



Routine Engineering Services for Water Projects in Jefferson Parish – Resolution No. 138809





March 30, 2022

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

**RE: Routine Engineering Services for Water Projects in Jefferson Parish - Resolution No. 138809**

Dear Selection Committee:

Ardurra Group, Inc. is excited to submit this statement of qualifications in response to the above referenced Request for Qualifications. As you evaluate the submittals, please keep the following key advantages of Ardurra in mind:

**We Know and Understand Jefferson Parish.** Ardurra has completed more than 20 projects for Jefferson Parish, dating back to the 1980s. Recent projects include drainage improvements to Bonnabel Canal, Hoey's Pump to the River Economic Study, Jefferson Parish West Esplanade Ave Crossing of Elmwood Canal, and various design projects within the Parish's Drainage CIP. Ardurra is a known quantity to Jefferson Parish and has proven to be an excellent steward of the public trust. **100% Local Staff.** Ardurra is headquartered within Jefferson Parish in Metairie, just minutes from Parish offices and facilities. Key proposed project personnel are local and boast a career focused on water, wastewater, drainage, and streets in the greater New Orleans area. 100% of the work will be performed in Ardurra's Metairie office.

**On Target Experience.** With 44 years of experience in engineering assessments, design, construction, and program management in the greater New Orleans area, we know the myriad of issues that are involved with executing design and construction services as they relate to the local authorities, U.S. Army Corps of Engineers (USACE) and FEMA. Since 1994, Ardurra has served as program manager for the SELA urban drainage program. This work includes serving as Jefferson Parish's representative in the development and execution of engineering and construction contracts; meetings with USACE, CPRA, utility companies and private landowners; and development, implementation and execution of the Parish's annual Drainage CIP budgets and schedules.

We trust that the enclosed qualification package clearly demonstrates the Ardurra team's qualifications as they relate to your program. Should you have any questions or concerns, please contact us at 504.454.3866.

Sincerely,

A handwritten signature in blue ink that reads "Joseph R. Becker".

Joseph Becker, PE  
Client Service Manager

## **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:**

**Routine Engineering Services for Water Projects for Jefferson Parish  
Resolution No. 138809**

**B. Firm Name & Address:**

**ARDURRA Group, Inc.  
3012 26th Street  
Metairie, Louisiana 70002**



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

Ann Springston Shires, PE  
Principal-in-Charge  
Ardurra Group, Inc.  
504-454-3866  
aspringston@ardurra.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.**

Ann Springston Shires, PE  
Principal-in-Charge  
Ardurra Group, Inc.  
504-454-3866  
aspringston@ardurra.com

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

<u>204</u> Administrative	<u>7</u> Estimators	<u>    </u> Specification Writers
<u>16</u> Architects (Licensed)	<u>    </u> Geologists	<u>12</u> Structural Engineers
<u>    </u> Chemical Engineers	<u>    </u> Geotechnical Engineers	<u>68</u> Graduate Engineers
<u>194</u> Civil Engineers	<u>    </u> Interior Designers	<u>81</u> Project Managers
<u>104</u> Construction Inspectors	<u>6</u> Landscape Architects	<u>18</u> Clerical
<u>4</u> Ecologists	<u>95</u> Land Surveyor	<u>    </u> Grant/Funding Specialist
<u>2</u> Electrical Engineers	<u>2</u> Mechanical Engineers	<u>43</u> Sanitary Engineers
<u>8</u> Engineer Intern	<u>18</u> Environmental Engineers	
<u>45</u> Professional Land Surveyors		<u>927</u> <b>TOTAL</b>

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

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

## TEC Professional Services Questionnaire

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

1. N/A

2.

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

YES ☐ NO ☐

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

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

**J. Please specify the total number of support personnel that may assist in the completion of this Project:**  
We will specify this number when we learn the size and scope of the project.



## TEC Professional Services Questionnaire

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

### **PROFESSIONAL IN CHARGE OF PROJECT:**

**Name & Title:**

**Ann Springston Shires, PE**  
**Principal-in-Charge**

**Project Assignment:**

Principal-in-Charge

**Name of Firm with which associated:**

**ARDURRA Group, Inc.**

**Years' experience with this Firm:**

29 (39 years total)

**Education: Degree(s)/Year/Specialization:**

Bachelor of Science / 1982 / Civil Engineering

**Active registration: Year first registered/discipline:**

1992 / Professional, Civil, Environmental Engineer Louisiana  
2008 / Civil Engineer Texas  
2015 / Professional Engineer New York  
2019 / Professional Engineer Florida

