaza Drive corridor. The existing drainage system was evaluated by development of computer model of the drainage system using Haestad's Storm CAD drainage modeling software. The model was then used to analyze multiple proposed improvement projects in order to maximize the reductions in flooding in the most cost-effective way. The results of the analysis were prioritized into proposed projects for the Parish to implement as funding became available.

Mehle Drive Corridor Master Drainage Plan *St. Bernard Parish, Louisiana*

This project entailed development of a master drainage plan for the Mehle Drive Corridor. The existing drainage system was evaluated by development of computer model of the drainage system using Bentley's Storm & Sewer CADD drainage modeling software. The model was then used to analyze multiple proposed improvement projects in order to maximize the reductions in flooding in the most cost-effective way. The results of the analysis were prioritized into proposed projects for the Parish to implement as funding became available.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Stephen Bourg, P.E. <i>Senior Vice President</i>
Project Assignment:
Senior Project Manager/ Senior Engineer
Name of Firm with which associated:
All South Consulting Engineers, LLC 
Years' experience with this Firm:
19
Education: Degree(s)/Year/Specialization:
Bachelor of Science, Civil Engineering, 1994 Post-Graduate Studies – Structural Engineering, 1994-1996
Active registration: Year first registered/discipline:
1998, Civil, Louisiana License No. 28240
Other experience and qualifications relevant to the proposed Project:
<p>Stephen Bourg, P.E. joined All South Consulting Engineers in 2005, and is currently Senior Vice President managing both the Design and Disaster Management Divisions. His responsibilities include oversight of all design projects and grant programs. Additionally, Mr. Bourg manages a staff of over 70 individuals which include Professional Engineers, Program/ Construction Managers and other design/ supporting professionals. Mr. Bourg has over 28 years of civil structural design experience and over 16 years of PA, HMGP, Debris & PDA experience on federally declared disasters. He has overseen Design, Program and Construction Management of over 2 billion dollars of projects which include: schools, theme parks, roads, bridges, locks, drainage infrastructure, public utilities, pump stations, levees, floodwalls, hotels, fire houses, high rise condos, community centers, and numerous commercial buildings.</p> <p>Tudor and Tallulah Drainage Improvements <i>Jefferson Parish, Louisiana</i> Mr. Bourg supervised staff engineers for the evaluation and design of drainage improvements for Tudor Ave and Tallulah Ave in River Ridge. The analysis included hydrologic and hydraulic analysis for the drainage areas of interest. 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. All South performed Hydrologic analysis was performed in HEC-HMS. Peak flows were determined using the EPA SWMM closed storm sewer system analysis software. Using the same design storm and criteria, an analysis of the required drainage capacity was also performed to help identify improvements. All South provided the study and recommendations with cost analysis to improve the systems.</p> <p>Westgate Subdivision Drainage Improvements <i>Jefferson Parish, Louisiana</i> Mr. Bourg provided design and administration oversight for the design and coordination of multi-discipline consultants</p>

TEC Professional Services Questionnaire

for the drainage improvements for this Jefferson Parish drainage project. Scope of work included the design and construction of two pump stations, the addition of drainage check valves, electrical requirements, structural design for generators and fuel tanks, and partial reconstruction of an existing roadway. Repairs includes approximately 3,200 linear feet of 36" reinforced concrete pipe arch, 8,800 square yards of concrete roadway replacement, relocation of utilities, including, water and sewer house connections, and construction of a 30-cubic foot per second and 25 cubic foot per section pump stations.

St. Louis Canal Drainage *Terrebonne Parish, Louisiana*

Mr. Bourg performed and supervised staff engineers for the evaluation and design of the St. Louis Canal drainage improvements. Project consisted of preparing the necessary applications for funding to the Emergency Board funding, and Hazard Mitigation Grant (HMGP) funding. These applications included damage estimates, hydraulic analysis, cost estimates for the improvements, and basic engineering and design. The proposed improvements include the installation of two concrete box culverts under St. Louis Canal Road. These culverts were five feet (5') wide and four feet (4') tall and will allow rainwater to flow unimpeded under the road.

Lake Trail Drive Drainage Improvements *Metairie, Louisiana*

Mr. Bourg provided design and administration oversight for Lake Trail project which consisted of performing a preliminary drainage analysis on the existing drainage system from Bruin Drive to the Canal 3 outfall, using the DOTD Hydrwin 6020 software and Rational Method. After the preliminary phase, the same methods were used to design the drainage system from Bruin Drive to the Canal 2 outfall. Using the designed drainage system, while also improving the sidewalks, driveways and street profile for better drainage, he developed a set of project plans, project traffic control plans, specifications, and cost estimate for the project based on Jefferson Parish's engineering criteria.

Hwy 434 Retention Lake *New Orleans, Louisiana*

Mr. Bourg provided design and administration oversight for a detailed hydrologic and hydraulic model of a drainage sub-basin located on Hwy 434 in St. Tammany Parish for the purposes of providing a retention lake. This retention lake will be used to provide storm water retention for the Highway 434 Transportation Center, Learning Center and new High School properties.

Trapp Canal Drainage *Jefferson Parish, Louisiana*

Mr. Bourg performed and supervised staff engineers in the analysis / design of approximately 14,500 linear feet of drainage canal concrete slope paving, various drain line extensions, and sediment removal within Trapp Canal. Repairs included 54,800 cubic yards of excavation, 46,300 cubic yards of lightweight aggregate (expanded clay) for backfill, 216,000 square feet of vinyl sheet pile, placement of 43,800 tons of rip rap, and the construction of 34,000 square yards of concrete slope paving.

Alidore Drainage Improvements *Lafourche Parish, Louisiana*

Mr. Bourg Provided design and administration oversight the Pre-application for State Wide Flood Control Program; Coordinated Pre-App with Parish and State DOTD representatives; Site assessment with parish staff; researched supporting information to justify flood control improvements; develop project components and provided cost estimates for project components. Mr. Bourg conducted initial evaluation of project area, reviewed application for funding under Statewide Flood Control Program conducted surveying and constructed a drainage model to analyze the system and develop a recommended plan for improvements. This plan included a new pump station with 3- 36" pumps, as well as reservoir improvements close to the pump station.

Schneider Canal Drainage Basin Infrastructure Repairs *Slidell, Louisiana*

Mr. Bourg provided design and administration oversight for the rehabilitation of about 4,030 concrete road panels and over 10,160' of asphalt roadway in Slidell, Louisiana. These streets were damaged in Hurricane Katrina and required day to day management of the design and construction management. This project consisted of reviewing and including eligible FEMA roadway, drainage and sewer repairs in a set of project documents. Mr. Bourg oversaw all design and ensured that all eligible work was included in the project plans.

W-14 Canal Drainage Basin Infrastructure Repairs *Slidell, Louisiana*

Mr. Bourg provided design and administration oversight for the rehabilitation of about 1,150 concrete road panels and over 5,500 of asphalt roadway in Slidell, Louisiana. These streets were damaged in Hurricane Katrina and required day to day management of the design and construction management.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Jarret Bauer, P.E. Civil Engineer
Project Assignment:
Project Engineer
Name of Firm with which associated:
All South Consulting Engineers, LLC 
Years' experience with this Firm:
17
Education: Degree(s)/Year/Specialization:
Master of Science, Ongoing, Coastal and Ecological Engineering Bachelor of Science, 2007, Civil Engineering Bachelor of Science, 2005, Business Management
Active registration: Year first registered/discipline:
2011, Civil, Louisiana License No. 36720
Other experience and qualifications relevant to the proposed Project:
<p>Jarret Bauer is a graduate of Loyola University in New Orleans and Louisiana State University, achieving a B.S. in Civil Engineering and a B.A. in Business Administration from Loyola University in May 2005. Mr. Bauer has a distinguished career that spans over sixteen years of infrastructure design, construction administration, and project management experience primarily in the fields of transportation and facilities (residential and commercial). A majority of his experience has been hands-on management of large-scale construction projects for government municipalities along with a vast experience in disaster management assistance. His current expertise includes hazard mitigation projects involving hydraulic modeling using the latest software, Benefit-Cost Analysis using FEMA approved methodologies and tools to demonstrate the cost effectiveness of projects. His current and previous projects include:</p> <p>Silverleaf Drainage Statewide Flood Application Gonzales, Louisiana As part of the LADOTD Statewide Flood Control Improvement initiative, Mr. Bauer performed hydraulic and hydrologic modeling and calculations for an existing neighborhood with inadequate pumping capacity. Mr. Bauer performed full site evaluations, including field data collection and integration with the project Owner to create a system model using HEC-HMS and HEC-RAS to model existing and proposed improved conditions to the area. The Silverleaf Flood Control Project includes improvements to the existing outfall ditches, earthen berms, earthen ditch blocks, and a new drainage pump station. Improvements to the outfall ditches will be needed to more efficiently help convey the water to the pump station quicker. Earthen berms and ditch blocks will be constructed to isolate the forced drainage areas from surrounding areas and prevent a proposed pump station from pulling in water from outside our project area. A proposed drainage pump station will remove the water from this system and discharge into Bayou Conway at a much</p>

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faster rate.

Sorrento Statewide Flood Control *Town of Sorrento, Louisiana*

As part of the LADOTD Statewide Flood Control Improvement initiative, Mr. Bauer performed hydraulic and hydrologic modeling and calculations for the Town of Sorrento drainage basin, including the effects of an existing pump station on the far eastern end of the Town, to illustrate the effects of widening and cleaning ditches. Mr. Bauer used HEC-HMS and HEC-RAS modeling software and downstream tailwater conditions to model multiple storms, including a 10-yr and 25-yr storm. All South provided all design and modeling services, including select surveying services to provide the requisite grant application information. The application was approved through 2 rounds of submittals, but the project has not proceeded into construction at this time.

Alidore Drainage Improvements *Lafourche Parish, Louisiana*

As part of the LADOTD Statewide Flood Control Improvement initiative, Mr. Bauer performed hydraulic and hydrologic modeling and calculations for an existing neighborhood with inadequate pumping capacity. Mr. Bauer performed full site evaluations, including field data collection and integration with the project Owner to create a system model using HEC-HMS 3.4 and HEC-RAS 4.1.0 under pumped flow conditions. The model successfully predicted a pumping configuration to maintain proper drainage elevations within proposed ditch improvements. Mr. Bauer successfully sized the system for new pumping capacities and neighborhood drainage improvements, including: improved ditch cross-sections, realignment of existing levee sections, and new pump and piping configurations to support the existing system. Mr. Bauer's efforts also included wetland permitting and collaboration with outside entities for right-of-way clearances.

Westside Boulevard and Alma Street Drainage *Terrebonne Parish, Louisiana*

Mr. Bauer provided H&H modeling services for the Alma Street intersection with Westside Boulevard which has historically suffered from poor drainage, with repeated damage to commercial and residential structures in the area during heavy rains. Using survey data and data on the existing culverts and sub-surface drainage in the area, Mr. Bauer developed an H&H model of the area to analyze the impacts of a 10-year storm event and a 25-year storm event. All South used the HEC-HMS and HEC-RAS modeling software in sequence to calculate overland flow, and to eventually size the drainage pipes. These models were used to develop a plan to increase the pipe sizes in the drainage system.

