JEFFERSON PARISH TEC PROFESSIONAL SERVICES QUESTIONNAIRE

Routine Engineering Services for Sewer Projects

submitted to: Jefferson Parish Council

submitted by: WSP USA Inc.

March 25, 2022

Technical Evaluation Committee (TEC) Questionnaire Instructions

- The Technical Evaluation Committee (TEC) Questionnaire shall be used for professional services related to architecture, engineering, or survey projects.
- **The TEC Questionnaire should be completely filled out. Complete and attach ALL sections. Insert "N/A" or "None" if a section does not apply or if there is no information to provide.**
- Questionnaire must be signed by an authorized representative of the Firm. Failure to sign the questionnaire shall result in disqualification of proposer pursuant to J.P. Code of Ordinances Sec. 2-928.
- All subcontractors must be listed in the appropriate section of the Questionnaire. Each subcontractor must provide a complete copy of the TEC Questionnaire, applicable licenses, and any other information required by the advertisement. Failure to provide the subcontractors' complete questionnaire(s), applicable licenses, and any other information required by the advertisement shall result in disqualification of proposer pursuant to J.P. Code of Ordinances Sec. 2-928.
- If additional pages are needed, attach them to the questionnaire and include all applicable information that is required by the questionnaire.

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 22-010 - Routine Engineering Services for Sewer Projects Jefferson Parish Government

B. Firm Name & Address:

WSP USA Inc.
1100 Poydras Street
Suite 1175
New Orleans, LA 70163

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:

Ian Chaney, PE
Supervising Engineer
277 Bendix Rd., Suite 300
Virginia Beach, VA 23452
757-466-9615
Ian.Chaney@wsp.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.

Rebecca Howell, PE
Sr. Lead Water Resources Engineer
301 N. Main Street, Suite 2200
Baton Rouge, LA 70801
225-508-3872
Rebecca.Howell@wsp.com

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

1 Administrative	___ Estimators	___ Specification Writers
___ Architects (Licensed)	___ Geologists	2 Structural Engineers
___ Chemical Engineers	___ Geotechnical Engineers	1 Graduate Engineers
3 Civil Engineers	___ Interior Designers	4 Project Managers
1 Construction Inspectors	___ Landscape Architects	___ Clerical
___ Ecologists	___ Land Surveyor	1 Grant/Funding Specialist
1 Electrical Engineers	1 Mechanical Engineers	2 Sanitary Engineers
2 Engineer Intern	2 Environmental Engineers	
___ Professional Land Surveyors		21 **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.

None

2.

None

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

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

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. None		
2.		
3.		

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

None

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:

Ian Chaney
National Director – Geotechnical & Tunneling
Senior Vice President

Project Assignment:

Principal

Name of Firm with which associated:

WSP USA Inc.

Years' experience with this Firm:

19

Education: Degree(s)/Year/Specialization:

MS, Geotechnical Engineer, Virginia Technical Institute / 2002
BS, Mining Engineering, Virginia Technical Institute / 2001

Active registration: Year first registered/discipline:

Professional Engineer: Louisiana (PE. 0042288) / 2018
Professional Engineer (other states): Virginia, Tennessee, Louisiana, Florida, North Carolina, Kentucky

Other experience and qualifications relevant to the proposed Project:

Ian Chaney is the National Director for Geotechnical & Tunneling for WSP. He is experienced in multi-disciplinary project management and leading geotechnical project efforts. His technical experience includes providing detailed and concept designs for marine facilities, tunnels, bridges and buildings that consider site-specific geotechnical and environmental conditions, as well as the spectrum of multi-disciplinary concerns inherent with large infrastructure construction activities.

IAN J. CHANEY, P.E.

National Director – Geotechnical & Tunneling
Senior Vice President

Years of Experience

20 (19 with WSP)

Education

M.S. Geotechnical Engineering, Virginia Tech, 2002

B.S. Mining Engineering, Virginia Tech, 2001

Professional Registrations

Professional Engineer: Virginia, Tennessee, Louisiana, Florida, North Carolina, Kentucky

Professional Affiliations

American Society of Civil Engineers

Underground Construction Association of SME

Deep Foundations Institute

PROFILE

Ian Chaney is the National Director for Geotechnical & Tunneling for WSP. He is experienced in multi-disciplinary project management and leading geotechnical project efforts. His technical experience includes providing detailed and concept designs for marine facilities, tunnels, bridges, and buildings that consider site-specific geotechnical and environmental conditions, as well as the spectrum of multi-disciplinary concerns inherent with large infrastructure construction activities.

PROFESSIONAL EXPERIENCE

Mid-Barataria Sediment Diversion Project – New Orleans, Louisiana: As part of this CMAR project to design an intake structure and 2-mile long conveyance channel from the Mississippi River, Ian is the lead designer and WSP project manager providing designs for a concrete intake approach. Options considered were floating U-structures, able to be placed 400 feet out into the Mississippi River, cast-in-place concrete structures with sheet pile seepage cutoffs, and a bored tunnel. The U-structure is being advanced and is being constructed on a piled foundation. At completion, the project will accommodate a diverted flow of more than 75,000 cfs of sediment-laden water that will ultimately be deposited and dispersed into the Barataria Bay, enabling marsh creating for future decades.

Gamesa Offshore Wind Turbine, Chesapeake Bay, Virginia: Project Manager responsible for the final design and installation of what would have been the first offshore wind turbine constructed in the United States. Project was cancelled after design completion, and consists of the design and installation of a 5 megawatt wind turbine founded in an offshore environment. Detailed geotechnical and structural analysis were performed by WSP to account for the static loads and dynamic operation of the turbine, coupled with the hydrodynamic loading imparted by waves and currents. An extensive offshore geotechnical engineering investigation utilizing CPTs, soil borings and laboratory testing was implemented to define subsurface conditions, critical for determining lateral soil spring values and for analyzing pile drivability.

Virginia Port Authority – North Wharf Extension, Norfolk, Virginia: geotechnical engineer responsible for the geotechnical design of sheet pile bulkheads consisting of both cantilever sections and anchored sections. In addition, Ian provided recommendations for ground improvement behind the bulkhead consisting of deep vibro-compaction of soils and staged construction and was responsible for the testing and evaluation of the vibro-compaction operations.

Puerto Bolivar Due Diligence Study, Ecuador: Geotechnical Engineer responsible for the due diligence review of all geotechnical design and construction aspects of the project that included a 450m wharf expansion, rock bund and land reclamation, ground improvements, and dredging.

Hampton Roads Bridge-Tunnel Expansion, Norfolk, Virginia: Engineering Manager for this $4B marine bridge and tunnel expansion project that consists of two new bored tunnels under the Hampton Roads shipping channel, artificial island expansion, access dredging, 4 miles of new bridge trestles and 4 miles of highway widening on land. On behalf of the owner, VDOT, Ian is responsible for all marine design and construction for this project that encompasses tunnels, island expansion, scour protection, Navy coordination and permitting. The project also includes two major excavations at the manmade islands – each over 50' deep and underwater, that are to be dewatered for launching and receiving the Tunnel Boring Machine.

Dominion Energy VOWTAP Offshore Wind Turbines: Provided engineer-of-record geotechnical services to Orsted for two, 6 MW offshore wind turbines to be constructed 30 miles off the Virginia Beach coast line. Ian was responsible for the foundation design of the offshore monopile foundations, scour design and constructability aspects of the projects.

Midtown Tunnel – Martin Luther King Expressway Project, Norfolk and Portsmouth, Virginia: on this long-term, $2.1B Mega-Project, Ian's duties started as the geotechnical design manager and finished with being the on-site Project Manager during construction. As the on-site Design Manager During Construction, Ian was responsible for daily management of design services during construction, claim mitigation and negotiation, and financial decisions regarding design work.

As geotechnical design manager for this immersed tunnel project that parallels an existing immersed tunnel, Ian was responsible for the management of all geotechnical, underground and marine aspects of the design and the coordination of the these works between the civil, geotechnical and structural disciplines. Work consisted of dredging and foundation preparation for the immersed tubes, immersed tube design, island reclamation, buoyancy and transportation, as well as the design of the support-of-excavation system that included over 4,000 lf of in-water sheet piling, some of which utilized tiebacks and underwater struts, and that included two 50-foot deep dewatered excavations for the tunnel approaches. The scope also required the remediation of the Portsmouth Marine Terminal, which the tunnel passes through. The port facility was returned with a 750-psf live-load allowance, with no reduction in service due to the newly constructed tunnel.

UK Round 3 Offshore Wind Farm Study, Southern North Sea, UK: Ian provided review services for the design basis document and concept-level turbine support foundation details. The study investigated various foundation types (monopile, jacket and gravity base) for numerous turbine sizes.

Kwajalein Wind Project, Marshall Islands: for this pilot project on a remote Pacific Ocean Island, Ian prepared conceptual foundation designs for nearshore, 6-megawatt, 115-meter diameter wind turbines founded on a coral reef. Due to the remote nature of the project, conventional offshore construction methods could not be implemented. Therefore, more conventional, drilled foundation elements and tiedowns to "tune" the dynamic stiffness of the structure was utilized.

Brooklyn Navy Yard, Brooklyn, New York: geotechnical engineer responsible for the development and design for all aspects of a Confined Disposal Facility and the protection of an on-site sewer outfall, including design recommendations, construction specifications, and construction drawings. The sewer outfall, which would be affected and destroyed by the construction of the CDF, was designed to be protected by the placement of an A-frame tieback retaining wall or by a bridged structure in which the loads that would be imposed by the placement of dredge fill were transferred to the A-frame structure, anchored into the underlying bedrock. The CDF was optimized using staged surcharge programs that would ultimately allow for land reclamation for useable land space.