**Other experience and qualifications relevant to the proposed Project:**

Ann has 39 years of experience in civil engineering planning and design throughout Louisiana, with a focus on open channel hydraulics, pipeline hydraulics, hydrologic analyses, computer modeling and pump stations. Relevant experience includes:

**Sewerage & Water Board of New Orleans Urban Flood Control Project, New Orleans, LA.** Ann served as the hydraulics engineer for this project which included upgrading an existing SWMM computer model, processing drainage improvements and making improvement recommendations. Ann was also responsible for project scheduling; coordination with the owner and the U.S. Army Corps of Engineers; development of the Orleans Parish Feasibility Study; field data collection for structure inventory and hydrologic modeling; hydraulic modeling; report design plates and hydraulic write-up; development of GIS based overflow maps using the SWMM model results to aid in cost-benefit analyses; review of FEMA repetitive flood damage and rate structure information.

**Big Island Mining and Atchafalaya Sediment Delivery Projects.** Ann served as hydraulic engineer for this project which included setting up a FASTTABS finite element computer model and processing alternate channel alignments to determine which alignment best diverted flows and sediment for marsh creation.

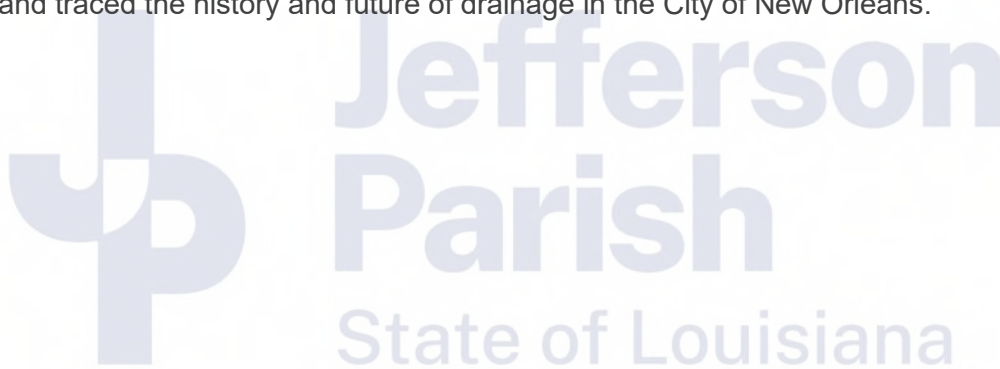
## **TEC Professional Services Questionnaire**

**St. Charles Parish East Bank Master Drainage Plan, St. Charles Parish, LA.** For four years Ann served as project engineer for this project with a study area of more than 7,000 acres. Her responsibilities included coordination of topographic mapping with subcontract photogrammetric mapping services, field data collection, hydrologic and hydraulic analyses using the HEC-1 and HEC-2 and final recommendations for drainage improvements. She developed the final master drainage plan which outlined modeling efforts, existing conditions, recommended improvements, and GIS based flood overflow maps for existing and improved conditions for the 10, 50, and 100-year storms. She subsequently provided expanded data from this study for the FEMA Hazard Mitigation Grant Program for project funding.

Ann performed hydraulic analyses to indicate impact to existing drainage from proposed subdivision installations and impact of installation of new pumps at pump stations in St. Charles Parish and acted as project manager during construction of these subdivisions.

**US Army Corps of Engineers SELA Project, Hydraulic Analyses and Improvements to Canal Systems in Jefferson and Orleans Parish, LA.** This project reconstructs the open canal system by means of concrete flumes and trapezoidal sections and reconstructs multiple bridge crossings. Ann utilized HEC-18 and WSPRO to determine the effects of roadway and utility crossings and canal intersections.

**Southeast Louisiana Drainage Project, New Orleans, LA.** Ann served as program manager for this \$460M program. She was responsible for the coordination of construction and design contracts as well as maintaining a public information program. The project involved a 30-minute television program, "Underground Rivers", which aired on PBS and traced the history and future of drainage in the City of New Orleans.



## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
<b>Name &amp; Title:</b>
<b>Joseph Becker, PE</b> <b>Client Service Manager (CSM)</b>
<b>Project Assignment:</b>
Quality Assurance/Quality Control (QA/QC)
<b>Name of Firm with which associated:</b>
<b>ARDURRA Group, Inc.</b>
<b>Years' experience with this Firm:</b>
3 (34 Total)
<b>Education: Degree(s)/Year/Specialization:</b>
Management Development / 1995 Bachelor of Science / 1985 / Civil Engineering
<b>Active registration: Year first registered/discipline:</b>
1992 / Professional Civil Engineer Louisiana 1992 / Professional Environmental Engineer Louisiana
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>Joseph has 34 years of engineering experience in engineering planning, design, program management, emergency response, disaster recovery and federal consent decree compliance. Joseph worked for the Sewerage and Water Board of New Orleans for over thirty years and was the General Superintendent of the Sewerage and Water Board for his last ten years at the agency.</p> <p><b>General Superintendent.</b> 2008-2017. As the General Superintendent, Joseph was the Chief Technical Officer for an agency of over 1,100 personnel. His responsibilities included direction, management, and supervision of all aspects of Sewerage and Water Board operations, maintenance and design for sanitary sewer, potable water, storm drainage as well as power generation and distribution. These responsibilities included the Departments of Operations, Engineering, Networks, Facility Maintenance, Environmental Affairs, Emergency Management, Support Services and Plumbing.</p> <p><b>Sanitary Sewer Consent Decree.</b> 1998-2017. Owner's representative for over 20 years. Intimately involved with Consent Decree negotiations between the Sewerage and Water Board of New Orleans and the Federal Government from 1996 through 1998 and with the compliance to that decree from 1998 through 2017. He was the Board expert in several areas of both construction and management and played a key role in the development and implementation of the Board's Preventive Maintenance Manual as well as the Emergency Response Manual, both of which are included in the final consent decree. From 1998 through 2017, he was intimately involved in daily consent decree compliance as well as review of quarterly and annual compliance reporting. Through this effort, Joe cultivated a positive relationship with the Department of Justice and the EPA regional offices.</p>



## TEC Professional Services Questionnaire

**Disaster Recovery.** 2005-2017. Extensive experience negotiating with Federal Emergency Management Agency and the state of Louisiana. Assisted in obtaining, and ensuring compliance with all accounting and tracking requirements, over \$2 billion in federal recovery dollars for both the City of New Orleans and the Sewerage and Water Board since the federal levee failures following Hurricane Katrina. Additional similar experience with other federal agencies have assisted in obtaining an additional \$1.5 billion in recovery funds.

**SELA Orleans.** 2000-2017. Owners' manager and representative to the \$1.4 billion Corps of Engineers South East Louisiana (SELA) program to increase interior drainage capacity in the New Orleans area. This effort included daily monitoring of construction, supervision of design, as well as program coordination with the Corps of Engineers, neighbors, and residents, and petitioning for funding from the federal government in Washington DC.

**Department Manager.** 1990-2007. From 1987-1999 was responsible for supervision of activities associated with sewer, water and drainpipe repair and appurtenances within the city of New Orleans. Responsible for a staff of over 150 positions, including engineers, clerical staff, and construction crews, and an Operating and capital budget of over \$10 million annually. From 1999-2007 was responsible for engineering design and submittal review for all sewer, water and Board maintained drainage within the City of New Orleans. This review included any private, city, state or federal project involving utilities in the public right of way within the city of New Orleans. Worked closely with a wide variety of both local and out of state consulting firms, as well as both large and small contractors, to ensure compliance with Board specifications.



## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
<b>Name &amp; Title:</b>
<p><b>Adam Faschan, PhD, PE</b>  <b>Civil/Environmental Engineer</b></p>
<b>Project Assignment:</b>
<p>Senior Civil and Environmental Engineer</p>
<b>Name of Firm with which associated:</b>
<p><b>ARDURRA Group, Inc.</b></p>
<b>Years' experience with this Firm:</b>
<p>8 (36 Total)</p>
<b>Education: Degree(s)/Year/Specialization:</b>
<p>PhD / 1992 / Civil &amp; Environmental Engineering  Master of Science / 1989 / Civil Engineering  Bachelor of Science / 1987 / Civil Engineering</p>
<b>Active registration: Year first registered/discipline:</b>
<p>1993 / Civil and Environmental Engineer Louisiana  1998 / Professional Engineer Mississippi  2014 / Environmental Engineer Texas  2015 / Professional Engineer New York  2015 / Professional Engineer South Carolina</p>
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>Adam has 36 years of experience in civil/environmental engineering for public infrastructure projects. He has been responsible for technical assistance and oversight of infrastructure design projects for the largest water and wastewater treatment facilities in Louisiana and Mississippi. Relevant experience includes:</p> <p><b>Baptiste Collette Navigation Channel Improvements, Plaquemines Parish, LA.</b> Adam served as senior technical advisor for the analysis and design for a deepening, widening and redirection of 16 miles of navigation channel to serve the Port of Venice. The Parish, under a Section 203 USACE authorization is preparing a feasibility study to determine the cost effectiveness of deepening the existing 16-foot channel to 22 feet and widening the 150-foot sections to 200 feet. These improvements will allow a wider range of oil field service vessels to reach new oil leases in the eastern Gulf of Mexico.</p> <p><b>Administrative Program Management Assistance for FEMA Repairs, St. Bernard, LA.</b> Adam served as senior technical advisor for St. Bernard Parish to manage the implementation of all the FEMA funded infrastructure repairs within the Parish. Adam's grant administration duties included reviewing and revising Project Worksheets as well as completing and maintaining all documentation required to ensure full and expeditious reimbursement of all eligible funds. This program helped increase grant funding to the Parish from \$117M to \$400M. Adam assisted directly with a \$20M increase to the WW consolidation program.</p>