Bayou Vista Drainage Modeling *Lafourche Parish, Louisiana*

Mr. Bauer provided H&H modeling services for the Bayou Vista neighborhood in Lafourche Parish, Louisiana which has experienced severe and repetitive flooding issues due to variations in the size of the drainage ditches and the driveway culverts within the neighborhood. Mr. Bauer performed full site evaluations, including field data collection work to support the development of an H&H model for the area. All South provided recommendations for improvements including: a new pump station and reservoir at the back of the subdivision, a small containment berm to isolate the lower portions of the subdivision from the neighboring agricultural fields, significant improvements to the drainage ditches on either side of the roadway and replacing over 20 driveway culverts that cross these roadside ditches.

Lirette St. Drainage Improvements *Houma, Louisiana*

Mr. Bauer successfully modeled multiple drainage networks consisting of multiple culverts, catch basins, and a drainage pump station using PCSMM modeling software to alleviate flooding and drainage concerns within a local subdivision during heavy rains.

H1 Water Control Structure *Terrebonne Parish, Louisiana*

Mr. Bauer completed site analysis, drainage calculations, overland runoff and proposed H&H modeling, and cost estimations of a proposed flow control structure to be constructed by the Terrebonne Levee and Conservation District in conjunction with the current MTOG levee alignment program. This project involved freshwater introduction to regulate flow in the wetland area to ensure continue wetland growth, water quality, and marine estuary nourishment. This effort includes HEC-HMS and HEC-RAS modeling to design multiple alternatives to relieve water surface elevations in this basin. Design incorporated biological considerations for optimum fish and shrimp habitats, including water velocities and surface profiles. As part of modeling, Mr. Bauer ensured draw down through a multi-barrel culvert system was limited to allow for optimum conditions.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Steven Schorr, P.E. Civil Engineer
Project Assignment:
Project Engineer
Name of Firm with which associated:
All South Consulting Engineers, LLC 
Years' experience with this Firm:
11
Education: Degree(s)/Year/Specialization:
Bachelor of Science, Civil Engineering, 2009 Minor in Structures, 2009
Active registration: Year first registered/discipline:
2015, Civil, Louisiana License No. 39515
Other experience and qualifications relevant to the proposed Project:
<p>Steven Schorr, PE joined All South Consulting Engineers in 2013 and currently serves as Engineering Supervisor for the Metairie office. In this role, Mr. Schorr coordinates and manages staff engineers and inspectors on all ongoing engineering projects. He has managed numerous projects on time and within budget and has provided engineering design and construction administration. Mr. Schorr is an exceptional asset to the All South team and utilizes new, innovative, and cutting edge engineering concepts to his project designs. Mr. Schorr's relevant experience includes:</p> <p>Russell Street Pump Station <i>Jefferson Parish, Louisiana</i> Mr. Schorr provided project oversight and led staff engineers for the design of the Russell St. Pump Station project. The project consists of building a new 200CFS pump station to alleviate local flooding for a neighborhood in River Ridge. The pump station has over a thousand LF of 72" outfall to an existing drainage ditch along Jefferson Hwy and has new culverts feeding the pumpstation consisting of jack and bored 54" pipes under a railroad right-of-way with new 72" culverts upstream of the railroad. Mr. Schorr developed preliminary drawings to decide on the best location of the pump station, oversaw geotechnical and survey investigations, and proposed new servitudes and ROW's for the proposed project. He is providing oversight for the design of the full system of pump station drainage improvements.</p> <p>Old Arabi Drainage St. <i>Bernard Parish, Louisiana</i> This project consists of comprehensive drainage analysis modeled with PCSWMM software, survey, and design of various drainage features to alleviate flooding in the Old Arabi area. Mr. Schorr provided engineering oversight and supervision for the layout, design, cost analysis and plan development specifications for the design of subsurface drainage improvements, conspan bridge, and detention pond. The conspan project includes replacing one three 130" x</p>

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72" existing damaged culverts beneath a roadway canal crossing with a specialty precast 8-segment 20'-width x 48' total length parabolic concrete span culvert crossing for 4,000 CFS capacity flow with headwalls/wingwalls. Mr. Schorr assisted in coordinating the layout, cost analysis, design, hydraulic analysis, and engineering plans and specification.

Lake Trail Drive Drainage Improvements (Between W. Esplanade Ave. and Bruin Dr.) Metairie, Louisiana

Mr. Schorr's duties on the Lake Trail project consisted of performing a preliminary drainage analysis on the existing drainage system from Bruin Drive to the Canal 3 outfall, using the DOTD Hydrwin 6020 software and Rational Method. After the preliminary phase, the same methods were used to design the drainage system from Bruin Drive to the Canal 2 outfall. Using the designed drainage system, while also improving the sidewalks, driveways and street profile for better drainage, he developed a set of project plans, project traffic control plans, specifications, and cost estimate for the project based on Jefferson Parish's engineering criteria.

Tudor and Tallulah Drainage Improvements Metairie, Louisiana

Tudor and Tallulah Drainage Improvements includes installation of new drainage culverts and a pump station with discharge pipes that will improve the drainage for a Metairie neighborhood. Mr. Schorr created drainage modeling utilizing the PCSWMM software to determine weak points in the existing neighborhood drainage system, and design new culverts and pump station requirements for the neighborhood drainage improvements. After modeling, an extensive drainage report was created to summarize all aspects of the drainage improvements including a cost estimate for the work. The project is being designed by Mr. Schorr's work included coordinating survey for the layout and size of culverts for the intake and discharge of the pump station, contacting utility companies and coordinating with railroad companies to locate existing utilities and coordinating permits needed to proceed with design and construction.

Mary Ridge Court Drainage Analysis Jefferson Parish, Louisiana

Mr. Schorr was tasked with identifying elevations and sizes of pipes, inlets and flow conditions, performing a H&H analysis of the drainage system on Mary Ridge Ct., reviewing the drainage analysis including several possible drainage improvements, preparing plans and specifications and developing construction documents for bid.

Sylvia Drainage Improvements, Houma, Louisiana

The Sylvia Drainage Improvements project was a project to do a drainage study for a large neighborhood to determine what drainage improvements were necessary to alleviate flooding issues. Mr. Schorr created a model for the neighborhood's existing drainage using PCSWMM to determine existing drainage issues. After problem areas were identified, he created the proposed model to add drainage and upgrade existing drainage to resolve drainage issues. Once the improvements were modeled and street flooding was mitigated, Mr. Schorr assisted with providing plans and specifications for the drainage improvements design.

Highway 434 Retention Lake St. Tammany, Louisiana

This project consisted of adding in (5 each) 8'x4' box culverts, subsurface drainage, drainage swales, roadway widening and improvements, and 800 LF of 120' wide canal to facilitate drainage for an adjacent learning center. Mr. Schorr's duties included designing the layout of the drainage features, designing the road so that it met the UA-2 DOTD road classifications, developing a temporary traffic control plan and overseeing all design aspects of the project.

Schneider Canal Drainage Basin Infrastructure Repairs Slidell, Louisiana

Mr. Schorr was the primary project manager for the rehabilitation of about 4,030 concrete road panels and over 10,160' of asphalt roadway in Slidell, Louisiana. These streets were damaged in Hurricane Katrina, and Mr. Schorr provided day to day management of the design and construction management for this project. This project consisted of reviewing and including eligible FEMA roadway, drainage and sewer repairs in a set of project documents. Mr. Schorr's duties included overseeing all design and assuring that all eligible work was included in the project plans. He also created details and roadway sections to illustrate how to the work should be constructed.

Bayou Vincent Drainage Basin Infrastructure Repairs Slidell, Louisiana

Mr. Schorr was the primary project manager for the rehabilitation of about 343 concrete road panels and over 11,920' of asphalt roadway in Slidell, Louisiana. These streets were damaged in Hurricane Katrina, and Mr. Schorr provided day to day management of the design and construction management for this project. This project consisted of reviewing and including eligible FEMA roadway, drainage and sewer repairs in a set of project documents. Mr. Schorr's duties included overseeing all design and assuring that all eligible work was included in the project plans. He also created details and roadway sections to illustrate how to the work should be constructed.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
<p>Jack Hingle, P.E. Senior Civil Engineer</p>
Project Assignment:
<p>Senior Engineer</p>
Name of Firm with which associated:
<p>All South Consulting Engineers, LLC</p> 
Years' experience with this Firm:
<p>10</p>
Education: Degree(s)/Year/Specialization:
<p>Bachelor of Science, Civil Engineering, 1979, Louisiana State University</p>
Active registration: Year first registered/discipline:
<p>1987/ Civil PE Louisiana License No. 22622</p>
Other experience and qualifications relevant to the proposed Project:
<p>Jack Hingle joined All South Consulting Engineers in 2014, bringing over 30 years of engineering experience. Mr. Hingle has extensive drainage, sewage, water, and roadway experience performing such design for local parishes and the LA DOTD.</p> <p>Westside Blvd. /Alma St. Drainage Improvements Terrebonne Parish, Louisiana Mr. Hingle investigated and interpreted survey data to determine resolution for conflicts involved with drainage improvements project for Terrebonne Parish between proposed drainage structures with any existing municipal utilities (water and sewer) as well private (gas) and develop plan with profile drawings to convey the resolution via either conflict structures, offsets etc. all coordinated with the Terrebonne water and sewer department engineers. Developed final engineering plans and specifications for eventual bid/construction; coordination all with CAD staff.</p> <p>Lake Trail Dr. Drainage Improvements (W. Esplanade Ave. to Bruin Dr.) Metairie, Jefferson Parish, Louisiana Mr. Hingle's duties on the Lake Trail project consisted of interpreting a preliminary drainage analysis on the existing drainage system from Bruin Drive to the Canal 3 outfall. Implementing the designed drainage system, while also improving the sidewalks, driveways and street profile for better drainage, he developed a set of project plans, project traffic control plans, specifications, cost estimate and coordination with all involved utility agencies to final plans. The project is currently on hold by the Parish.</p> <p>South Kenner Avenue Rehabilitation (Between Live Oak Blvd. and Chenevert Rd.) Jefferson Parish, Louisiana Mr. Hingle is Lead Design Engineer responsible for design and engineering plan preparation for Jefferson Parish Dept. of Public Works. His duties include interpreting survey data and developing all typical sections, plan sheets with</p>

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improved roadway & profile and proposed drainage structures, cross sections, quantities, details, cost estimate and eventually specifications necessary to bid/construct the rehabilitation of an existing asphalt roadway through a partial rural and developed residential area with existing side ditch drainage, into a wider and improved roadway section by asphalt overlay with new sidewalks and subsurface drainage within existing parish right of way and as per Jefferson Parish criteria and all necessary coordination with associated utility agencies. In addition, Mr. Hingle also directs and supervises CAD staff.

Upper Kraak Ditch Subsurface Drainage Improvements *Jefferson Parish, Louisiana*

In responsible charge of developing the design plans, hydraulic analysis and specifications to implement specified improvements to existing drainage outfall culverts (60") from the Kaye St. pump station to Airline Drive within the Upper Kraak Drainage outfall servitude. Mr. Hingle coordinated the design, plans, specifications, cost estimate, construction administration and field operations for all along with our inspector staff to successful completion of the project closeout resulting in much greater and efficient flow and to extreme satisfaction of the Jefferson Parish agencies officials.