Chesapeake Bay Bridge-Tunnel – Parallel Thimble Shoals Tunnel Pursuit, Virginia Beach, Virginia: As pursuit manager, Ian was responsible for preliminary designs of both an immersed tunnel option and a bored tunnel option, including manmade island extensions, ground improvement, and protection of the existing tunnels and islands, built in the Chesapeake Bay on a subsurface consisting of up to 80 feet of soft compressible clays.

Enighed Pond Backland Improvement, St. John, US Virgin Islands: geotechnical engineer responsible for the design of a ground improvement scheme to make a 5-acre parcel land consisting of dredge spoils usable for port operations. Ground improvement

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Max Nassar Vice President Senior Managing Director, Local Business Leader
Project Assignment:
Officer in Charge
Name of Firm with which associated:
WSP USA Inc.
Years' experience with this Firm:
4
Education: Degree(s)/Year/Specialization:
BA, Psychology Louisiana State University / 1976
Active registration: Year first registered/discipline:
None
Other experience and qualifications relevant to the proposed Project:
Max is a Louisiana native who has spent 30 years in executive level positions in Fortune 500 Companies in both the Manufacturing/Industrial Sector and AE Consulting Services Sector. Over the past 25 years, he has overseen a multiplicity of infrastructure projects in the Southeast United States and in Central America and with a value in the billions. Many of these projects have been FEMA Federal Aid Funded in Louisiana and have been performed for a variety of public and private clients. Max possesses demonstrated experience in NEPA Project Leadership, Government and Stakeholder Relations, Program Management, Project Management, Program and Project Development, and Construction Management and Inspection services related to major infrastructure and facilities projects which include roadway, highway and bridge infrastructure, drainage and utilities infrastructure, railways and transit ways, airport facilities, and various waterfront infrastructure and facilities.

MAX NASSAR

Vice President
Senior Managing Director, Local Business Leader

Years with the firm

4

Years total

42

Education

BA, Psychology Louisiana State University, 1976

Additional Training
Post-graduate studies in: Business, Finance, Labor Relations, and Industrial Operations, Tulane and Loyola Universities, New Orleans, LA

CAREER SUMMARY

Max is a Louisiana native who has spent 30 years in executive level positions in Fortune 500 Companies in both the Manufacturing/Industrial Sector and AE Consulting Services Sector. Over the past 25 years, he has overseen a multiplicity of infrastructure projects in the Southeast United States and in Central America and with a value in the billions. Many of these projects have been FEMA Federal Aid Funded in Louisiana and have been performed for a variety of public and private clients.

Max possesses demonstrated experience in NEPA Project Leadership, Government and Stakeholder Relations, Program Management, Project Management, Program and Project Development, and Construction Management and Inspection services related to major infrastructure and facilities projects which include roadway, highway and bridge infrastructure, drainage and utilities infrastructure, railways and transit ways, airport facilities, and various waterfront infrastructure and facilities.

RELEVANT PROJECT EXPERIENCE

- **Bonnabel Boulevard Roadway Improvements (Metairie Rd. to I-10), Jefferson, L, Project Principal**. The project, which is a Federal Aid program with joint FHWA and Jefferson Parish funding, will provide a 3" mill and overlay of the roadway surface, full depth concrete patching and curb replacement. The project required coordination Jefferson Parish and LADOTD engineering staff, the creation of preliminary drawings per LADOTD standards, establishment of a proposed profile to aide surface drainage and the creation proposed cross sections. The Project also included a Phase I Noise Mitigation Investigation at the Interstate 10 Overpass. The design work was performed with Inroads SS2. Design guidelines followed included Jefferson Parish, LADOTD and AASHTO. Client: Jefferson Parish. Dates: September 2020 – Present.

- **Pontchartrain Levee District; Cross Bayou Pump Station Inspection and Assessment**. Project Principal. The Cross Bayou Pump Station is owned ty the Pontchartrain Levee District. The District desires to transfer the Station to ownership of St. Charles Parish. Prior to the transfer the station will undergo an in-depth inspection and assessment of the infrastructure. The Project Team will review O & M experience, develop a Rough Order Repair Estimate, and develop a Scope of Services and Plan for refurbishment of the Statement. A partial listing of the systems included are Diesel Pump Drives, Fuel Transfer and Storage Tanks, Power Take Off and Gear Reducer, Main Pumps, Auxiliary Pumps, Standby Generator, Trolley System, Automated Bar Screen and Telemetry and Controls

- **Louisiana Department of Transportation and Development. IDIQ Contract for Electrical and Mechanical Engineering Services** – Project Principal for this Task Order based engineering services contract which supports efforts on mechanical and electrical services related to roadways, pump stations and other mechanical and electrical needs. June 2017 to present

  - ✓ Task Order 1: State Project No. H.010439: Boyd Street & 21ST Street Pump Station Improvements
  - ✓ Task Order 2: State Project No. H.010439.5: Boyd Street & 21St St Pumping Station Improvements I-110
  - ✓ Task Order 3: State Project No. H.010565 Acadian St. Pumping Station Improvements
  - ✓ Task Order 4: State Project No. H.010565.5 Acadian Street Pumping Station

- ✓ Task Order 5: State Project No. H.972249.1 Generator Site Investigation and Load Study for Airline Drive Pump Station and LADOTD Maintenance Facility and Construction Docs for Airline Drive Pump Station
- ✓ Task Order 6: State Project No. H.010253: Bluebonnet Blvd Pump Station Improvements LA 1248
- ✓ Task Order 7: State Project No. H.010251: Chippewa St Pumping Station Improvements US61/190

— **LADOTD Contract FOR 5 Movable Bridges, Vermillion, St. Martin, Assumption, and Cameron Parishes:** Project Principal. WSP USA was selected by the Louisiana Department of Transportation and Development to both inspect and to develop a rehabilitation or replacement plan for 5 movable bridges located in various Parishes across Louisiana. As part of the project scope, WSP will perform site inspections and an LRFR Load Rating and/or NBIS In-Depth inspection on the 5 bridges. The load rating shall be based on the current condition, capacity, and loading of the bridge structure, and shall be performed on all load carrying members including approach spans and movable spans. The development of preliminary and final plans as well as all construction related engineering services are also included in the assignment. As a part of the Construction Plan Set, WSP will prepare and submit a Transportation Management Plan. Many bridges in Louisiana have been designated "Historic" in the Section 106 document "Programmatic Agreement Regarding Management of Historic Bridges in Louisiana".

— **St. Bernard Group A, New Orleans, Louisiana: Roadway reconstruction, roadway repairs, sidewalk repairs, and handicap ramp replacement for forty-five blocks within the City of New Orleans, Project Principal**. The project was FEMA Federal Aid funded and provided Engineering Services from initial project meetings with the New Orleans Department of Public works Sewerage and Water Board, design, preparation of construction documents to bidding. Client: City of New Orleans Department of Public Works. Dates: December 2016 – June 2018.

— **St. Bernard Group A, New Orleans, Louisiana Waterline replacement for forty-five blocks within the City of New Orleans, Project Principal**. The project was FEMA Federal Aid funded and provided Engineering Services from initial project meetings with the New Orleans Department of Public works Sewerage and Water Board, design, preparation of construction documents to bidding. Client: City of New Orleans Department of Public Works. Dates: December 2016 – June 2018.

— **Ormond Boulevard Pavement and Rehabilitation, St. Charles Parish, Louisiana, Project Officer.** The project, which was a Federal aid program with joint FHWA and St. Charles Parish funding consisted of concrete roadway patching and a 2-mile asphalt mill and overlay of Ormond Boulevard. Client: St. Charles Parish Department of Public Works and Wastewater. Dates: November 2016 - December 2017.

— **LADOTD Emergency Repairs New Orleans Signals, Project Principal.** In the aftermath of Hurricane Katrina the Louisiana DOTD immediately undertook an emergency effort to restore Traffic Control Systems on the Federally Funded System in multiple parishes within the Greater New Orleans region, for a total project cost of $6 Million. Funded by FHWA Emergency Relief Grant Funds, the project consisted of condition assessment, preliminary and final design, financial management and budget controls, contruction engineering and inspection, and program management.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Rebecca D. Howell, PE Sr. Lead Water Resources Engineer
Project Assignment:
Project Manager / Professional in Charge
Name of Firm with which associated:
WSP USA Inc.
Years' experience with this Firm:
<1
Education: Degree(s)/Year/Specialization:
BS, Civil Engineering, Louisiana State University / 2012 BS, Atmospheric Science, University of Louisiana at Monroe / 2010
Active registration: Year first registered/discipline:
Professional Engineer: Louisiana (PE.0042559)
Other experience and qualifications relevant to the proposed Project:
Rebecca is a civil engineer with consulting experience in engineering, design, project management. She is committed to providing quality service to stakeholders in the private and public sector for the design, management, bidding/contracting and construction administration for a broad range of civil engineering projects. Rebecca's project experience includes sanitary and storm water collection systems, sanitary sewer lift station and force main design, drainage impact analysis, HEC-RAS modeling (1D and 2D), water distribution system design, off-system bridge replacements, subdivision, and commercial site design.

REBECCA DAVEZAC HOWELL, PE

Sr. Lead Water Resources Engineer

Years with the firm

<1

Years total

10

Education

Louisiana State University, BS in Civil Engineering, 2012

University of Louisiana at Monroe, BS in Atmospheric Science, 2010

Professional Registrations

Professional Engineer: LA PE.0042559

Professional Certifications

Advanced Benefit Cost Analysis Training, National Emergency Planning and Training Association, 2019

Traffic Control Technician, LA Specific, exp. 2023

Traffic Control Supervisor, LA Specific, exp. 2023

CAREER SUMMARY

Rebecca is a civil engineer with consulting experience in engineering, design, project management. She is committed to providing quality service to stakeholders in the private and public sector for the design, management, bidding/contracting and construction administration for a broad range of civil engineering projects. Rebecca's project experience includes sanitary and storm water collection systems, sanitary sewer lift station and force main design, drainage impact analysis, HEC-RAS modeling (1D and 2D), water distribution system design, off-system bridge replacements, subdivision, and commercial site design.