Alidore Pump Station Drainage Improvements *Lafourche Parish, Louisiana*

As part of the LADOTD Statewide Flood Control Improvement initiative, Mr. Hingle interpreted/verified hydraulic and hydrologic modeling data and calculations for an existing residential neighborhood with inadequate pumping capacity. Mr. Hingle designed the new pumping station and site work infrastructure, including improved ditch cross-sections, platform and piping configurations, steel sheeting for sump area, rip rap and all utility adjustments to support the new system for 183 cfs capacity. Final design included 3, 36" vertical lift pumps with discharge piping between BNSF Railroad crossings via jack and bore operations for 3-42" x 82' steel casings and 36" steel discharge pipes to outfall into the marsh. He developed and coordinated necessary permitting with BNSF RR, USACE, LADNR and to approval under direction LPG engineers. Mr. Hingle will provide all construction administration activities, including resident project inspection oversight.

Lake Vista Group D *New Orleans, Louisiana*

The project scope involves the rehabilitation of city streets and park walkways through an upscale, residential neighborhood. The scope also includes the total reconstruction/retrofit of the concrete roadways and sidewalks within the 50' Right of Way. Mr. Hingle's duties include directing All South survey crews through topographical survey updates, coordinating with CAD staff and E.I. associate on the development and implementation of plans along with typical sections, plan profile sheets, geometrics, drainage and utilities design, graphical grades/joint layout, and specifications. All of which are in accordance with NODPW and Sewerage & Water Board standards. Mr. Hingle also worked with and directed sub engineering consultants through the completion and bid phase. The project is currently under design and is set to be completed by the end year for public bid. Following the design phase, Mr. Hingle will oversee the construction administration.

HMGP Canal Crossing – Golden Drive @ Intercepting Canal, *St. Bernard Parish, Louisiana*

Mr. Hingle was responsible for the layout, cost analysis, design, hydraulic analysis, and engineering plan and specification development for replacing two (2) existing damaged culvert roadway canal crossings each with specialty precast segmented grade level bridge crossings in coordination with St. Bernard Parish Dept. of Public Works Engineering and construction staff, and FEMA guidelines including developing all typical section, plan-profile, foundation design and special details sheets etc. with associated utility agency coordination for replacement and/or adjustments and developing specifications to completion and bid phase then construction administration.

HMGP Canal Crossing – Maureen Lane @ 20 Arpent Canal *St. Bernard Parish, Louisiana*

Mr. Hingle was responsible for the layout, cost analysis, design, hydraulic analysis, and engineering plan and specification development for replacing two (2) existing damaged culvert roadway canal crossings each with specialty precast segmented grade level bridge crossings in coordination with St. Bernard Parish Dept. of Public Works Engineering and construction staff, and FEMA guidelines including developing all typical section, plan-profile, foundation design and special details sheets etc. with associated utility agency coordination for replacement and/or adjustments and developing specifications to completion and bid phase then construction administration.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title: Michael Slovensky, P.E. <i>Civil Engineer</i>
Project Assignment: Project Engineer
Name of Firm with which associated: All South Consulting Engineers, LLC 
Years' experience with this Firm: 12
Education: Degree(s)/Year/Specialization: Bachelor of Science, Civil Engineering, 2007
Active registration: Year first registered/discipline: 2015, Civil, Louisiana License No. 40354
Other experience and qualifications relevant to the proposed Project: Michael B. Slovensky is a graduate of McNeese State University with a BS in civil engineering. He has over 10 years of experience in structural design of concrete, steel and timber structures with a concentration in design of coastal structures and foundations. During his time with All South Consulting Engineers, Mr. Slovensky has worked on a wide range of projects of various scope and size including water control structures, port structures, public infrastructure, and public buildings. Mr. Slovensky works on a project from conception through construction and his project experience with All South Consulting Engineers include but are not limited to the following: Westgate Subdivision Drainage Improvements <i>Jefferson Parish, Louisiana</i> The project included the installation of two (2) drainage pumping stations along Napoleon Blvd.; removal/replacement of PCC Pavement; removal/replacement of subsurface drainage systems; and rerouting of public utilities. Mr. Slovensky's duties included development of detailed design plans and specifications; development of the construction cost estimate for budgeting; and Project management during construction; including conducting construction meetings; review of submittals; processing of pay applications and change orders; inspection of construction for compliance and close-out; and review/submission of close-out documentation for final acceptance. West Esplanade Canal 10 Drainage Improvements <i>Jefferson Parish, Louisiana</i> The project consisted of the Removal/Replacement of culvert system under West Esplanade Ave.; site dewatering; removal/replacement of PCC Pavement; removal/replacement of subsurface drainage systems; and rerouting of public utilities. Mr. Slovensky's duties include development of detailed design plans and specifications; development of the construction cost estimate for budgeting; with project management and construction administration during

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construction, including: conducting construction meetings; review of submittals; processing of pay applications and change orders; inspection of construction for compliance and close-out; inspection for substantial completion; and review of close-out documentation for final acceptance.

Alidore Levee and Pump Station improvements *Matthews/Lafourche Parish, Louisiana*

This project initially consisted of the design for a 3 drainage pump platform, access walkway, diesel fuel tank foundation, site fencing and improvements. Mr. Slovensky's responsibilities included: Evaluation of geotechnical information and structural design of the 3 drainage pump platform, access walkway, abandonment of existing discharge lines, install of new discharge piping within a railroad right of way. and trash screen assemblies. The project has had multiple redesigns, with current redesign focusing on reduction in size to accommodate 2 drainage pumps with single space for a temporary pump. Following completion of final design, Mr. Slovensky will be responsible for all construction administration, to include review of all product submittals, conducting progress meetings, processing all invoices, change orders, and development of closeout documentation and final as built drawings.

Homeplace Pumping Station Hurricane Ida Repairs *Lafourche Parish, Louisiana:*

This project is a FEMA Disaster Recovery Project, which required an initial assessment of damages with development of a repair cost estimate, and development of mitigation proposals to outline required cost for structure upgrades to stiffen the structure for future storm events. The project included design of the replacement structure and development of plans and specifications for public bid. Mr. Slovensky's responsibilities consist of assessment of damages, development of repair cost, working with FEMA to get mitigation approved, design of the new structure, handling the public bidding process and providing construction administration. Mr. Slovensky is currently working with the Owner to secure FEMA funding.

Viavant Lake Catherine Group C *New Orleans, Louisiana*

This project was federally funded under the FEMA Recovery Roads Program and consisted of approximately 8000 linear feet of roadway restoration and approximately 4000 linear feet of waterline replacement by means of horizontal directional drilling for a total construction cost of \$3,646,956.00. The project included construction under the Department of Public Works and the Sewerage and Water Board. Mr. Slovensky's duties include construction administration (CA), coordination of resident inspection, project closeout and development of as built drawings. He is also responsible for conducting all project meetings, review processing and disturbing all inspection reporting, review and processing all invoicing for contractor, special services, and materials testing.

Canal "A" Drainage Improvements *New Sarpy, St. Charles Parish, Louisiana*

Mr. Slovensky's responsibilities for this project included the design and coordination between project professionals, review of geotechnical soil data, and the structural design of cantilevered SSP Systems with design of the Concrete Box and flume Sections. He fully developed all plans and specifications, complete with a detailed cost estimate and will handle the public bidding of the project. He will be responsible for all construction administration and project closeout. The project consisted of the design of multiple Cantilevered Steel Sheet Pile Wall Systems to line a section of Drainage Canal, with removal of an existing 96" Arch Culvert and replacement with two (2) 6' x 10' Cast in Place Box Culverts, to improve drainage flow and prevent flooding. Project estimated to cost \$4.6 million which, included over 1800 LF of Cantilevered SSP, approximately 120 LF of a curved Box Culvert utilizing approximately 450 CY of Class A Concrete, with 3 concrete flumed entrances and included removal and replacement of approx 350 SY of PCC Roadway and curbing.

Jefferson Parish Fire Station No. 12 *Jefferson Parish, Louisiana*

The project consists of planning, designing, and construction of a new fire station for Jefferson Parish. The structure was comprised of 3,700 SF of a two-story living quarters adjacent to an 840 SF single engine bay. Mr. Slovensky's duties included coordination of design by all disciplines, parish and DOTD permitting, civil site design, structural design of the building system and foundation, and project management during construction. The unique aspect of this project was minimal available space to situate all features; property was only 60' wide by 100' in depth and had existing roadways at both front and rear of the lot. The building had sleeping quarters for 5 persons, required 5 parking spaces, and a van accessible handicap space. Building was equipped with a backup generator situated at grade meeting NFPA distance requirements. Project required coordination and multiple reviews with local code enforcement to achieve an acceptable site layout. Project budget was \$2,000,000.00 which included demolition of the existing station. A new site was selected and purchased by the owner and additional design was required for the larger new site.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Emily Newell, P.E. Civil Engineer
Project Assignment:
Project Engineer
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, Civil and Environmental Engineering, 2012
Active registration: Year first registered/discipline:
2015, Civil, Louisiana License No. 43646
Other experience and qualifications relevant to the proposed Project:
<p>Ms. Newell has been providing consulting engineering services for clients in Southeast Louisiana since 2007. Throughout her career, Ms. Newell has gained a broad range of experience in a variety of fields including land development; hydraulics; hydraulic modeling; wastewater collection and treatment; lift stations; water distribution systems; roadways; drainage collection systems; pumping stations; bulkheads; marsh creation; permitting; environmental assessments; construction administration; forensic engineering; grant assistance and other general engineering services. Since joining All South Consulting Engineers, Ms. Newell has been tasked with managing over \$16M in infrastructure improvements for clients in Lafourche, Livingston & Jefferson Parishes. Ms. Newell understands the importance of being readily available and responsive to clients, permitting agencies, team members and other involved personnel and strives to answer all calls and return messages promptly.</p> <p>Old Arabi Drainage – Angela St. Drainage Improvements <i>St. Bernard Parish, Louisiana</i> The Angela St. Drainage Improvements Project was planned as part of a number of projects to improve drainage and reduce flooding in St. Bernard Parish. Work included removing and replacing approximately 1,000 linear feet of existing piping and reshaping/clearing an existing ditch. Ms. Newell was responsible for project plans and specifications.</p> <p>Russell St. Drainage Pump Station <i>Jefferson Parish, Louisiana</i> The Tudor and Tallulah Ave. neighborhoods in Jefferson Parish have been subject to flooding during wet weather events. To alleviate this flooding, a new 200 cfs drainage pump station is planned for construction. Improvements will include new influent piping with bore under railroad, three new electric pumps and 1,400 LF of large diameter discharge piping. Ms. Newell is project manager for this work and has been tasked with development of construction plans,</p>

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specifications, and cost estimates; and with coordinating with permitting agencies for project permits (CN Railroad, LADOTD); and with project coordination for surveying, mechanical and electrical services; Ms. Newell is also expected to provide bid phase and construction phase services for this work.

Lake Trail Drive/Vintage Ave. Drainage Pumping Station *Kenner, Louisiana*

The Vintage Ave. Drainage Pump Station is a 100 cfs drainage pumping station in Kenner, Louisiana. The station is comprised of two mixed flow pumps on an elevated pile supported structure located within the Vintage Canal. A 48" concrete drain feeds the line from nearby residential areas. Ms. Newell assisted in design of this station including civil site plans, modeling, grading plans, pump station plans and details. Ms. Newell also assisted with pump selection and preparation of cost estimates. The project was successfully bid in 2016 for \$843K and was constructed in 2017.