RELEVANT EXPERIENCE

- **Oxidation Pond Hwy 3127, Hahnville, Louisiana**: Project Manager. St. Charles Parish contracted WSP for professional services to perform a feasibility study and analysis for an oxidation pond in Hahnville, LA. The Parish desires additional wastewater capacity to accommodate future residential growth. WSP is conducting a planning-level study to evaluate available data and establish a basis-of-design concept for a new 2 MGD lagoon-type wastewater treatment system (oxidation pond) to discharge into a natural wetland for wetland assimilation. The proposed facility includes: Two-cell (minimum) lagoon, Aeration system, Circulation pumps, Pond dike, Headworks that include mechanical trash rake/bar screening, Emergency relief structure, including emergency disinfection, Open-Channel UV disinfection, Provision for standby power, Utility building to house electrical service for misc. storage. Upon completion of the study, the project is anticipated to move into the design phase.

- **Barringer Foreman Sanity Sewer Improvements, Baton Rouge, Louisiana**: project manager and design engineer for the Barringer Foreman commercial development sanitary sewer improvements. The project included decommissioning the existing wastewater treatment plant, design and installation of 900-linear-foot force main to tie into public gravity sewer system and pump upgrades to the existing on-site lift station.

- **BREC Greenwood Park and Baton Rouge Zoo Master Plan Phase 1, Baker, Louisiana**: project manager/project engineer developed a master plan for infrastructure improvements to the existing Baton Rouge Zoo that were required for re-accreditation. Rebecca led a team of engineers in the design of infrastructure improvements including the following: upgrades to existing water distribution system which includes the addition of 12,000 linear feet of new water main (potable and fire protection), 7,200 linear feet of new gas main, and 700 linear feet of gravity sewer, along with 6,300 linear feet of subsurface drainage system which conveys stormwater from the exhibits to an onsite stormwater pond and treatment system that includes a 1,000-gallons-per-minute pump and ultraviolet disinfection system to treat the exhibit influent prior to discharging into a nearby lateral.

- **Cypress at Gardere Gravity Sewer Extension, Baton Rouge, Louisiana**: project manager and design engineer for the gravity sewer extension to tie the proposed Cypress at Gardere Senior Living Facility to the public sanitary sewer system. The project included design of 1,000 linear feet of gravity sewer, including a jack and bore across Gardere Lane (State Highway) to tie into an existing East Baton Rouge City-Parish manhole.

- **Harveston District Pump Station and Force Main, Baton Rouge, Louisiana**: project engineer led a team of engineers in the design of the first residential and commercial phases of the pump stations and force main. The firm provided master sewer planning for a private development which included three pump stations and a mani-folding force main.

The developments include two subdivisions and one multi-use development, which will discharge effluent into a wetland assimilation plant with a bypass connection to the East Baton Rouge City-Parish sewer system.

— **Harveston District Pump Station and Force Main Phase 1, Baton Rouge, Louisiana**: project engineer led a team of engineers in the design of the first residential and commercial phases of the pump stations and force main. The firm provided the design for Phase 1 residential development of the Harveston District Subdivision. Ms. Howell led the team in the design of the 600 gpm sanitary sewer duplex lift station and 16,000 LF of forcemain, ranging in sizes from 8" to 16". The force main system discharges into an onsite wastewater treatment/wetland assimilation plant and included a bypass connection to an existing 30" public sanitary sewer forcemain. This project included a jack and bore of a 16" forcemain under a state highway. The lift station was designed to meet initial and future/full-buildout wastewater conditions of the development.

— **Isle de Jean Charles Resettlement Project – Phase III, Louisiana Office of Community Development – Disaster Recovery Unit, Isle de Jean Charles, Louisiana:** project engineer led a team of engineers in the design of a 64-lot subdivision which included 2 miles of concrete roadway with a combination of open ditch and subsurface roadside drainage, 7,700 linear feet of gravity sewer, two sanitary sewer lift stations and 2.5 miles of sanitary sewer force main, three recreational ponds and one dry detention pond. The project, funded through United States Department of Housing and Urban Development, awarded the Louisiana's Office of Community Development – Disaster Recovery Unit $48 million, involved the master planning of a new development to accommodate voluntary resettlement of an island community in response to significant environmental degradation from ongoing coastal land loss, subsidence, and sea level rise.

— **Meadowview Subdivision Pump Station and Flanacher Road Force Main, Zachary, Louisiana**: engineer intern/design engineer for the Meadowview Pump Station which included 2,700 linear feet of 6-inch and 18-inch force main and a 345-gallon-per-minute lift station to serve the Meadowview Subdivision and connect to Zachary's existing city/parish sewer. Tasks included design, estimating costs, compiling final plans and specifications, obtaining Department of Health and Hospitals documents, and coordinating with the client and sub-contractor.

— **Longfarm Regional Gravity Sewer Extension, Baton Rouge, Louisiana**: engineer intern/design engineer for the Longfarm Regional Gravity Sewer Extension which included 4,480 linear feet of gravity sewer extension, to tie into the existing gravity sewer system along Airline Highway in Baton Rouge. Tasks included design, estimating costs, compiling final plans and specifications, obtaining Louisiana Department of Transportation and Development and Department of Health and Hospitals documents, and coordinating with the client and sub-contractor.

— **Rollins Road Regional Pump Station, Zachary, Louisiana**: engineer intern/design engineer for the Rollins Road Pump Station which included 2,000 linear feet of gravity sewer, 4,500 linear feet of force main and a 1,000-gallon-per-minute lift station. Tasks included design, estimating costs, compiling final plans and specifications, obtaining Louisiana Department of Transportation and Development and Department of Health and Hospitals permits, and coordinating with the client and sub-contractor.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Walter Mahoney Environmental Engineer
Project Assignment:
Environmental Engineer
Name of Firm with which associated:
WSP USA Inc.
Years' experience with this Firm:
14
Education: Degree(s)/Year/Specialization:
AS, Civil Engineering Technology, Fayetteville Technical Community College / 2018
Active registration: Year first registered/discipline:
Grade 6 Municipal and Industrial Wastewater Treatment Plant Operator (MA) Certified Collection System Operator (MA) Certified Wastewater Laboratory Analyst (MA)
Other experience and qualifications relevant to the proposed Project:
Walter has experience in the technical and regulatory aspects wastewater infrastructure, including wastewater treatment plant and collection system design, construction, and operation and maintenance. Walter's design background allows him to fully understand all technical aspects of major construction and rehabilitation projects. His background includes plant design, operations, and inspection, as well as operations staff training, preparation of O&M manuals, wastewater treatment system analysis, design and implementation of pilot-scale treatment studies, and industrial process water recovery and reuse. Mr. Mahoney effectively coordinates the O&M of wastewater collection and treatment plant systems, drawing upon extensive experience in the design, installation, and maintenance of electrical, mechanical, and instrumentation systems. Additional recent experience includes, pump station design, water storage and distribution design, construction inspection, preparation of O&M manuals, emergency management planning, and Resident Engineer. He is a licensed municipal and industrial wastewater treatment plant operator.

WALTER MAHONEY

Environmental Engineer

Years with the firm

14

Years total

30

Education

AS, Civil Engineering Technology, Fayetteville Technical Community College, 2018

Professional Registrations

Grade 6 Municipal and Industrial Wastewater Treatment Plant Operator (MA)

Certified Collection system Operator (MA)

Certified Wastewater Laboratory Analyst (MA)

OSHA 40 Hour Hazardous Waste Operators Health and Safety Training

Professional Certifications

Water Environment Federation

New England Water Environment Association
Massachusetts Water Pollution Control Association

CAREER SUMMARY

Walter has experience in the technical and regulatory aspects wastewater infrastructure, including wastewater treatment plant and collection system design, construction, and operation and maintenance. Walter's design background allows him to fully understand all technical aspects of major construction and rehabilitation projects. His background includes plant design, operations, and inspection, as well as operations staff training, preparation of O&M manuals, wastewater treatment system analysis, design and implementation of pilot-scale treatment studies, and industrial process water recovery and reuse. Mr. Mahoney effectively coordinates the O&M of wastewater collection and treatment plant systems, drawing upon extensive experience in the design, installation, and maintenance of electrical, mechanical, and instrumentation systems. Additional recent experience includes, pump station design, water storage and distribution design, construction inspection, preparation of O&M manuals, emergency management planning, and Resident Engineer. He is a licensed municipal and industrial wastewater treatment plant operator.

RELEVANT EXPERIENCE

- **2021 Carmondy Torrance Sandak & Hennessey LLP Environmental Technical Support, Seymour, Connecticut:** responsible for the process and performance evaluation of an industrial wastewater pretreatment system that was designed to remove copper and aluminum by flocculation-coagulation followed by plate and frame press. WSP provided technical investigation of an industrial wastewater pretreatment system operated by a manufacturer of wire and cable products. This investigation is in support of ongoing litigation between the manufacturer and the Connecticut Department of Energy and Environmental Protection. Wastewater from the manufacturing process contains concentrations of the metal elements cadmium, copper, lead and zinc. This wastewater is treated by precipitation, pH correction and flocculation in batches of up to 4,900 gallons each prior to discharge to the municipal sanitary sewer. Average daily flow is approximately 4,200 gallons. WSP provided a detailed analysis of the pretreatment process including removal efficacy and operational procedures.

- **National Parks Service 2021 Architectural/Engineering Indefinite Delivery/Indefinite Quantity, Nationwide:** design engineer responsible for raw waster pumping and conveyance systems. The design included ultraviolet disinfection for the inactivation of Quagga Mussel larvae as well as pump barges and anchoring systems. WSP was responsible for water treatment and distribution, wastewater treatment and conveyance improvements, and new facilities for a number of National Parks across the United States. Water projects involved small (less than one million gallons per day) groundwater systems. Wastewater projects included gravity sewer replacement/rehabilitation and design of onsite treatment and disposal systems.

- **Naval Facilities Engineering Systems Command On-Call, Bremerton, Washington:** project engineer responsible for the vulnerability analysis of Whidbey Island Naval Air Station water distribution system. Walter provided a report on findings including recommendations for security and resiliency improvements. WSP is providing engineering services to the Naval Facilities Engineering Systems Command for various projects.

- **Downtown Seattle Transit Tunnel General Engineering Consulting Services, Seattle, Washington:** project engineer responsible for condition assessment of transit tunnel storm

and sanitary pump stations. WSP was selected to lead the Downtown Seattle Transit Tunnel General Engineering Consulting Services project focused on program development, management, and delivery of the state of good repair program for the Downtown Seattle Transit Tunnel facility. This contract will work to retrofit the existing tunnel through downtown Seattle (originally designed by WSP in the 90s). The project has two phases. Phase 1 will focus on developing the state of good repair and capital improvement program within the tunnel, and Phase 2 will deliver the program's projects on a task order by task order basis.

- **Biohabitats 2020 Duck Pond Restoration, Bergen County, New Jersey:** responsible for the design of a 1,000 gallons per minute pump system to convey makeup water from a creek to a recreational and aesthetic pond. The design includes intake structure, screening, self priming centrifugal pump system, electrical and electronic controls, and site/civil. WSP is responsible for regrading the existing drainage channel to create micro topographies that will promote variability in soil and saturation conditions consistent with freshwater wetland systems while also aiding in the treatment of storm water runoff. WSP will also remove invasive plant species and plant native vegetation within the re-graded drainage channel and along the edge of the pond as fringe wetland systems, upgrade the existing pumping system with a new at-grade pump to improve pumping capabilities to the pond, and repair the pond liner within the manmade pond to provide stability to water surface elevations within the pond.

- **New Jersey Department of Environmental Protection Superfund (EPA Region 2), Sediment and Remediation Projects, New Jersey:** design engineer for a variety of Superfund site remediation related projects including landfill leachate pumping, landfill leachate pretreatment, landfill gas recovery and destruction by gas flare and thermal oxidation, groundwater pumping; a significant role in the design of electronic control and SCADA systems for these facilities. Walter's work also included explosive gas concentration monitoring for structures where flowing leachate was evolving methane and hydrogen sulfide. He designed a custom electro-optical precipitation monitoring device to automatically disable leachate pumping during intervals of high stormwater infiltration. Walter also modified existing SCADA RTU equipment using loop current splitters. On behalf of the New Jersey Department of Environmental Protection, WSP has managed more than 150 environmental investigation and remediation sites since 1998 throughout the state of New Jersey as a part of the three consecutive task order contracts awarded for these services. Work is performed under the terms of three ongoing indefinite quantity contracts that require rapid mobilization and local resources sufficient to handle multiple concurrent and complex projects.

- **A.T. Cross, Industrial Wastewater Treatment, Lincoln, Rhode Island**: managed a treatability study and design effort for an on-site destruction of cyanide/heavy metal complexes in support of a plating facility decommissioning. System included chemical destruction of cyanide and solids removal by flocculation and filter press.

- **City of Newport, Dam Inspection and Repair, Rhode Island**: emergency repair of earthen municipal water supply impoundment. Geotechnical investigation effort and design of permanent repairs.

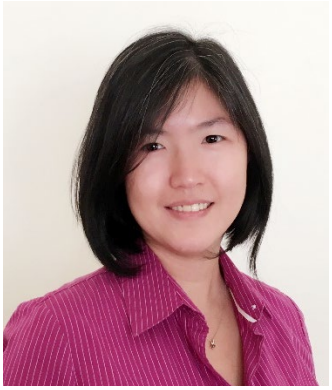
- **City of Newport, Ultraviolet Light Disinfection System, Rhode Island**: installed and operated a three-million gallon per day ultraviolet (UV) disinfection system; with an online UV transmittance feedback control to power lamp intensities and providing three-log inactivation of enterococci. The system was used to develop dose-response curves related to the disinfection of storm water runoff that causes frequent beach closures.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Yudu (Sonia) Wu, PE, LEED AP BD+C, PMP Lead Water Resources Engineer
Project Assignment:
Water Resources Engineer
Name of Firm with which associated:
WSP USA Inc.
Years' experience with this Firm:
5
Education: Degree(s)/Year/Specialization:
MS, Geography and Environmental Engineering, Johns Hopkins University / 2007 BS, Environmental Science, Sun Yat-Sen University / 2006
Active registration: Year first registered/discipline:
Professional Engineer: Maryland, 2015 (46963), California, 2011 (78697)
Other experience and qualifications relevant to the proposed Project:
Sonia is a Lead Water Resource Engineer in with various experiences in water and wastewater engineering, stormwater management, drainage, stream restoration, floodplain, site development and asset management. She has comprehensive knowledge of the principles and practices of design and project management in water resource engineering She leads the team and manages design projects such as drainage design, BMP retrofit, stormwater management, water reuse, stream restoration, floodplain studies, water & wastewater utilities replacement and construction, and upgrading of treatment plants & pumping stations; or management projects intending to deliver organizational or program benefits and improvements. She works on both design bid build and design build projects.

YUDU (SONIA) WU, P.E., LEED AP BD+C, PMP

Lead Water Resources Engineer



Years with the firm

5

Years total

15

Professional qualifications

Professional Engineer: Maryland, 2015 (46963), California, 2011 (78697)

Areas of practice

Drainage, Storm Water Management, Stream Restoration, Floodplain, Water, Wastewater & Site Development

Languages

English

CAREER SUMMARY

Yudu Wu is a Lead Water Resource Engineer in with various experiences in water and wastewater engineering, stormwater management, drainage, stream restoration, floodplain, site development and asset management. She has comprehensive knowledge of the principles and practices of design and project management in water resource engineering She leads the team and manages design projects such as drainage design, BMP retrofit, stormwater management, water reuse, stream restoration, floodplain studies, water & wastewater utilities replacement and construction, and upgrading of treatment plants & pumping stations; or management projects intending to deliver organizational or program benefits and improvements. She works on both design bid build and design build projects.

EDUCATION

M.S., Geography and Environmental Engineering, Johns Hopkins University, Baltimore, MD	2007
B.S., Environmental Science, Sun Yat-Sen University	2006

ADDITIONAL TRAINING

Project Management Professional (1826714)	2015

PROFESSIONAL EXPERIENCE

Water & Wastewater

BOA Contract No. PM0010A13(OY) , WSSC, Laurel, Maryland. Project Manager managing multiple design projects of 3 mile water main and 13 meter vault replacement/relocation with tight project schedule, bringing various projects from different design stages to bid ready submittal. Coordinated and held meeting with client's task managers regarding schedule, project progress, permitting and comments, providing monthly status report; Identified and streamlined permit and easement process on critical path of design scheduling, actively coordinating with permit agencies and client land survey section to assure application approvals; Oversaw sub-consultants on surveying, geo-tech and cost estimate tasks; Provided technical support to the design team to ensure deliverable meeting project milestones; Performed QAQC and communicating with design team and sub-consultants to enforce deliverable quality.

- Task 1 - Kerby Hills Water Main Replacement Project, including 4,500 LF of 8" water main same trench replacement design in Prince George's County.
- Task 2 - Darlene Drive Water Main Replacement Project, including 9,750 LF of 8" - 12" water main same trench replacement and relocation design in Prince George's County.
- Task 3 - Three Large Meter Vault Replacement Project, including 1 meter vault retrofit and 2 meter vault replacements in Montgomery County.
- Task 4 - Fiver Large Meter Vault Replacement Project, including 2 meter vault retrofit and 3 meter vault relocations in Montgomery County.
- Task 5 - Five Large Meter Vault Replacement Project, including 1 meter vault retrofit and 4 meter vault relocations in Prince George's County.

Water Main Replacement Water Main Design Work, Atlanta, GA. Lead water resource engineer providing technical support for watershed management program with City of Atlanta (COA) for projects involving various water main replacements and relocation design work at sites located across the entire City of Atlanta and beyond the city limits. Multiple projects including roadway design, improvement/widening, bridge replacement, interstate roadway design built from various clients (Georgia Department of Transportation GDOT, City of Sandy Springs, City of South Fulton). Perform investigations, conduct studies, engineering reviews and prepare construction contract documents including all calculations and other supporting documentation. Attending coordination meetings with GDOT, COA and other utility agencies to research existing and planned utilities, identify potential conflicts, and coordinate with design teams to eliminate or resolve potential conflicts.