Metairie Road Drainage Improvements *Jefferson Parish, Louisiana*

Metairie Road (LA 611-9) is a critical urban highway in the Metro New Orleans area which provides essential transportation to and from New Orleans and Jefferson Parish and allows access to major thoroughfares including Interstate 10, Causeway Boulevard, and Airline Highway. Metairie Road serves many commercial and residential developments in Jefferson Parish and maintains historic and economic significance to the region. Due to the local topography and grading patterns, Metairie Road floods frequently in several areas during moderate to heavy rainfall. These flooding events cause limited access to this important highway and disrupt traffic flow along the route. To address flooding on Metairie Road, Jefferson Parish authorized a hydraulic and hydrologic assessment for the roadway to improve drainage of this critical facility. Ms. Newell assisted in assessing existing drainage patterns using GIS and LIDAR data and reviewed hydraulic models developed in SWMM 5.1 by others. Ms. Newell also facilitated development of alternatives for drainage improvements including subsurface drainage, new pumping stations and raising the roadway and provided cost estimates for these alternatives. Conceptual plans for a green linear park were also drafted by Ms. Newell using SketchUp. The construction cost of recommended improvements, which includes raising portions of Metairie Road and improving subsurface drainage, is \$36M.

Duncan Canal Box Culvert Assessment *Kenner, Louisiana (*Project from previous employer)*

The City of Kenner planned to replace an old, pile supported bridge over the Duncan Canal at West Esplanade Ave. with large concrete box culverts. The existing Duncan Canal is a major Canal serving as the primary outfall to Lake Pontchartrain for Kenner and Jefferson Parish residents. Additionally, Canal No. 2, another primary canal serving the residents of Jefferson Parish, ties into the Duncan Canal at the proposed project location. This would necessitate a tee-type box culvert structure for the replacement. The City of Kenner requested losses through the new system be kept at or below the existing system to reduce the risk of adverse consequences upstream. Ms. Newell undertook assessment of existing conditions using HEC-RAS modeling. She then developed a model using Excel and HEC-RAS to assess new conditions and provide recommendations. Findings and cost estimates were documented in a report. The \$12M project began construction in 2018 and was concluded in 2022.

Assessment of the Canal Street Canal *Jefferson Parish, Louisiana*

The Canal St. Canal includes about 3,100 linear feet of formerly open channel canal which into the 17th Street Canal in Jefferson Parish, Louisiana. Numerous side streets discharge directly to the Canal St. Canal. As part of ongoing beautification efforts, the Parish wanted to enclose the canal to provide pedestrian walkways and a biking path in the neutral ground. Ms. Newell was tasked with providing hydraulic assessment to estimate inflow and size the new culvert. Runoff computations were undertaken by Ms. Newell for approximately 150 acres of contributing area. Ms. Newell then used Parish GIS data of the existing collection system to estimate discharge at each outfall. Hydraulic profiles of existing conditions were then developed by Ms. Newell using HEC-RAS and existing pump station specifications. Proposed improvements were then developed and assessed with findings documented in a report. The beautification project has since been used as a primary route for pedestrians and cyclist in neighboring residences.

Mulberry St. Drain Line *Amite, Louisiana*

This project included site assessment and addition of new subsurface drainage and ancillary drainage structures to accommodate future development in Amite, Louisiana. Ms. Newell was responsible for topographic field services (field work and in-office). Ms. Newell inspected the sites, obtained lot grades, topographic features and subsurface utilities. Hydraulic assessment was then undertaken by Ms. Newell using LADOTD criteria. Improvements were then developed and designed by Ms. Newell including construction plans and cost estimates.

TEC Professional Services Questionnaire

PROFESSIONAL IN CHARGE OF PROJECT:
Name & Title:
Tatiana Pavlyukova Mobley, P.E. <i>Civil Engineer</i>
Project Assignment:
Civil Engineer, Construction Administration
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, 2014, Civil Engineering Bachelor of Science, 2011, Hydro-Meteorology Engineering
Active registration: Year first registered/discipline:
2022, Civil, Louisiana License No. 46468
Other experience and qualifications relevant to the proposed Project:
<p>Tatiana Pavlyukova is a graduate of University of New Orleans, achieving Masters in Civil Engineering, and Bachelor's Degree in Hydro-Meteorology Engineering. Ms. Pavlyukova joined the All South team in April of 2022 and brings substantial experience working on a variety of levee protection systems and drainage projects. Her experience includes performing engineering computations, material quantity takeoffs, estimates, survey interpretation, designs and performed construction supervision and management. Her relevant work experience includes the following projects:</p> <p>Old Arabi Drainage St Bernard Parish, Louisiana Old Arabi is a residential area and has a history of flooding during high intensity rainfall events. It is typical for this drainage system to become overwhelmed, which results in flooding of the streets and surrounding yards. The Old Arabi area consists of an established residential neighborhood with concrete streets, open ditches, and subsurface drainage. The area of focus is prone to street flooding and has the following boundaries: the Mississippi River to the south, the Jackson Barracks to the west, and rail line to the north and east sides. This area flows into Aycock Ditch, then drains east to the Florida Walk Canal, and is then pumped by pump stations #1, 2 and 6. The St. Bernard Parish Consolidated Government selected All South to develop a plan to improve the drainage in the area and remedy this problem. Using survey data and data on the existing culverts and sub-surface drainage in the area, All South developed a hydraulic & hydrologic model of the area to analyze the impacts of a 25-year and a 100-year storm event. Based on study findings All South's plan was broken down into 8 phases.</p> <p>Mounes St. Drainage Improvements (Phase 1 - Dickory Ave. to Crochet Ditch) Jefferson Parish, Louisiana</p>

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This project consisted of subsurface drainage improvements, installation 10' x 8' pre-cast reinforced concrete box culvert, concrete roadway pavement removal and replacement including curbs, striping, traffic signalization. Ms. Pavlyukova designed plans and specs, communicated with the subs and Jefferson Parish. She performed construction management and final walk through.

Mounes St. Drainage Improvements (Edwards Avenue to Crochet Ditch) Jefferson Parish, Louisiana

This project consisted of subsurface drainage improvements, installation 10' x 8' pre-cast reinforced concrete box culvert, concrete roadway pavement removal and replacement including curbs, striping, traffic signalization. Ms. Pavlyukova designed plans and specs, communication with the subs and Jefferson Parish.

Mounes St. Drainage Improvements (Dealers Avenue to Edwards Avenue) Jefferson Parish, Louisiana

This project consisted of subsurface drainage improvements, installation 10' x 8' pre-cast reinforced concrete box culvert, concrete roadway pavement removal and replacement including curbs, striping, traffic signalization. Ms. Pavlyukova designed plans and specs, communication with the subs and Jefferson Parish.

Mounes St. Drainage Improvements (Elmwood Park Blvd. to Dealers Ave.) Jefferson Parish, Louisiana

This project consisted of subsurface drainage improvements, installation 10' x 8' pre-cast reinforced concrete box culvert, concrete roadway pavement removal and replacement including curbs, striping, traffic signalization. Ms. Pavlyukova designed plans and specs, communication with the subs and Jefferson Parish. She is performing construction management.



TEC Professional Services Questionnaire

PROFESSIONAL IN CHARGE OF PROJECT:
Name & Title:
<p>Scott Wetzel, P.E. Civil Engineer</p>
Project Assignment:
Project Engineer
Name of Firm with which associated:
<p>All South Consulting Engineers, LLC</p> 
Years' experience with this Firm:
5
Education: Degree(s)/Year/Specialization:
Bachelor of Science, Civil Engineering, 2019
Active registration: Year first registered/discipline:
2022, Civil Engineer, Louisiana License No. 48298
Other experience and qualifications relevant to the proposed Project:
<p>Scott Wetzel joined All South in July of 2019 after graduating from LSU in May of 2019. He recently received his license as a Professional Civil Engineer. During his time with All South, Mr. Wetzel has assisted different Engineers with a variety of projects performing various tasks. He has assisted in roadway and drainage projects providing help with design and construction administration for multiple Slidell FEMA projects. Mr. Wetzel has worked closely with contractors, inspectors, and residents to ensure all complaints and issues are addressed. His experience includes the following:</p> <p>Ph. I Angela St. Drainage Improvements Arabi, Louisiana This project consists of removal and replacement of drain lines and other drainage structures, including catch basins, manholes, and conflict boxes, removal and replacement of roadway, ditch reshaping, and utility coordination. Mr. Wetzel provided design of the project, designing layout of the new drainage structures and ditch. He developed project plans and specifications for this project and coordinated with utility companies to work through conflict. Mr. Wetzel also performed cost analysis for the project scope. He will be involved with the Construction Administration as well.</p> <p>J&N Truck Stop Outfall Improvements Houma, Louisiana This project consists of drainage pipe installation near a truck stop at the Houma-Terrebonne Airport to reduce seepage of sediment from underneath the concrete parking lot near the drainage ditch. Mr. Wetzel assisted in the design of the construction plans and the specifications for this project.</p> <p>Russel St. Drainage Pump Station Jefferson Parish, Louisiana This project consists of improvements to alleviate flooding in the Tudor and Tullulah Ave. neighborhoods in Jefferson</p>

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Parish. Improvements planned include a new 200 cfs drainage pump station, new influent piping with bore under railroad, and three new electric pumps and 1,400 l.f. of large diameter discharge piping. Mr. Wetzel has assisted in developing project plans, specifications, and costs estimates; as well as assisting with coordination for surveying and project coordination. Mr. Wetzel is also expected to assist with bid phase and construction administration services.

DPW Capital Improvements Program – Lake Vista Infrastructure Repairs *New Orleans, Louisiana*

This project consists of roadway, drainage, sewer, and water restoration throughout a neighborhood in New Orleans. Mr. Wetzel will be heavily involved in the design of these full reconstruction streets, providing analysis using the HydroWin program, cost estimating, and developing the plans and specifications. He will also be performing the Construction Administration after the project goes under construction.

DPW Capital Improvements Program – Lakeview Infrastructure Repairs *New Orleans, Louisiana*

This project consists of roadway, drainage, sewer, and water restoration throughout a neighborhood in New Orleans. Mr. Wetzel will be heavily involved in the design of these full reconstruction streets, providing analysis using the HydroWin program, cost estimating, and developing the plans and specifications. He will also be performing the Construction Administration after the project goes under construction.

DPW Capital Improvements Program – Pines Village Infrastructure Repairs *New Orleans, Louisiana*

This project consists of roadway, drainage, sewer, and water restoration throughout a neighborhood in New Orleans East. Mr. Wetzel has been heavily involved in the Construction Administration for this project, assisting in day-to-day design and management. His tasks include developing survey proposals, checking grades to ensure proper drainage, tracking added and deleted scope, developing field and plan changes, running progress meetings, resolving construction delays and issues in the field, tracking quantities and processing invoices, tracking the progress of construction costs, cost estimating for value engineering of existing construction changes and field issues, managing resident inspectors, and working closely with the Contractor and City.