- **Uniformed Services University of the Health Sciences(USUHS), NAVFAC, Bethesda, Maryland:** Water resource engineer supporting the Civil team in designing existing water main & wastewater pipe (WSSC owned) relocation due to the proposed USUHS facility. Utilizing AutoCAD Civil 3D Pressure Pipe Network & Pipe Network to set up existing and proposed utility system. Providing calculations in support of design.
- **Naval Health Clinic at Naval Air Station, NAVFAC, Patuxent River, Maryland:** Water resource engineer supporting the Civil team in designing existing water main & wastewater pipe (WSSC owned) relocation due to the proposed facility. Providing calculations in support of design.
- **Water Transmission Main Relocations at Hawkins Point Road and Forest Park Avenue Bridges, Baltimore DOT/DPW, Maryland:** Design the replacement of existing 24"& 30" transmission main with 30" DIP within Hawkins Point Road, including 160 ft of 30" water main within 48" steel casing pipe mounted on a separate structure supported by the bridge. Responsible for engineering study, utility and record drawings research, engineering design,
- **Water & Sewer Relocation BOA for Various Locations in Montgomery County, WSSC, Maryland:** Relocation of 130 ft of 10" water main to accommodate the reconstruction of Park Valley Road Bridge over Sligo Creek; Design of 3 mile Water Main Replacement/Relocation at Glen Mill Road Vicinity; Design for the sample pump, sample pipe routing and installation of a new, on-line turbidmeter at Potomac Water Filtration Plant. Responsible for engineering study, utility and record drawings research, engineering design, permit application.
- **Clinton Street Sewage System Improvements (SC930), Baltimore DPW, Maryland:** Design of replacing the existing 3"- 4" PVC force mains and grinder pumps with 360 GPM Pump Station, 900 ft of 6" DI force mains and 1,500 ft of 8" PVC gravity sewer (400ft of 8" PVC using bore-jack method). The construction value is 6M. Responsible for construction plan, specification and cost estimate. Coordinated/corresponded with other agencies to resolve design conflicts and constructability issues.
- **Study for Manhole and Sewer Segments Rehabilitation site at Northwest Branch Environmentally Sensitive Area, WSSC, Maryland:** Coordinated manhole inspections and identified access routes for rehabilitation design. Used system approach to identify manhole defect problems and created decision tree for manhole rehabilitation method.

Additional Technical Staff

DAVID LODUCA, PH.D., PE, LEED AP

Professional Associate, Certified Project Manager
Supervising Electrical Engineer

Years with the firm

12

Years total

40

Professional qualifications

Professional Engineer: Virginia, 1990 (20603); California, 1998 (E15878); Florida, 1993 (46453); Georgia, 1994 (21119); Illinois, 1998 (062-52552); Indiana, 2007 (10707946); Iowa, 2007 (18296); Kansas, 2007 (19295); Louisiana, 1998 (28117); Maryland, 2002 (28484); Michigan, 2007 (54375); Missouri, 1998 (29899); Nebraska, 2006 (11700); New Jersey, 2000 (GE 42700); North Carolina, 1993 (18870); Ohio, 1993 (E56698); South Carolina, 1994 (15826); Texas, 2007 (99060), Ontario, 2009 (100152101)

U.S. Green Building Council LEED BD+C Accredited Professional

Record: National Council of Examiners for Engineering and Surveying, 1990 (9600)

CAREER SUMMARY

David (Dave) is a supervising electrical engineer with WSP. He is experienced on projects including industrial facilities, light rail and subway lighting and electrical systems, highway lighting, renewable energy, airport land side facilities, telecommunications facilities, government facilities, campus lighting, educational facilities, transportation maintenance facilities, commercial offices, restaurants, retail stores, and gas stations.

Dave's duties include power distribution and lighting design, grounding, fire detection and alarm, public address, intrusion detection, CCTV, code compliance, and utility coordination. He prepares specifications, construction cost estimates, and calculations such as lighting level, voltage drop, and short-circuit/coordination. He supports construction management and administration by answering RFIs and conducting site surveys, inspections, submittal reviews. Dave's supervisory duties include plan-checking, design reviews, scheduling and staging personnel, and ordinary supervisory tasks for an electrical design group.

EDUCATION

Ph.D., Engineering Management, Missouri University for Science and Technology, 2011;	1965
M.S., Engineering Management, University of Missouri – Rolla	2005
B.S., Electrical Engineering, Virginia Military Institute	1981
A.A.S., summa cum laude, Management, Virginia Western Community College	1995

PROFESSIONAL MEMBERSHIPS

Institute of Electrical and Electronic Engineers (IEEE)

Excellence in Missouri Foundation

Missouri Quality Award (MQA)

Senior Member Board of Examiners

American Society of Quality (ASQ), Member

American Society of Engineering Management (ASEM), Member

PROFESSIONAL EXPERIENCE

Louisiana Retainer Contract for Electrical & Mechanical Services, Statewide (Contract No. 4400004763) Task Order 1 and 2 (H.010439) Boyd St & 21st St Pump Station Improvement: Work involved upgrade of three LADOTD freeway pumping stations. Dave designed controls, lighting, and new electrical distribution at each pump station for the replacement of 8 main pumps and 2 stripper pumps. Dave was the project manager and the electrical designer of record.

South Florida Water Management District (SFWMD), Miscellaneous Engineering Services, Boca Raton, Florida: supporting impoundment design for the Central Florida Everglades Acceler8 Restoration Progwram, Site 1 Impoundment, Boca Raton, Florida. The site whose water level is being controlled by the pump station is an approximately 1,800-acre triangle of undeveloped land located adjacent to the Hillsboro Canal in southern Palm Beach County. The purpose of the impoundment project is to provide groundwater recharge, reduce seepage from adjacent natural areas, provide water supply for environmental and urban demands and prevention of saltwater intrusion. The Impoundment functions by capturing excess storm runoff from the Hillsboro Canal urban drainage basined for later release, thus reducing loss of direct runoff to tide. Dave prepared basis of design report for the electrical distribution of the wetland pumping station.

Port of New Orleans Due Diligence Study, New Orleans, Louisiana: lead electrical engineer for a study of the Halter Marine Complex, which sustained damage from Hurricane Katrina. The objective of the study was to determine the feasibility and cost of (1) restoring the facility to pre-Katrina conditions and (2) upgrading the facility to current IBC standards. The study included field observations of electrical distribution equipment, major feeders, and key elements of utilization equipment with an eye for flood damage and disrepair that may have pre-dated Katrina.

Housing Authority of New Orleans – Fischer Housing Revitalization Project, New Orleans, Louisiana: project involves planning and design of a 73-acre (29.5-hectare) neighborhood on the West Bank of New Orleans Parrish for the Housing Authority of New Orleans. This $100 million project involves the demolition of an elderly high rise and three 60-unit apartment buildings at the Fischer Housing Development and the design of a new community that will include 640 dwelling units of family housing ranging in size from two to four bedrooms, a 25,000-square-foot (2,320-square-meter) Community Center, a 2,500-square-foot (230-square-meter) Management Office and miscellaneous support buildings. Dave provided QC review of plans and technical specification documents for the single-family dwelling units.

East Valley Water District, New Administration Campus, Highland, California: designer for new lighting for site street improvements for the widening of Greenspot Road. Project involved ground-up development for a 28,500 SF administration building and 5,900 SF operations building on 24.7 acres of land located on Greenspot Road in the City of Highland, including environmental planning, design engineering, and construction support.

North Main Street Reconstruction; City of Columbia, South Carolina: electrical engineer for lighting on one-half mile reconstructed segment of North Main Street. Work included electrical service and distribution, and lighting and electrical calculations for new roadway/pedestrian light poles, and irrigation system.

CHRISTOPHER J. BARNETT, P.E.

Senior Supervising Engineer

Years with the firm

13

Years total

41

Professional qualifications

Professional Engineer: Massachusetts, 1989 (34328)

Professional Engineer: California, 2011 (M35691)

Professional Engineer: Indiana, 2012 (11200684)

Ontario PEng, 2014 (100207031-01 temp)

Board-Certified Environmental Engineer (Hazardous Waste)

CAREER SUMMARY

Christopher Barnett is a senior project manager skilled in design management and construction contract review for major capital programs. He has provided management and advisory services as a key team member for some of WSP's most noteworthy projects.

EDUCATION

M.S., Technology and Policy, Massachusetts Institute of Technology — 1980

B.S., Mechanical Engineering, Massachusetts Institute of Technology — 1977

ADDITIONAL TRAINING

Hazardous Waste Operations (OSHA 40-hour course and annual 8-hour refreshers)

Nuclear Power Reactor Safety

Power Systems Operation

Utility Rate Making

Six Sigma Quality/Process Improvement (Six Sigma Champion)

PROFESSIONAL MEMBERSHIPS

American Society of Civil Engineers

American Academy of Environmental Engineers

PROFESSIONAL EXPERIENCE

Lower Pogues Run Tunnel, Indianapolis, Indiana: Deputy project manager for advanced facilities plan development for a system of near-surface and deep tunnel structures to address combined-sewer overflows in downtown Indianapolis, as part of a system-wide Long-Term Control Plan and consent decree. Led hydraulic design and preliminary and final design of near-surface conduits, diversion structures and drop shafts across a two-mile section of urban watershed.

Marblehead Force Mains Condition Assessment and Repair, South Essex Sewerage District, Salem, Massachusetts: Principal-in-charge for fast-track evaluation of condition and repair options, design and construction services for two 6,000-foot, 20- to 24-inch diameter submarine pressure mains across an environmentally sensitive harbor and federal navigation channel. Selected option was to replace mains

with twin fused high-density polyethylene (HDPE) pipelines in a dredged trench.

Ridge Road Pump Station, Wichita, Kansas: Project Engineer that managed design review and final MEP design of 75,000 gpm, 33-foot TDH storm-water/flood-control pump station, and provided review services during construction.

Dry Dock Modifications, Norfolk, Virginia: Consultant on ventilation modifications to a large dry dock, being performed in preparation for a complex multi-year vessel overhaul project.