DPW Capital Improvements Program – Viavant-Lake Catherine Infrastructure Repairs *New Orleans, Louisiana*

This project consists of roadway, drainage, sewer, and water restoration throughout a neighborhood in New Orleans. Mr. Wetzel has assisted in developing design quantities for this project. He has worked closely with members of the City of New Orleans DPW and will be assisting in the Construction Administration for this job as well, performing some of the same tasks as mentioned in the Pines Village description.

DPW Capital Improvements Program: Uptown-W. Riverside, Audubon, Black Pearl-E. Carrollton Infrastructure Repairs

This project consists of roadway, drainage, sewer, and water restoration throughout a neighborhood in New Orleans. Mr. Wetzel has led the Construction Administration for this project, assisting in day-to-day design and management. Some of his tasks include developing survey proposals, checking grades to ensure proper drainage, tracking added and deleted scope, developing field and plan changes, running progress meetings, resolving construction delays and issues in the field, tracking quantities and processing invoices, tracking the progress of construction costs, cost estimating for the purposes of value engineering of existing construction changes and field issues, managing resident inspectors, and working closely with the Contractor and City.

Schneider Canal Drainage Basin *Slidell, Louisiana*

This project consists of roadway, sewer, and drainage repairs in Slidell. Mr. Wetzel has assisted with the day to day design and management of the concrete and asphalt roadway repairs, as well as the sewer and drainage lining and installation being performed in this area. Tasks included analyzing daily reports from resident inspectors, checking and processing invoices, cost estimating for the purposes of value engineering of existing construction changes and field issues, developing change orders, reviewing plans, resolving issues with construction delays and errors, and attending progress meetings and site visits.

W-14 Basin *Slidell, Louisiana*

This project consists of roadway, sewer, and drainage repairs in an area of the city of Slidell, LA. Mr. Wetzel has assisted with the day to day design and management of the concrete and asphalt roadway repairs, as well as the sewer and drainage lining and installation being performed in this area. Some tasks included analyzing daily reports from resident inspectors, checking and processing invoices, tracking the progress of construction costs, cost estimating for the purposes of value engineering of existing construction changes and field issues, developing change orders, reviewing plans, resolving issues with construction delays and errors, and attending progress meetings and site visits.

TEC Professional Services Questionnaire

PROFESSIONAL IN CHARGE OF PROJECT:
Name & Title:
Jens J. Nielsen III <i>Engineering Graduate</i>
Project Assignment:
Engineering Graduate, Construction Administration
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, Civil Engineering, 2021
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project:
<p>Jens Nielsen joined All South in January of 2022 after graduating from LSU in December of 2021. He is currently working towards receiving his license as an Engineering Intern. During his time with All South, Mr. Nielsen has assisted different Engineers with a variety of projects performing various tasks. He has assisted in the design and construction administration for roadway and drainage projects. Mr. Nielsen has worked closely with contractors, inspectors, and residents to ensure all complaints and issues are addressed. His experience includes the following:</p> <p>Avenue E Drainage Improvements, Metairie, Louisiana This project consists of roadway, drainage, sewer, and water restoration throughout a neighborhood in Jefferson Parish. Mr. Nielsen has assisted in the design and cost estimation for this project. He's worked closely with Jack Hingle (ASCE) on civil design, with Stephen Hughes (ASCE) on structural design, and with members of Jefferson Parish.</p> <p>DPW Capital Improvements Program – Black Pearl, East Carrolton Infrastructure Repairs New Orleans, Louisiana This project consists of roadway, drainage, sewer, and water restoration throughout a neighborhood in New Orleans. Mr. Nielsen has assisted in developing plan changes for this project. He has worked closely with Vincent Orlando (ASCE) and members of the City of New Orleans DPW.</p> <p>DPW Capital Improvements Program – Audubon Group A Infrastructure Repairs New Orleans, Louisiana This project consists of roadway, drainage, sewer, and water restoration throughout a neighborhood in New Orleans. Mr. Nielsen has assisted in developing field changes and plan changes for this project. He is the Construction Administrator on the job, and he's worked closely with members of the City of New Orleans DPW.</p>

TEC Professional Services Questionnaire

DPW Capital Improvements Program – Viavant, Lake Catherine Infrastructure Repairs *New Orleans, Louisiana*

This project consists of roadway, drainage, sewer, and water restoration throughout a neighborhood. Mr. Nielsen has assisted in developing plan changes for this project. He is the Construction Administrator on the job, and he's worked closely with members of the City of New Orleans DPW.

LaDOTD North Carnation Street Pavement Rehabilitation *Slidell, Louisiana*

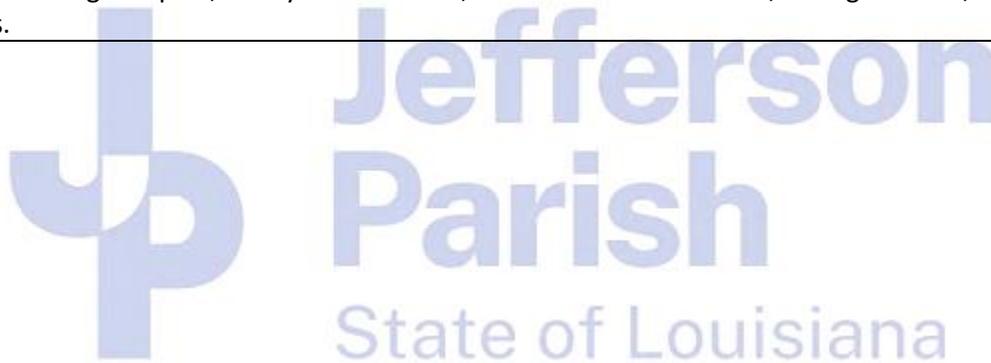
This project consists of Roadway rehabilitation in Slidell and includes concrete and asphalt roadway work and other drainage improvements including the installation of multiple box culverts both next to and beneath the roadway. Mr. Nielsen's responsibilities include: Construction management, inspector management, project coordination, SiteManager inputs, utility coordination, contractor coordination, change orders, submittal reviews, update meetings.

LaDOTD Natchez Drive Rehabilitation *Slidell, Louisiana*

This project consists of Roadway rehabilitation and includes concrete and asphalt roadway work and includes drainage improvements along Natchez Dr. Mr. Nielsen's responsibilities include: Construction management, inspector management, project coordination, SiteManager inputs, utility coordination, contractor coordination, change orders, submittal reviews, update meetings.

LaDOTD Lindberg Drive @ US 190 (Gause Blvd) *Slidell, Louisiana*

This project consists of roadway rehabilitation in a heavily trafficked area. The project includes concrete and asphalt roadway work, the addition of a turning lane onto Gause Blvd. to alleviate traffic issues, and drainage improvements along Lindberg Drive. Mr. Nielsen's responsibilities include: Construction management, inspector management, project coordination, SiteManager inputs, utility coordination, contractor coordination, change orders, submittal reviews, update meetings.



TEC Professional Services Questionnaire

PROFESSIONAL IN CHARGE OF PROJECT:
Name & Title:
<p>John Teegarden, P.L.S. <i>Vice President/ Survey Division Manager</i></p>
Project Assignment:
<p>Senior Professional Land Surveyor/ Survey Project Manager</p>
Name of Firm with which associated:
<p>All South Consulting Engineers, LLC</p> 
Years' experience with this Firm:
<p>10</p>
Education: Degree(s)/Year/Specialization:
<p>International Correspondence School, Surveying and Mapping Course (2-year course completed)</p>
Active registration: Year first registered/discipline:
<p>1990/ Professional Land Surveyor/ Louisiana License No. 4635 1999/ Professional Land Surveyor/ Mississippi License No. 2782</p>
Other experience and qualifications relevant to the proposed Project:
<p>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. Throughout his 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. 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.</p> <p>Tudor and Tallulah Drainage Analysis <i>River Ridge, Jefferson Parish, Louisiana</i> 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.</p> <p>Alidore Drainage Study and Improvements <i>Lafourche Parish, Louisiana</i> 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.</p>

TEC Professional Services Questionnaire

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.

Upper LA 45 Basin Tidal Surge Protection *Lafitte, Louisiana*

Mr. Teegarden and his team conducted topographic, magnetometer and bathymetric surveys for the design of a tidal surge protection system for the Upper LA 45 basin in the Lafitte Levee District. The team surveyed three routes, one along Bayou Baratavia for the design of a floodwall and 2 possible routes for rear protection levee through swamp and marsh areas. RTK GPS, Robotic Total stations, remotely operated Z-Boat and Marine Magnetics Sea-Spy magnetometer were used for this project. Survey deliverables included plan and profile sheets and plotted cross sections.

Breakwater Drive Improvements *New Orleans, Louisiana*

Mr. Teegarden and his crew conducted a topographic survey for Breakwater Drive in New Orleans. He was tasked with identifying the scope of damaged elements inside the footprint of Breakwater Drive, while highlighting the facility's history and cultural significance, as well as its pre-storm conditions and full description. From this survey, All South identified additional facilities not directly within the footprint of the breakwater but that depend on it for protection (includes marinas, restaurants/vendors, housing, yacht clubs, a lighthouse, fishing piers, and more) and were able to provide cost estimates for the demolition and repairs of the damaged elements in the 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: <p>Taylor Casteigne, PLS Professional Land Surveyor, Survey Supervisor</p>
Project Assignment: <p>Professional Land Surveyor</p>
Name of Firm with which associated: <p>All South Consulting Engineers, LLC</p> 
Years' experience with this Firm: <p>4</p>
Education: Degree(s)/Year/Specialization: <p>Bachelor of Science / 2019 / Geomatics</p>
Active registration: Year first registered/discipline: <p>2022/ Professional Land Surveyor / Louisiana License No. 5291</p>
Other experience and qualifications relevant to the proposed Project: <p>Mr. Casteigne graduated from Nicholls State University with a B.S. in Geomatics and has served as surveyor, party chief and draftsman on a variety of surveys. He is well versed in the latest surveying equipment technology to ensure fast and accurate surveys. Mr. Casteigne performs/oversees necessary field work for the survey, manages field crews, and coordinates data processing. He tracks project budgets daily, ensuring that the surveys are completed on time and under budget.</p> <p>Westside-Alma Drainage Project Terrebonne Parish, Louisiana Mr. Casteigne performed full topographic services including data collection, data processing, data management, CAD, and project budget oversight. He performed necessary field work for the survey, then processing the data into a field book file. This includes a site visit prior to beginning the project to develop a cost estimate and developing a packet for field crews detailing what data will be required to complete the survey. This survey was for the purpose of improving the drainage along Westside Blvd from Main St. to Alma Street.</p> <p>Old Arabi Drainage Improvements St. Bernard Parish, Louisiana Mr. Casteigne performed full topographic services including data collection, data processing, data management, research, CAD, and project budget oversight. This included managing field crews during the data collection process ensuring that everything within the project scope was captured during the fieldwork. Oversight over the drafting process was another key responsibility for this project. This survey was intended to assist with the design of new drainage for a portion of Old Arabi.</p>

TEC Professional Services Questionnaire

Bayou Vista Subdivision Drainage Model *Thibodaux, Louisiana*

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.

LaFreniere Park Meadow Drainage Improvements *Jefferson Parish, Louisiana*

Mr. Casteigne performed full topographic services including data collection, data processing, data management, CAD, and project budget oversight. Also, performing the necessary field work for the survey, then processing the data into a fieldbook file. Once the data was in a fieldbook it is imported into Auto CAD, where the data is used to build a TIN surface. This work was used to analyze the existing drainage conditions of the park meadow area.

Delambert Pump Station *St. Bernard Parish, Louisiana*

Mr. Casteigne performed full topographic/boundary survey and CAD services for improvements to be made on the Delambert Pump station. This includes performing the necessary field work for the survey, then processing the data into a useable format.

Savanne Rd Drainage Improvements *Houma, Louisiana*

Mr. Casteigne performed full boundary surveying services for the acquisition of a servitude by Terrebone 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.

Ascension Parish School Board Airline Highway Property Topographic Survey

Mr. Casteigne performed full topographic and boundary services including data collection, data processing, data management, research, CAD, and project budget oversight. This included managing field crews during the data collection process ensuring that everything within the project scope was captured during the fieldwork. Oversight over the drafting process was another key responsibility for this project. This survey was used in the design of a new building for the site, and to establish the western boundary to aid in tree clearing.

St. Bernard Parish Canal Servitude Creation *St. Bernard Parish, Louisiana*

Mr. Casteigne performed full boundary services including data collection, data processing, data management, research, CAD, and project budget oversight. This included managing field crews during the data collection process ensuring that everything within the project scope was captured during the fieldwork. Oversight over the drafting process was another key responsibility for this project. This survey is intended to create servitudes over 9 different canals throughout St. Bernard Parish for the parish to go in and clean these canals of obstructions after a major storm event.

Des Allemands Bulkhead Improvements *St. Charles Parish, Louisiana*

Mr. Casteigne performed full topographic and hydrographic services including data collection, data processing, data management, research, CAD, and project budget oversight. This included managing field crews during the data collection process ensuring that everything within the project scope was captured during the fieldwork. Oversight over the drafting process was another key responsibility for this project.

Jefferson Parish Fire Training Center *Jefferson Parish, Louisiana*

Mr. Casteigne performed full topographic services including data collection, data processing, data management, CAD, and project budget oversight. Also, performing the necessary field work for the survey, then processing the data into a fieldbook file. This includes a site visit prior to beginning the project to develop a cost estimate and developing a packet for field crews detailing what data will be required to complete the survey. This survey was for the purpose of improving the Jefferson Parish Fire Training Site.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
<p>Scott Breidenstein CADD Technician</p>
Project Assignment:
<p>CADD Technician / Draftsman</p>
Name of Firm with which associated:
<p>All South Consulting Engineers, LLC</p> 
Years' experience with this Firm:
<p>5</p>
Education: Degree(s)/Year/Specialization:
<p>Technical Diploma, 2020, L. E. Fletcher Technical Community College</p>
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Breidenstein joined the All South team in 2019. 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. Breidenstein 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.</p> <p>Russell St Pump Station <i>River Ridge, Louisiana</i> Mr. Breidenstein 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.</p> <p>Alidore Drainage Improvements <i>Raceland, Louisiana</i> Mr. Breidenstein 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. Breidenstein were used to design better drainage for the surrounding area and proved to be more economical.</p> <p>Westside-Alma Drainage Project (Alma-West Park) <i>Houma, Louisiana</i> This project consists of roadside drainage improvements in an area of the city of Houma, LA. Mr. Breidenstein assisted</p>

TEC Professional Services Questionnaire

in the topographic survey and prepared the proposed design plans for the improvements to the existing drainage system. Mr. Breidenstein modeled in detail the hydrologic components of the project area using CAD and provided profiles and cross sections that were utilized in the design process.

Old Arabi Drainage St. Bernard, Louisiana

Mr. Breidenstein prepared proposed design drawings for the clearing and dredging of existing canals and the construction of drainage structures. The project involved replacing culverts, ditch re-grading, and dredge operations. Site plans provided by Mr. Breidenstein were used to design improved drainage for the surrounding area.

Canal A Drainage Improvements, New Sarpy/St. Charles Parish, Louisiana

Mr. Breidenstein prepared the design plans for the Canal A drainage improvement project. The project was approximately ±1800 LF, it consisted of replacing an existing arch culvert with two cast in place box culverts, roadway reconstruction and multiple cantilevered sheet pile wall systems. Mr. Breidenstein created a C3D model showing the proposed canal depth for volume calculations. Three separate concrete flume walls were drawn and detailed as well. Mr. Breidenstein assisted the project engineer in completing the proposed plan set and reconstructed roadway design.

Lake Vista New Orleans, Louisiana

Mr. Breidenstein prepared survey baseline drawings, topographic plan sheets and profiles depicting the existing underground utilities for the streets in the Lake Vista project. These surveys depicted the elevations of the streets to show centerline and gutter line profiles, the surface created showed the many imperfections and potholing in the streets. Utility information was researched and observed to show the areas in need of repair or replacement of major drainage, sewer and water lines. Also included were right-of-way lines, apparent lot lines, 3D surface, and cross sections. Mr. Breidenstein was also involved in the design phase of this project. Coordinating with engineers and subconsultants to prepare drawings depicting the proposed new roadway, elevations, cross sections, new subsurface drainage, sewerage and water for approximately 4900' of roadway and sidewalks. This project also conformed to Orleans Parish DPW standards.

Breakwater Drive Improvements New Orleans, Louisiana

Mr. Breidenstein prepared survey maps along Breakwater Drive, from its intersection with N. Roadway Street to its termination at the point. Baseline maps, plan, profile and cross sections were provided to show the existing berms and existing topography of the site. FEMA and CORP permit drawings were also provided in this project. Shown in the plans were horizontal and vertical location of existing berms and proposed berms. Mr. Breidenstein assisted the project engineer in creation of the new west, north, south and the point berms. Proposed berm plan and profile sheets with cross sections showing proposed work were also created by Mr. Breidenstein.

RR016 New Orleans Streets Topographic Surveys New Orleans, Louisiana

Mr. Breidenstein prepared survey baseline drawings, topographic plan sheets and profiles depicting the existing underground utilities for the streets in this project submittal. These surveys depicted the elevations of the streets to show centerline and gutter line profiles, the surface created showed the many imperfections and potholing in the streets. Utility information was researched and observed to show the areas in need of repair or replacement of major drainage, sewer and water lines. Also included were right-of-way lines, apparent lot lines, 3D surface, and cross sections. This project also conformed to Orleans Parish DPW standards.

Fire Station No. 12 Jefferson, Louisiana

Mr. Breidenstein prepared the design plans for the construction of a new fire station for Jefferson Parish. The plans included new site plan, structural design, details, grading plan, drainage plan and utility plan. Mr. Breidenstein coordinated with the project engineer and sub-contractors to conform and finalize the plans.

Lock 1 Boat Launch Restoration, Pearl River, Louisiana

Mr. Breidenstein prepared the demolition and design plans for the restoration of the two boat launches located at Pearl River Lock 1 location. The plans including grading and cross sections for the new gravel parking areas and the two boat launches. Structural plans will be provided in the next design phase of this project. Mr. Breidenstein is currently coordinating with the project engineer to complete these design plans.

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>Westgate Subdivision Subsurface 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 provided design and construction administration for subsurface drainage improvements in the Westgate Subdivision consisting of the construction of drainage pump stations and associated force main and gravity line installations.</p> <p><i>All South was responsible for the design of two new 30 CFS drainage pumping stations. Both Stations have pile supported foundations with concrete slabs located above concrete flume sections. Outfall pipes were installed into new concrete flume canal sections. Design of two metal building to house generator and fuel tanks were also included.</i></p> <p>All South also provided the design of the installation of over 2,200 ft. of 22" X 44" Reinforced Concrete Arch Pipes, relocation of existing sub surface sewerage and water pipe, design of utility conflict boxes, design of new concrete flume sections, and repairs to existing concrete roadway surfaces.</p>	
 		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
10/2019	\$4,145,345	\$360,867

TEC Professional Services Questionnaire

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lake Trail Drive 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>This project includes the design of upgrades to subsurface drainage along Lake Trail Drive between West Esplanade Avenue and Bruin Drive. This includes the removal and replacement of the Portland Cement Concrete roadway panels and the relocation of public utilities to residence. It is located in a dense residential neighborhood with many challenges associated with public and private utilities, limited elevations and working close to private residences. The established neighborhood was developed in the 1970s and has aging infrastructure along with inadequate drainage features. This project will help alleviate the drainage issues and repair some of the infrastructure.</p> <p>To meet the 10-year storm criteria and provide a technical memorandum outline, All South evaluated existing subsurface drainage along Lake Trail Drive between Bruin Drive and Canal No. 3. This analysis determined new pipe sizes and outfall elevations. Pipe sizing with limited slope required the use of mostly concrete arch pipe throughout the project.</p> <p>Originally this project was proposed to utilize the existing Jefferson Parish Drainage Maintenance Contract and plans were initially developed with this intent. Recently it was decided to develop a complete set of bid documents that included over 3,000 linear feet of concrete pipe ranging from 12" to 48" arch pipe, the relocation of utilities, the removal and repaving of concrete streets, curb and driveway aprons along with detailed specifications and detour phasing plans. All South also prepared all necessary applications for permits as well as coordinating notices with private utility companies regarding the adjustment, relocation and/or removal of existing utility lines and structures within the project in conflict with the proposed improvements.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing (On hold by Parish)	\$3,422,404 (est.)	\$293,386

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Russell Street Pumping Station Drainage Improvements <i>Jefferson Parish, Louisiana</i></p> <p>Jefferson Parish Government Mitch Theriot, P.E., Director of Drainage 1221 Elmwood Park Blvd. Jefferson, Louisiana 70123 (504) 736-6753</p>	<p>In 2016, Jefferson Parish authorized All South Consulting Engineers to provide a hydrologic and hydraulic assessment of the Tudor and Tallulah Avenue drainage areas in Jefferson Parish, Louisiana. The purpose of the assessment was to identify potential drainage improvements to alleviate flooding in these neighborhoods.</p> <p>All South personnel conducted a survey and developed hydraulic models of these drainage areas using the EPA SWMM Program. 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 Program. Using the same design storm and criteria, an analysis of the required drainage capacity was also performed to help identify proposed improvements for eliminating flooding.</p> <p>Numerous projects were identified to help reduce levels of street flooding during wet weather events, one of which included construction of a new drainage pump station. All South provided an assessment to evaluate site options for the new 130 CFS drainage pump station and, in 2021, was authorized to begin design as prime consultant for this work.</p> <p><i>The new Russell St. Drainage Pump Station is comprised of screening, three vertical drainage pumps and a 1,300 LF 54" steel discharge pipe which discharges to the Airline Canal. The project also includes improvements to influent lines; jack and bore of two 54" pipes beneath existing railroad tracks; railroad permitting and cofferdam design.</i> All South personnel are also assisting Jefferson Parish in acquisition of right-of-way for this work. Construction of the est. \$9.2 million project is slated to be completed in 2025.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing (03/2025 est.)	\$9,200,000	\$490,560