South Coast Rail, Massachusetts Bay Transportation Authority **(MBTA):** Deputy Project Manager, construction, for owner's representative services, providing statutory independent oversight, peer review and advisory services to MBTA for this $2.3 billion extension of the commuter-rail system to New Bedford and Fall River, to include 75 miles of electrified track, with 45 new or upgraded grade crossings, 36 bridges, and upgraded signal and communication systems. Work has included a review of environmental permitting schedule risks and production of monthly and annual reports on the state of the project.

Massachusetts Water Resources Authority, Boston, Massachusetts: Technical Manager, responsible for technical oversight, regulatory support and day-to-day coordination between engineering, construction and procurement organizations for metropolitan water and sewer utility engaged in design and construction of a $6 billion wastewater treatment facilities program. Planned and negotiated contracts for interim and long-term supply of electricity. Coordinated operating divisions and consultant teams for MWRA's Combined-Sewer Overflow (CSO) facilities planning effort, mandated by the U.S. District Court as part of agency's Clean Water Act compliance order. Led successful troubleshooting and start-up of scum fixation system for 300 million-gallon-per-day primary treatment plant, after specialty contractor was unable to meet milestones. Met court-ordered date for stopping discharges of scum to harbor, developed concepts of placing pipelines in lining of raw wastewater conveyance tunnel.

GLENN A. BOTTOMLEY, P.E.

Senior Supervising Engineer

Years with the firm

33

Years total

34

Professional qualifications

Professional Engineer: Virginia, 1992 (23299)

CAREER SUMMARY

Glenn Bottomley has managed hydrology, hydraulics, stormwater management, and infrastructure projects with drainage construction values totaling over $30 million. His diverse experience and qualifications include project management, task leader and design responsibilities for; hydrologic and hydraulic analysis and design with an emphasis in: computer modeling (SWMM, HEC-2), watershed evaluations and alternative studies, urban roadway and highway drainage systems, stormwater management and BMPs, analysis and design of urban storm sewers; subdivision and site development with specific experience in port facilities and light rail; highway and urban roadway design with an emphasis in leading large multi-disciplinary efforts for projects with time-constrained schedules or requiring extensive coordination between multiple stakeholders. In addition, Glenn has experience utilizing the following hydrologic and hydraulic analysis programs on design projects: EPA Storm Water Management Model (SWMM); HEC-2; HYDRAIN; KYPIPES; ROUT; and TR-55.

EDUCATION

B.S., Civil Engineering Technology, Old Dominion University, 1986

PROFESSIONAL MEMBERSHIPS

American Society of Civil Engineers, Virginia Lakes and Watersheds Associations

PROFESSIONAL EXPERIENCE

North Beach Stormwater, Pump Station and Ocean Outfall, Virginia Beach, Virginia: Project Manager for the planning, design, construction documents, and contract administration for this $20 million construction project consisting of: large diameter collection system, 90,000 gallon-per-minute submersible pump station, 2,000 linear feet of large diameter force main ocean outfall, microtunnel evaluation, EPA SWMM computer simulation model, Watershed Evaluation Study, environmental permitting, public utility relocations, architectural design for pump station generator building and landscaping consistent with the oceanfront resort community environment, phased construction and detailed estimates to meet budgetary constraints, and public participation with civic leagues and residents.

Eastern Shore Drive Stormwater Pump Stations and Watershed Evaluation, Virginia Beach, Virginia: Project manager for the study, planning, final design, contract documents, contract administration and construction inspection. The project watershed is at the mouth of the

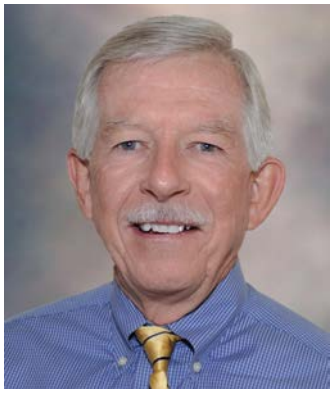
Chesapeake Bay and the Atlantic Ocean and experiences frequent flooding due to moderate rainfall and storm surges from hurricanes and northeasters. Sea level rise and increased precipitation impacts are being evaluated and strategies developed. The project involves the planning, phasing and prioritization for three stormwater pump stations ranging from 45,000 to 80,000 gpm. The largest pump station is a "smart pump station" that uses water level sensors and automated tide gates to protect against storm surges and establishes a long-term strategy for sea level rise and increased precipitation. The smart pump station will pump down water surface elevations in the main watershed tidal canal, connected by two pump stations, to provide storage for the design storm. Remote telemetry control and SCADA will allow pre-emptive gate closures and pump drawdown for predictive forecasting of storms.

HRSD System Metering, Phase IV, Hampton Roads, Virginia: as project manager provided planning, design, and bidding documents and construction services to install 53 flow meters and pressure sensors on large diameter interceptor force mains across seven jurisdictions for the Hampton Roads Sanitation District (HRSD) for their Master Meter Program. The project is critical to meeting the EPA-driven consent order requirements. The meter installations quantify and separate flow contribution for the individual jurisdictions and provide data for the Regional Wet Weather Management Plan and provide information to evaluate the integrity of the system and calibration of the hydraulic model. Maintaining service during meter installation often required pipe replacement and involved evaluation of: shutdowns, pump and haul, line stop and bypass and impacts of construction in urban principal arterials.

South Battlefield Boulevard Sewer Project, Chesapeake, Virginia: Project Manager for providing construction documents and construction inspection and administration services for sanitary sewer service for 280 acres with a $1.8 million construction cost. The project involved 14,500 linear feet of gravity sewer, 29 jack-and-bore crossings, submersible pump station, 1,000 linear feet of 16-inch interceptor force main with a pile supported aerial creek crossing, Health Department approval, property owner coordination, construction administration and Auto CAD plans.

WILLIAM (SID) RIDDICK, JR., P.E.

Senior Water and Wastewater Engineer



Years with the firm

24

Years total

31

Professional qualifications

Professional Engineer: Massachusetts, 1994 (#37937); Vermont, 1992 (#6369)

CAREER SUMMARY

Sid Riddick has designed several raw water intake, pumping, and transmission line projects. The most relevant is the 45 MGD Kings Bluff project completed for the Lower Cape Fear Water and Sewer Authority, which includes a subaqueous intake system, the pump station and 110,000 feet of 48-inch diameter raw water transmission main.

He has also managed and designed other large diameter water line projects, many involving congested urban environments. Many of these large pipeline projects included critical tie-ins and interconnections where careful planning of the construction sequence, definition of measures to control existing flow, and preparation of detailed contract requirements are essential.

Mr. Riddick has 47 years of experience working on numerous large diameter water and wastewater pipeline projects (up to 78-inch diameter). He has managed the planning, design, and construction of numerous complex multi-disciplined projects including water and wastewater (WW) pumping and treatment facilities where coordination of various design disciplines is critical. Mr. Riddick has performed and supervised planning studies for regional utility systems, and detailed alignment studies for large diameter pipelines in urban environments.

EDUCATION

MS, Civil Engineering, North Carolina State University	1969
B.S., Civil Engineering, North Carolina State University,	1965

PROFESSIONAL EXPERIENCE

Lower Cape Fear Water and Sewer Authority: Project Manager on capacity and reliability upgrades to the Raw Water Pump Station. This involved a new wetwell sump and two new 25 MGD raw water vertical turbine pumps with 1,600 Hp variable speed drives. Expansion included connections to the 48" raw water suction line, provisions for a new intake, a new 48-inch discharge header, an expanded surge control system, and new medium voltage motor controls and switchgear. The upgrades will increase capacity to 50 MGD initially, and 90 MGD when a planned parallel raw water main is completed.

City of Morganton, NC: Expanded an existing "run of river" intake on the Catawba River and designed a new 12.0 MGD raw water pump station for the City's water treatment facility. The new raw water pumping station was equipped with two 8,400 GPM vertical turbine pumps. A new parallel 24-inch main extended to the water treatment plant.

Lower Cape Fear Water and Sewer Authority: Lead Design Engineer / Project Manager on 110,000 LF of 48-inch diameter raw water piping from the intake / pump station site at King's Bluff on the Cape Fear River, to delivery points for Brunswick County and City of Wilmington. Phase I included 73,500 feet of 48-inch pre-stressed concrete cylinder pipe terminating in 3.0 MG ground storage tank. The cross country alignment paralleled an existing 30-inch pipe and a CSX railroad, and passed beneath a railroad storage yard at a paper mill. Phase III included a subaqueous crossing of the Cape Fear River.

Newton, 64-Inch West Water Main, Charlotte Mecklenburg Utilities: Project Manager: Planning, design, and construction of the 64-inch west water main. The $20m high service water main extended 22000 feet through neighborhood streets, commercial / business areas, and along major thoroughfares from near the city's airport to uptown charlotte. Planning studies evaluated a number of alternative alignments to minimize impacts to residents, businesses, and traffic. The selected alignment involved construction in the travel lanes of several major thoroughfares; a 1,000-foot long tunnel under an interstate highway; and "open cut" crossings of nc designated routes. Design challenges included a relatively deep installation (10' – 15' cover) to avoid existing utility infrastructure (water, sewer, natural gas, telephone, and fiber optic cables. The project required the preparation of detailed traffic control and work staging plans, and reconstruction plans for impacted multi-lane roadways. The construction documents allowed three materials, ductile iron, pre-stressed concrete, and welded steel incorporating a passive corrosion monitoring / control system.

54-Inch Transmission Main, Phase II, Charlotte Mecklenburg Utilities: Program Manager: The second phase of this project extended along major thoroughfares, beneath a major interstate expressway, and paralleled a Norfolk Southern Railroad line inside the RR right-of-way. Mr. Riddick served as the project manager for the design and construction of this 17,000-foot long PCCP high service transmission main. Design issues involved an 8-lane interstate crossing, railroad coordination, traffic control, and design of the connections to the existing high service pump station at the potable water treatment facility. Over a mile of the alignment was inside a joint City/Norfolk Southern RR easement.

TEC Professional Services Questionnaire

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

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
St. Charles Parish Oxidation Pond Feasibility Study (Hwy 3127), Hahnville, Louisiana Sarah Golz Louisiana Department of Transportation and Development Public Works, Hydraulic Section 225-379-1430 Sarah.Golz@LA.GOV	St. Charles Parish contracted WSP for professional services to perform a feasibility study and analysis for an oxidation pond in Hahnville, LA. The Parish desires additional wastewater capacity to accommodate future residential growth. WSP is conducting a planning-level study to evaluate available data and establish a basis-of-design concept for a new 2 MGD lagoon-type wastewater treatment system (oxidation pond) to discharge into a natural wetland for wetland assimilation. The proposed facility includes: • Two-cell (minimum) lagoon • Aeration system • Circulation pumps • Pond dike • Headworks that include mechanical trash rake/bar screening • Emergency relief structure, including emergency disinfection • Open-Channel UV disinfection • Provision for standby power • Utility building to house electrical service for misc. storage Upon completion of the study, the project is anticipated to move into the design phase.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
6/2022	$192,000	????

PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Bonnabel Boulevard Roadway Improvements (Metairie Rd. to I-10) Jefferson Parish, Jefferson, LA Neil Scheider, PE Jefferson Parish Capital Projects Jefferson, LA 70123 Phone: (504) 736-6833	The Bonnabel Blvd. project is a Federal aid program with joint FHWA and Jefferson Parish founding. The project will involved a 3" mill and overlay of the roadway surface, full depth concrete patching and curb replacement. Work involves coordination with Jefferson Parish and LADOTD engineering staff, creation of preliminary drawings per LADOTD standards, proposed profile to aide surface drainage and creation of proposed cross sections. The design work was performed with Inroads SS2. Design guidelines followed included Jefferson Parish, LADOTD and AASHTO.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
Ongoing	$2,500,000 (Construction)	$207,837 (design)

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility**	
Pump Station No. 9141 and 8-inch Force Main Replacement Miami, Florida Miami Dade County Seaport Department Becky Hope (305) 347-4972	In 2015, PortMiami contracted WSP to provide professional civil engineering design and construction administration services for upgrades to their Master Sanitary Sewage Pump Station No. 9141 and replacement of the existing 8-inch cast iron pipe forcemain with a 10-inch pipe crossing underneath Biscayne Bay. The project also includes a new "dry" force main. The replacement force main and dry force main alignments that will cross the waterway between Dodge Island and the mainland are designed to be south of the Bascule Bridge below the Biscayne Bay Bottom using the Horizontal Directional Drilling (HDD) method of construction. The remaining portions of the replacement force main along Dodge Island and the mainland are designed using a combination of open-cut and trenchless methods of construction.	
Completion Date (Actual or estimated)	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
Ongoing	$3,500,000	$ 700,000

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
MESA IV On-Call Services Contract Sanitary Sewer Rehabilitation, Aurora, CO City of Aurora Water Clint Weisz 720.859-4337	WSP assisted the City in the oversight of 500,000 to 750,000 LF of sewer pipe rehabilitation (250,000 LF/year), in the northwest quarter of the city. This project was for cured-in-place pipe (CIPP) services during construction for rehabilitation of the sanitary sewer system. Construction is ongoing and will continue through the year. WSP provided engineering services in support of the City, reviewing and overseeing materials and installation, field inspection, sampling testing, reviewing change orders, reviewing monthly pay requests, and compliance with American Society for Testing and Materials standards. WSP worked with City staff, providing training and preparing them for continued pipe rehabilitation work within the City. The firm also assisted the City with their annual sewer manhole rehabilitation contract. The firm's work includes evaluation of the existing system, design, preparation of specifications, evaluation of proposed products, prequalification's of bidders, recommendations for contract award and inspection during construction.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
12/2014	$ 30,000,000	$2,500,000

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
Stockade Sewer Separation Atlanta, Georgia City of Atlanta Marcia Hurd-Wade (retired) (404) 838.0780 mwade678@gmail.com	WSP provided preliminary and final design and construction phase services for the new parallel sanitary sewer lines for the Stockade sub-basin. The project involved disconnecting several hundred service connections from the existing combined sewers and reconnecting them to new separate sanitary sewer. The WSP team conducted geotechnical investigations, subsurface utilities engineering, hydrologic and hydraulic studies of existing and converted storm drainage systems to determine their ability to carry 25-year design storm and to identify potential improvements to the systems. The work was primarily within residential areas as well as in utility dense arterial streets, requiring significant public outreach efforts and coordination of right-of-way.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
11/2007	$ 79,600,000	$ 6,000,000

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
Norris Cut Utility Relocation, Miami-Dade County, Florida Miami-Dade Water & Sewer Dept. I. Gary Clarke (786) 268-5174 Phone gycrk@miamidade.gov	In late 2011, MDWASD completed the condition assessment of the existing 54-inch prestressed concrete force main between Miami Beach and the Central District Wastewater Treatment Plant (CDWWTP) and identified several sections of pipeline in highly distressed condition and in danger of rupturing and causing a sewage spill. WSP provided design review, construction management, construction engineering/inspection services for the replacement of the 54-inch sewer force main from Fisher Island to the CDWWTP at Virginia Key to ensure compliance with the design-build criteria. The project included 5300 lf of concrete segment lined tunnel, 2500 lf of open cut construction, and several hundred feet of horizontal directional drilling.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
05/2016	$ 77,500,000	$ 5,000,000

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
Government Cut Utility Relocation Project Miami, Florida Miami-Dade Water & Sewer Dept. I. Gary Clarke (786) 268-5174 Phone gycrk@miamidade.gov	The major driving force for replacement of the 54-inch force sanitary force main crossing under Government Cut and 20-inch water main crossing under Fisherman's Channel is the U.S. Army Corps of Engineers' (USACE's) Miami Harbor Government Cut Federal Navigation project. This USACE project was required to deepen the navigation channel into the Port of Miami. The deepening of the navigation channel required that the existing 54-inch sanitary sewage pre-stressed composite concrete pipeline and 20-inch ductile iron water main be replaced in advance of the USACE Miami Harbor project. WSP provided construction management services for the relocation of the 24-inch water main and 54-inch to 60-inch force main under Government Cut using horizontal directional drilling and microtunneling construction methods.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
09/2013	$ 77,300,000	$ 4,900,00

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
First Street Tunnel Design/Build Washington, DC DC Water Carlton Ray (202) 787-4469 carlton.ray@dcwater.com	WSP served as lead designer for the Skanska – Jay Dee JV (SKJD) design-build team for the First Street Tunnel (FST) project. The FST will mitigate combined sewer overflows to the Anacostia River and flooding in two urban neighborhoods in Washington, DC. The main tunnel, approximately 2,700 LF and 18.5 ft, will be excavated in soft ground from a 160-foot deep working shaft located within the historic McMillan Sand Filtration Plant site. WSP designed the precast concrete bolted and gasketed segmental final lining. The project included four diversion chambers to relieve the existing sewers during large storm events and to divert flow to the tunnel for storage. Diverted flows were directed to the tunnel via two dropshafts, at approximately 90 to 110 ft. below grade, and connecting adits. Adit tunnel design included a 292 LF 84 in. ID microtunnel for the Adams Street Adit. A temporary below grade pumping station and shaft, which was used to dewater the tunnel, were included in the project.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
02/2016	$ 157,600,000	$ 5,670,000

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
Marblehead Sewer Pipeline Replacement Project, Marblehead, MA South Essex Sewerage District Alan F. Taubert 978-744-4550, ext. 127	The South Essex Sewerage District retained WSP to conduct a condition assessment study following the rupture of one of the District's cross-harbor pressure sewers in March of 2013. The study included the condition assessment of 12,000-feet of 20-inch and 24-inch pressure sewers that convey up to 20 CFS of wastewater beneath Salem Harbor from the town of Marblehead to the District's wastewater treatment facility in Salem, Massachusetts. The firm prepared a condition assessment report that documented the condition of the pipelines based on direct underwater observations of the pipelines, ultrasonic thickness testing, and a soils corrosivity analysis. Results of the assessment showed that the existing ductile iron pipes are severely corroded and in imminent danger of failure. WSP evaluated various alternatives for immediate replacement of the pipelines, and completed the design and permitting of two new HDPE replacement pipelines that will be installed in a shallow trench offset from the existing pressure mains, and across a one-mile length of the harbor using the float-and-sink approach. The existing mains have no redundancy, so a 6,000-ft temporary bypass was installed and connected to the upstream sewer and treatment plant before the permanent connection of the new mains to the system can be made. The project proceeded on an emergency basis to minimize the potential for further rupture and discharge of wastewater to this historic and popular recreational harbor.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
12/2016	$ 11,000,000	$ 1,200,000

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
North Dorchester Bay CSO Boston, Massachusetts Massachusetts Water Resource Authority Michael Hornbrook (617) 778-4359 Michael.Hornbrook@mwra.state.ma.us	WSP was responsible for final design of the tunnel, the 60-ft. deep mining shaft, TBM removal shaft, access shaft, helical and plunge drop shafts, 4,700 feet of consolidation conduits and new stormwater pipes, and diversion structures at six CSO outfalls with passive and active controls (i.e., weirs and hydraulically operated control gates). Diversion structures were configured to intercept CSO and stormwater in accordance with control requirements established specifically for the project, and included design of new power and communication lines and cabinets to support the control gates at each outfall. WSP led the investigation and design of rehabilitation of the existing brick conduits and designed cured-in-place pipe to strengthen and reinforce these conduits in advance of tunnel construction.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
05/2011	$ 147,000,000	$ 2,050,000

TEC Professional Services Questionnaire

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

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

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

Please see additional information on the following pages.