TEC Professional Services Questionnaire

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Tudor And Tallulah Drainage Area Master Plan And Implementation <i>Jefferson Parish, Louisiana</i></p> <p>Jefferson Parish Government Mitch Theriot, P.E., Director of Drainage 1221 Elmwood Park Blvd. Jefferson, Louisiana 70123 (504) 736-6753</p>	<p>All South was selected by Jefferson Parish to analyze the drainage requirements in this project area. The goal of this analysis was to provide a master plan that will eliminate street flooding due to the 10-yr, 24-hr rainfall event. This report included 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. All South provided the study and recommendations with a cost analysis to improve the systems.</p> <p>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 (RCP) 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 three (3) 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>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
07/2017	\$238,207	\$238,207

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Canal 10 Drainage Improvements at West Esplanade <i>Kenner, Louisiana</i></p> <p>Jefferson Parish Government Matthew Zeringue, Director of Engineering 1221 Elmwood Park Blvd. Jefferson, Louisiana 70123 (504) 736-6833</p>	<p>All South Consulting Engineers provided the professional services necessary to prepare construction documents for the drainage improvements to W. Esplanade Ave. at Canal No. 10. <i>The project included an upgrade to the existing culvert crossing along W. Esplanade Ave. at Canal No. 10 from a 72" RCPA to a double 6'x6' box culvert.</i></p> <p><i>The project consisted of the following:</i></p> <ul style="list-style-type: none"> • <i>Removal/Replacement of culvert system under West Esplanade Ave</i> • <i>Site Dewatering</i> • <i>Removal/Replacement of PCC Pavement</i> • <i>Removal/Replacement of Subsurface Drainage Systems</i> • <i>Rerouting of public utilities</i> <p>In the Preliminary Phase of this project, All South coordinated topographic surveys and geotechnical investigations to develop the preliminary layout and sketches for the design criteria. All South provided a cost estimate and assisted the project owner with the preparation of State & Federal Grant Applications.</p> <p>During the Design Phase, All South prepared detailed construction plans, specifications and contract documents inclusive of utility locations, ownership and right of ways. Responsibilities also included permitting, developing the final cost estimate, and coordinating utility adjustment, relocation, removal, etc.</p> <p>All South provided bidding services, as well as project management and construction administration. Construction administration services included conducting construction meetings; review of submittals; processing of pay applications and change orders; inspection of construction for compliance and close-out; inspection for substantial completion; and review of close-out documentation for final acceptance.</p>	
	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
12/2019	\$1,215,471	\$108,760

TEC Professional Services Questionnaire

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Old Arabi Drainage Improvements <i>New Sarpy, St. Charles Parish, Louisiana</i></p> <p>St. Bernard Parish Government Donald Bourgeois, Jr. 8201 W Judge Perez Dr. Chalmette, LA 70043 (504) 278-4480</p>	<p>Old Arabi is a residential area with a history of flooding during high intensity rainfall events. It is typical for this drainage system to become overwhelmed, which results in flooding of the streets and surrounding yards. The Old Arabi area consists of an established residential neighborhood with concrete streets, open ditches, and subsurface drainage. The area flows into Aycock Ditch, then drains east to the Florida Walk Canal, and is then pumped by pump stations #1, 2 and 6.</p> <p><i>All South was selected to develop a plan to improve the drainage in the area and remedy this problem. Using survey data and data on the existing culverts and sub-surface drainage in the area, All South developed a hydraulic and hydrologic model of the area to analyze the impacts of a 25-year storm event and a 100-year storm event. Based on study findings, All South's plan was divided into 8 phases.</i></p> <ul style="list-style-type: none"> • Aycock Ditch Cleaning and Reshaping. • Drainage Improvements on Esteban St.: Drainage improvements of the Esteban St. block between Bienvenue St. and N. Peters St. to an area that has been reported to flood and hold water due to a low point in the road with no existing drainage outlet. Project consists of placement of approx. 503 LF of new 24" pipe, 4 new catch basins, and tying new subsurface drainage into existing 30" RCP on Aycock St. • New Conspan on Patricia St.: Replacement of 3 existing 72" culverts under Patricia St. with a new 8.5' x 21' Conspan. Existing culverts are undersized, rusted and have sunken to a negative slope. • New Culverts at Florida Walk Canal and Railroad Crossing: Replacement of 6 existing 72" culverts under crossing with 4 96" round culverts. Existing culverts are undersized, rusted, and have sunken/collapsed to a negative slope which promotes silting. • Ph I. Angela St. Drainage Improvements - New 48" and 60" Pipes Tying Angela St. to Aycock St.: Placement of a new 48" pipe on N. Rampart St., from Angela St. to the ditch between Mehle Ave and Aycock St., and placing a new 60" pipe to connect the ditch to existing 54"x 88" RCP. • Ph II. Angela St. Drainage Improvements - New 60" Pipe Tying Angela St. to Aycock Ditch: Placement of a new 60" pipe on the east side of Aycock St. tying into the north side of St. Claude Ave. into the exiting 5'x 8' box culvert • Old Arabi Streets Drainage Improvements: Combination of point repairs, open cut and CIPP Lining on Angela St., Mehle Ave., and Aycock St, and other streets. • CIPP Lining of Existing Pipes on W. Judge Perez Dr: Lining 2 existing 72" culverts and 1 existing 77"x 107" CMPA under W. Judge Perez Dr 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing (12/2024 est.)	\$9,242,383.18	\$1,053,779

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p align="center">Westside Boulevard and Alma Street Drainage <i>Terrebonne Parish, Louisiana</i></p> <p>Terrebonne Parish Consolidated Government Jeannie Bray – Capital Projects 2000 St. Louis Canal Road Houma, LA 70364 985-873-6720</p>  <p align="center"><i>Geometric Layout of the HEC-RAS Model</i></p>	<p>The Alma Street intersection with Westside Boulevard has historically suffered from poor drainage, with repeated damage to commercial and residential structures in the area during heavy rains. The area was developed over 40 years earlier, and the drainage system has not kept up with the development. The Terrebonne Parish Consolidated Government selected All South to develop a plan to improve the drainage in the area and remedy this problem. All South's plan was broken down into 4 phases.</p> <ul style="list-style-type: none"> • <i>Phase 1: culvert crossing improvements and ditch cleanouts on St. Louis Canal Road</i> • <i>Phase 2: existing ditch improvements in roadside ditches between Marie Drive and St. Louis Canal Road</i> • <i>Phase 3: improving the drainage system upstream of the ditches improved in Phase 2 from Alma Street to Marie Drive through increased culvert sizes and conversion of open ditch to subsurface culverts. Design of this phase has been completed and the construction bidding process has begun.</i> • <i>Phase 4: All South's plan is to improve the drainage system from Alma Street to West Park Avenue (LA-24). This phase has been designed and submitted to Terrebonne Parish Consolidated Government for review.</i> <p>Using survey data and data on the existing culverts and sub-surface drainage in the area, All South developed a hydraulic and hydrologic model of the area to analyze the impacts of a 10-year storm event and a 25-year storm event. All South used the HEC HMS and HEC RAS in sequence to calculate overland flow, and to eventually size the drainage pipes. These models were used to develop a plan to increase the pipe sizes in the drainage system. The older pipes were much too small, and restricted water flow. The models were also used to project existing and proposed damage for a 25-year storm event as part of a benefit-cost analysis.</p> <p>The project includes the removal of 3,000 LF of existing drainage pipe. This existing pipe ranges in size from 18" to 24". This pipe is replaced with pipe ranging from 36" to 54" in diameter. Because this area has been developed for so long, there are significant sewer lines, power lines, water lines, and other utilities in the area. The planning for this project included measures to avoid these other utilities. All South developed a program that would make the overall project costs manageable and would lessen the impact to the residents and businesses.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing (07/2024 est.)	\$5,147,376.71	\$307,800

TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Alidore Drainage Improvements and Statewide Flood Application <i>Lafourche Parish, Louisiana</i></p> <p>Lafourche Parish Government James Branes P.O. Box 425 Mathew, LA 70375 (985) 532-8235</p>	<p>The Alidore Community State Flood Control Project involved:</p> <ul style="list-style-type: none"> • Reconstructing an existing pump station with three (3) diesel engine driven 36" vertical lift pumps • Widening existing drainage ditches to improve conveyance of storm water to the pump station • Excavation of a system reservoir to provide additional storage capacity of storm water during major rain events • Levee improvements to prevent overtopping from surrounding areas <p><i>This project was divided into two phases: Phase I Levee and Reservoir Improvements-cleaning out ditches, raising levees, and construction of the reservoir. Phase II will be to construct the new pump station.</i></p> <p>Design and Construction Administration</p> <p>All South prepared both a pre-application and a full application for funding of pump station, levee, and reservoir improvements for the Alidore Community in Central Lafourche Parish. The Alidore Community experienced severe rainfall flooding in 2009, and the Parish Government contracted with All South shortly thereafter to pursue state funding for flood control improvements. All South conducted surveying (topographic survey, hydrographic survey, prepared right of way plat for new pump station) and constructed a drainage model to analyze the system and develop a recommended plan for improvements.</p> <p>All South provided H&H modeling and calculations for the neighborhood's existing inadequate pumping capacity. This included full site evaluations, including field data collection and integration with the project owner to create a system model using HEC-HMS 3.4 and HEC-RAS 4.1.0 under pumped flow conditions. The model predicted a pumping configuration to maintain proper drainage elevations within proposed ditch improvements. All South sized the system for new pumping capacities and neighborhood drainage improvements including: improved ditch cross-sections, realignment of existing levee sections, and new pump and piping configurations to support the existing system.</p> <p>The design includes a new pump station with 3-36" pumps, as well as reservoir improvements close to the pump station. All South assessed the existing pumps as well to determine if those pumps could be improved and provided cost estimates.</p> <p>All South completed a search of the courthouse records for all affected landowners for all proposed work including ditch cleanout, levee modification, reservoir and pump station construction. Our firm compiled a map depicting all the affected landowners and has coordinated a meeting with the Public Works Department to begin acquiring the necessary land rights for the project.</p>	
 		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing	\$3,322,045	\$622,045

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">W-14 Infrastructure Repairs <i>Slidell, Louisiana</i></p> <p style="text-align: center;">City of Slidell Blaine Clancy, P.E., City Engineer 2045 Second Street Slidell, LA 70458 (985) 646-4270</p>	<p>As a result of Hurricane Katrina, City of Slidell was inundated with several feet of water causing damage to all public and private facilities and damaging roadway bases and utilities. All South was hired to evaluate the condition of the utilities and roadways.</p> <p>All South has worked on the W-14 Infrastructure Repairs project since after Hurricane Katrina; from assisting with identifying eligible repairs to securing funding through FEMA. Using our vast experience, our firm understands the justification required to ensure eligibility for repairs to receive FEMA funding. Once the scope of work was identified, All South worked with the City, the State and the federal government to develop the project worksheets to justify the funds.</p> <p>Once the Project Worksheets were written, All South began preparing construction documents for public bid. Our team has completed the design for the W-14 Drainage Basin and is responsible for all roadways and utilities in this area. Infrastructure repairs for the project include sewer/drainage open cut, asphalt/concrete repairs, sewer/drainage Cured In Place Pipe (CIPP) repairs and CIPP Box Culvert repairs. The box culvert repairs are over 2,100 LF and include CIPP lining boxes that are near the end of their design life. CIPP repairs were selected for the repair type due to close proximity to residential housing and utilities.</p>	
	<p>During construction, All South is performing construction management and inspection duties for the W-14 Construction Project. To ensure the construction is completed as directed in the plans and specifications and within the allotted time, monthly onsite progress meetings are being conducted with the owner and contractor, along with periodic site inspections by the Project Engineer. To ensure all repairs are being completed and recorded properly and within budget, All South is diligently reviewing all inspection reports, log all completed repairs and maintain as-built construction plans. During all phases of this project, All South is working with the City of Slidell on filling out the appropriate payment applications and ensure that all possible federal funds are captured.</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
12/2021	\$18,726,677.66	\$1,165,018.66

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PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Upper Kraak Ditch Subsurface 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 Consulting Engineers, LLC was selected by Jefferson Parish Government to provide plans & specifications, construction administration and resident inspection for replacement of existing deteriorated corrugated metal pipe at 2 locations within the Upper Kraak Basin. The existing drainage culverts crossed substantial rail improvements, and the Parish did not want to interrupt rail service in this area. As a result, the Parish asked All South to develop a plan that utilized the existing pipe, and improved its capacity, while not exposing the pipe through open cut of a trench. All South developed a plan to use over 1000 feet of cured in place resin liner. All South also conducted the topographic survey for this job and managed the geotechnical investigations.</p> <div style="text-align: center;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
11/2016	\$1,464,369.00	\$235,557

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

Parties:		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, LLC is a Limited Liability Company owned by Timothy Bonura, Jens J. Nielsen Jr., and Stephen Smith. Established in May 2004, All South is a multi-disciplinary firm that provides Civil and Structural Engineering, Land and Hydrographic Surveying, Program and Grant Management, Construction Administration and Inspection, and Disaster Management to federal, state, and municipal agencies, as well as, private clients throughout the Gulf Coast.

» SPECIALIZED EXPERIENCE «

All South has substantial experience in the Civil Engineering, Project Management, Land Surveying, and Resident Inspection services pertinent to the scope of work outlined in the request for this proposal. *We offer a plethora of experience with projects to alleviate drainage issues, including many years of experience in the design and construction management of Jefferson Parish Drainage Projects.*

The knowledge and experience of our staff, paired with the use of innovative software, allows us to develop *hydraulic and hydrologic models and relevant drainage calculations* to give an end product that addresses the entire drainage system for each project. The finished drainage projects substantially improve the flow of water in each area, thus preventing any flooding. All South's experience includes *pre and post drainage calculations, culvert sizing and design, horizontal and vertical conflict resolution and any other permitting processes required*. Our projects involve multiple facets showcasing aptitude for addressing the needs of our clients and the community by utilizing our expertise in civil engineering to deliver infrastructure improvements.

All South's Stormwater Management projects involve pumps and motors, open and subsurface drainage canals, and subsurface drainage systems. These projects were successfully completed in a timely manner and within budget. Additional experience can be found in the above resumes and project descriptions.



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» FIRM CAPABILITIES AND FIELD EQUIPMENT «

Our staff performs a wide variety of design and administrative services for our clients. These services span multiple design specialties, and we rely on this versatility to offer a more complete service. All South's specialties span from design, to construction and project management, to onsite resident inspection, to a variety of surveying applications. More specifically, a list of our applicable specialties for this proposal is included below.

ENGINEERING DESIGN		
<p>Water</p> <ul style="list-style-type: none"> • Water Modeling • Water Treatment • Water Distribution Systems <p>Drainage</p> <ul style="list-style-type: none"> • Hydraulic/Hydrologic Studies • Collection Systems • Open Channels (Structural/Earthen) • Retention Ponds • Detention Ponds • Pump Stations <p>Sewer</p> <ul style="list-style-type: none"> • Computer Modeling • Treatment Plants • Collection Systems • Lift Stations • Force Mains 	<p>Coastal</p> <ul style="list-style-type: none"> • Land Development • Levees • Wetland Development • Marsh Re-creation • Mitigation • Dredging <p>Flood Control</p> <ul style="list-style-type: none"> • Locks • Flood Gates • T-Walls • I-Walls • Earthen Levees • Structural Levees • Sheet Pile Structures <p>Land Development</p> <ul style="list-style-type: none"> • Civil Site Services 	<p>Transportation</p> <ul style="list-style-type: none"> • Traffic Counts • Traffic Impact Analysis • 3D Modeling • Concrete Roadway • Asphalt Roadway • Bridge Design <p>Recreational</p> <ul style="list-style-type: none"> • Recreational Fields • Bicycle/ Pedestrian Paths • Master Plans <p>Public Utilities Structural</p> <ul style="list-style-type: none"> • Buildings • Retaining Walls • Shallow and Deep Foundations • Existing Facility Structural Analysis
SURVEYING	PROGRAM/ GRANT MANAGEMENT	CONSTRUCTION MANAGEMENT
<ul style="list-style-type: none"> • Boundary/ALTA-NSPS Survey • Construction Survey • Control Survey • Data Processing • Elevation Survey • GIS Data Acquisition • HDS (High Definition) Laser Scanning • Hydrographic Survey • Pipeline Survey • Topographic Survey • Right of Way 	<ul style="list-style-type: none"> • Grant Writing and Management • Public Assistance • Application Development • Planning • Cost Estimating • Reimbursements • Scheduling • Plan Review • Document Control • Program Database Development • Problem Solving 	<ul style="list-style-type: none"> • Bidding and Advertising • Resident Project Representative • Document Control • Cost Control • Safety Review • Field Engineering • Close Out Documentation • As Built Drawing Development

Our survey crews use the latest of field equipment to deliver for our clients, including:

• Leica GS-14 GPS Receivers	• G-882 Magnetometer
• AutoCAD Stations Civil 3D, Microstation, InRoads, CadConform	• Four wheel off road vehicles / marsh buggies
• 26' Scully Aluminum Boat with Dual 150 h.p. motors	• 14' Aluminum Flat Boat
• DJI Inspire 2 Aircraft with Zenmuse X4S Payload	• DJI Phantom 4 Advanced Aircraft
• 6' Z-boat, remotely operated hydrographic survey boat	• DJI Mavic Pro Aircraft
• Odom Hydrographic CV100 dual frequency Echosounder	• Hypack – Hydrographic software

» PROFESSIONAL TRAINING AND EXPERIENCE «

All South's licensed engineers have a total of 296 combined years of experience performing civil works projects in South Louisiana. Our licensed professionals all obtain over 15 hours annually of continuing education along with several in house seminars. These courses are all designed to make sure our staff is up to date with all the latest construction

TEC Professional Services Questionnaire

materials and methods. All South maintains annual agreements with AutoCAD and Civil 3D to keep us up to date with the latest computer software's. Each design professional researches the proper continuing education courses to help further their experience in the proper fields.

Our team of Professional Engineers, Project Managers, Construction Managers, and Resident Inspectors obtain professional qualifications that allow for satisfactory work, which cumulatively include:

- ATSSA Traffic Control Supervisor/ Technician/ Flagger
- USACE Certified in Construction Quality Management for Contractors
- LaDOTD Asphalt Paving Inspector/Technician
- Veriforce Certified OQ in Excavating, Trenching, and Shoring
- LaDOTD Density Testing for Embankment
- Veriforce Certified in CCT
- LaDOTD Base Course & Base Course Inspection
- USACE Resident Inspector/Disaster Recovery Monitor

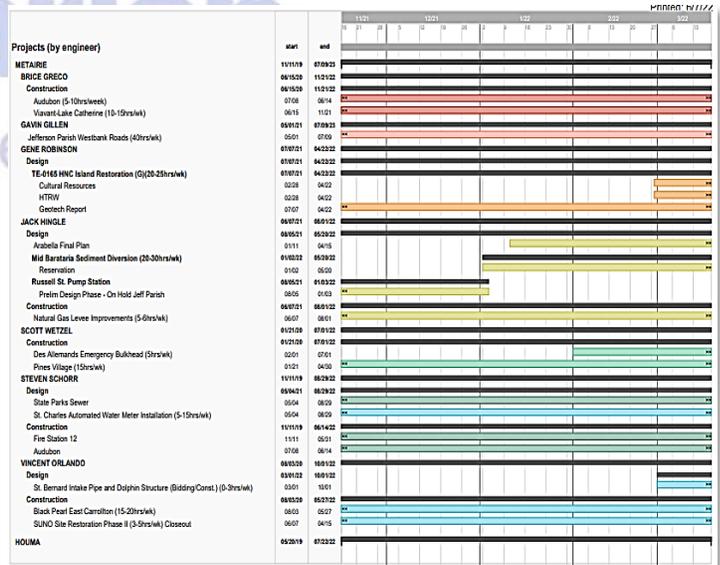
» SIZE OF FIRM «

The All South staff includes 77 professionals driven to excellence and focused on our clients' needs. We are made up of 15 Louisiana Licensed Professional Engineers, 8 Engineering Interns, 2 Professional Land Surveyors, and 14 program and grant management personnel. Our staff also includes program managers, CADD technicians/draftsmen, grant specialist, field monitors and administrative support staff, all of which provide years of experience to help ensure that our work is exceptional.

» CAPACITY FOR TIMELY COMPLETION «

With 77 employees and ample resources, All South has more than enough capacity to meet any deadlines that the Parish requests. 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.



All South takes pride in the quality control taken to ensure our design and management practices account for accuracy, schedule, and costs for every project. If selected, All South will implement our quality control and assurance principles to the Jefferson Parish Government projects through our qualified staff, innovative scheduling software, and innovative design practices to control cost.

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» PAST PERFORMANCE «

Over the past 20 years, All South has developed an outstanding reputation as one of the Gulf South's leading Engineering and Surveying firms. 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. Our past performance within Jefferson Parish has given us a keen and nuanced understanding of the inner working of the various Parish departments, as well as the likings and needs of the Parish as a whole.

Our background has bred a sense of commitment, comradery, and the willingness to fight for our clients through every phase of a project. 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. As a direct result, our clients continue to choose All South. We believe this trend speaks very highly to our staff, our commitment, and our results. The staff members included in this proposal will employ these same levels of client devotion and satisfaction to Jefferson Parish.

Since its inception in 2004, All South has reached innumerable professional accomplishments within each aspect of our wide variety of disciplines. Some of our notable accomplishments include:

- ✓ **American Council of Engineering Companies of Louisiana 2020 Engineering Excellence Awards**
 - Structural Systems Grand Award Winner: Terrebonne Port Industrial Blvd N. Soil Improvements & Bulkhead
- ✓ **American Concrete Institute Louisiana Chapter's 22nd annual Excellence in Concrete Construction Awards in recognition of outstanding and innovative use of concrete products:**
 - 2019 Infrastructure Award of Merit: Terrebonne Port Industrial Blvd N. Soil Improvements & Bulkhead
- ✓ **American Concrete Institute Louisiana Chapter's 22nd annual Excellence in Concrete Construction Awards in recognition of outstanding and innovative use of concrete products:**
 - 2019 Repairs and Restoration Project Award of Merit: West End – Breakwater Drive Boat Launch Project

» 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 maintained a strong and successful working relationship with Jefferson Parish since 2004 and has continuously received positive feedback from Parish officials and personnel. 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:** Timothy P. Bonura, P.E.

Title: Managing Partner **Date:** June 21, 2024