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

Signature: Nassar, Max (nassarmj) Digitally signed by Nassar, Max (nassarmj) DN: cn=Nassar, Max (nassarmj), ou=Active, email=Max.Nassar@wsp.com Reason: I agree to the terms defined by the placement of my signature on this document Date: 2022.03.25 09:52:30 -05'00' **Print Name:** Max Nassar

Title: Vice President Senior Managing Director **Date:** 3/25/22

Introduction

WSP USA offers over a century of experience in the planning, design, and construction management of municipal infrastructure projects, including water, wastewater, drainage, and roadways nationwide. WSP is an industry leader in developing infrastructure solutions for the way we will live in the 21st century.

WSP USA Inc., formerly Parsons Brinckerhoff, Inc., is a leading engineering professional services consulting firm. Nationally, our staff of 7,000+ provide engineering and multidisciplinary services in a vast array of industry sectors, with a focus on technical excellence and client service. The firm has a 132-year history, with roots in companies founded in the United States, the United Kingdom and Canada. WSP is committed to performing our services in a socially, ethically, and environmentally responsible manner. In the United States, the firm's roots date back to 1885.

We offer expertise in every phase of project delivery, from concept to completion. Our services include strategic consulting, program management, planning, engineering design, construction management, and operations & maintenance.

Municipalities rely on us to execute projects under every form of project delivery, including design-build and public-private partnership. We employ the latest technologies and methodologies to develop infrastructure that addresses anticipated demographic, social, and economic changes, and we plan and design infrastructure systems to be resilient to the threats posed by climate change.

Our engineers and planners view municipal infrastructure planning and design to improve the communities in which we live and work, and wherever possible we apply the latest concepts in sustainable development to improve social, economic, and environmental conditions.

We help our clients find the right solutions to their challenges through innovative planning and design, deep knowledge of the federal and local regulatory environments, and strong management of project delivery.

In addition to a full range of specialized services, we provide broad oversight and direction for complex mega projects, working on integrated teams with our clients to deliver some of the world's largest and most well-known transportation projects.

To every project we bring a total commitment to achieving client goals, with strict attention to schedule and budget, drawing on the multidisciplinary skills of 7,800 professionals in more than 100 offices across the U.S. and Latin America.

Minimum Qualifications

1. *One principal who is a professional engineer who shall be registered as such in Louisiana.*

Senior Vice President, Ian Chaney, PE is WSP's National Director for Geotechnical and Tunneling. He maintains his Louisiana PE (0042288)) and will serve as the Principal for any work WSP is awarded by Jefferson Parish. He brings 20 years of experience to this team.

2. *Professional in charge of the project who is a professional engineer who shall be registered as such in Louisiana with a minimum of five (5) years experience in the disciplines involved.*

Rebecca Howell, PE will serve in the role of Project Manager. She has 15 years of experience in civil engineering, including consulting experience in engineering, design, project management. Rebecca's project experience includes sanitary and storm water collection systems, sanitary sewer lift station and force main design, drainage impact analysis, HEC-RAS modeling (1D and 2D), water distribution system design, off-system bridge replacements, subdivision, and commercial site design. Her resume is included in this submission.

3. One employee who is a professional engineer registered as such in Louisiana in the field or fields of expertise required for the project.

Rebecca Howell, PE additionally meets the requirement of MPR #3.

Evaluation Criteria

1. *Professional training and experience in relation to the type of work required for the routine engineering services.*

WSP has extensive experience in the design and rehabilitation of water and wastewater distribution and collection systems. This includes expertise in civil, structural, and mechanical/electrical engineering. In this submission, we show projects completed by WSP where both routine and complex engineering solutions are provided to our clients.

WSP USA provides innovative solutions and technologies for planning, engineering, and management to improve the effectiveness of operations, maintenance and replacement of aging and failing drinking water and wastewater treatment and conveyance systems. We deliver a full range of planning, design and construction management services for outfalls, pipelines, pump stations, flow control facilities and other special structures related to water and wastewater— all intended to improve water quality while meeting strict environmental regulations.

We have completed planning, design and permitting of numerous municipally owned wastewater systems for new, rehabilitated or expanded wastewater treatment plants. Wastewater treatment design has involved current technologies in biological nutrient removal and advanced wastewater treatment from relatively small systems to regional wastewater treatment systems.

For water and wastewater conveyance systems, our experience includes planning, condition assessment, new and rehabilitation design, and construction management of water transmission and sanitary sewer pipeline systems, as well as outfalls, pump station and other major flow control related to the transmission and conveyance of water, wastewater, and reclaimed wastewater.

We have extensive experience in solving combined sewer overflow and sanitary sewer overflow problems includes separation of sewer and storm water collection systems, area-wide storage and transport remedies, and state-of-the-art gray and green infrastructure technologies.

2. *Capacity for timely completion of newly assigned work, considering the factors of type of routine engineering task, current unfinished workload, and person or firm's available professional and support personnel.*

WSP has the capacity to complete all tasks that might be assigned under this contract. The individuals identified, resumes provided, have the availability to start work immediately.

WSP prides itself in providing high quality services on time and within our clients' budgets. Even if there is an aggressive schedule, we can provide resources quickly to meet demands. With more than 500 professionals located in the firm's Southeast region, we can staff projects and contracts large and small, simple, and complex, at a moment's notice.

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

WSP's office is located at 1100 Poydras Street in New Orleans. Most of the work will be performed from this office. There could be instances when a subject matter expert is needed, and their work could be performed remotely, but all work will undergo the strict quality control and assurance reviews in our New Orleans office. This ensures that all state and local regulations and requirements are met.

4. *Adversarial legal proceedings between the Parish and the person or firm performing professional services.*

WSP USA Inc. has had NO legal proceedings with Jefferson Parish.

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

WSP has a portfolio of experience that spans from planning, design, and construction management of large diameter pipelines, sewers, outfalls, water and force mains, separate and combined collection systems, pump stations, flow control facilities, as well as special

structures related to the storage, transmission and conveyance of water, wastewater, and reclaimed water. Jefferson Parish will benefit from the lessons learned and innovative solutions we bring from similar projects. The projects included in the questionnaire all have verifiable references.

6. *Size of firm, considering the number of professional and support personnel required to perform the type of routine engineering tasks, including project evaluation, project design, drafting of technical plans, development of technical specifications and construction administration.*

Nationally, our staff of 10,000 provide engineering and multidisciplinary services in a vast array of industry sectors, with a focus on technical excellence and client service. In New Orleans, we have a staff of 21. We will assemble our team as we see the scope of the work for any engineering tasks.

7. *Past Performance by person or firm on Parish contracts.*

WSP is currently completing work on the Jefferson Parish Bonnabel Blvd. Improvements project. Your proposed project manager, Brian Hundt is serving as the project engineer on the Bonnabel Blvd. project. Additionally, all proposed team members have experience working on projects within the Jefferson Parish or in neighboring Parishes. In addition, our Louisiana Area Manager, Max Nassar, will serve as Officer in Charge. Max will ensure that Jefferson Parish receives the highest quality of service and deliverables.

Max is a life-long resident of Louisiana and will devote his considerable efforts to understanding the challenges faced by the Parish and will make sure that the very best individuals are assigned to exceed your expectations of our firm.

Campaign Contributions Disclosure by Affiant, Max Nassar		
JEFFERSON PARISH		
Michael Yenni, Parish President	December 15, 2018	$1,000.00
Michael Yenni, Parish President	February 21, 2019	$500.00
Dominic Impastato, Councilmember	July 20, 2017	$300.00
	November 2, 2017	$250.00
	November 16, 2017	$250.00
	November 30, 2017	$250.00
	February 1, 2018	$100.00
	October 25, 2018	$250.00
	April 13, 2019	$500.00
	June 21, 2021	$100.00
	July 22, 2021	$100.00
	August 21, 2021	$100.00
	September 21, 2021	$100.00
	October 21, 2021	$100.00
	November 21, 2021	$100.00
	December 21, 2021	$100.00
	January 21, 2022	$100.00
	February 21, 2022	$100.00
	March 21, 2022	$100.00
Jennifer Van Vranken, Councilmember	March 25, 2017	$500.00
	April 12, 2017	$500.00
	August 7, 2019	$500.00
Ricky Templet, Councilmember	February 26, 2019	$500.00
	March 7, 2019	$2,000.00
Paul Johnston, Councilmember		$1,000.00
Chris Roberts, Councilmember	April 3, 2019	$500.00
Deano Bonano	June 11, 2019	$500.00
	September 2019	$500.00
	April 29, 2021	$100.00
	May 29, 2021	$100.00
	June 29, 2021	$100.00
	July 29, 2021	$100.00
	August 29, 2021	$100.00
	September 29, 2021	$100.00
	October 29, 2021	$100.00
	November 29, 2021	$100.00
	December 29, 2021	$100.00
	January 29, 2022	$100.00

	February 28, 2022	$100.00
Cynthia Lee Sheng	September 12, 2019	$1,000.00
Paul Johnston	September 1, 2019	$2.50
Jedidiah Jackson	September 16, 2019	$250.00
Paul Johnston	September 1, 2019	$2.50
ORGANIZATION	**Date**	**Amount**
Son of a Saint	November 1, 2019	$700.00
Son of a Saint	November 1, 2019	$5,000.00