## TEC Professional Services Questionnaire

### **Blind River Freshwater Diversion, Louisiana Department of Natural Resources, St. James Parish, LA.**

Adam provided technical oversight of the analysis and design for a 3,000 cubic feet per second diversion from the Mississippi River to the Maurepas Swamp and Lake Pontchartrain for the Office of Coastal Protection and Restoration. The \$100M project includes a diversion structure using culverts with automated gates and a conveyance facility using culvert and earthen channel sections. The distribution system to the swamp includes detailed hydraulic modeling with both HEC-RAS and EFDC models. The objective of this project is to rejuvenate the swamp and to propagate cypress trees that have been stressed from lack of freshwater and nutrients for 50 years. The project includes construction of three 10'×10' culverts through the USACE flood control levee on the Mississippi River. The installation drawings included roadway relocations, temporary levee relocations, levee reconstruction details and special details for prevention of leakage along through levee structures.

**Munster Wastewater Treatment Plant Expansion, St. Bernard Parish LA.** Adam served as senior technical advisor for this project that included consolidation of all the Parish's facilities to one major plant - a \$60M wastewater consolidation effort funded substantially through FEMA. The consolidation reduces the Parish's long-term operational costs by \$500K annually, reduces staff requirements and minimizes the need to finance improvements through Parish funds. Work included expansion of the Munster WWTP to an average daily capacity of 15 MGD and a peak capacity of 50 MGD. The WWTP expansion consisted of the design of influent and effluent pump station capacity upgrades, new headworks, new aeration basins, two new final clarifiers, RAS/WAS facilities, new digesters, and associated yard piping.

**Shoreline Protection Emergency Restoration Project, Louisiana Coastal Protection and Restoration Authority (CPRA), LA.** Adam served as senior technical advisor for this project that provides protection to areas where marsh vegetation was highly impacted by the Deepwater Horizon oil spill in order to avoid additional irreversible losses and reduce the continuing threat to the natural resources. Adam provided senior technical oversight through a conceptual planning phase, coordinating between numerous agencies, stakeholders and interested parties. Adam provided oversight of the project team through data collection, permitting and final design.



## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
<b>Name &amp; Title:</b>
<b>Gerald Preau, PE</b> <b>Civil Engineer</b>
<b>Project Assignment:</b>
Senior Civil Engineer
<b>Name of Firm with which associated:</b>
<b>ARDURRA Group, Inc.</b>
<b>Years' experience with this Firm:</b>
8 (43 years total)
<b>Education: Degree(s)/Year/Specialization:</b>
Master of Science / 1978 / Civil Engineering Bachelor of Science / 1975 / Civil Engineering
<b>Active registration: Year first registered/discipline:</b>
1980 / Civil & Environmental Engineer Louisiana 1983 / Civil Engineer Alabama
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>Gerry has 43 years of experience in engineering design and for public works facilities throughout Louisiana. For 15 years, Gerry was employed with the New Orleans S&amp;WB responsible for oversight of all aspects of drainage, sewer and water projects. He served as program manager for the Southeast Louisiana Urban Flood Control Program and the Sewer System Evaluation and Rehabilitation Program, two of the largest S&amp;WB programs prior to Hurricane Katrina. Relevant experience includes:</p> <p><b>Sewerage &amp; Water Board, City of New Orleans Department of Public Works Paving Program, New Orleans, LA.</b> Gerry served as program coordinator, responsible for review and/or management of every paving project in Orleans Parish for impact on S&amp;WB facilities. Work included evaluation of existing utilities within project limits and design of utility improvements, which were added to the paving projects under a cost sharing agreement between the S&amp;WB and the City. Gerry was involved in each project from inception/preliminary cost estimates through design, construction, and final closeout. In this capacity, Gerry was instrumental in the development of the 1992 City of New Orleans Department of Public Works Standard Specifications for Street Paving.</p>

## **TEC Professional Services Questionnaire**

**City of New Orleans Department of Public Works Capital Improvement Program, New Orleans, LA.** Gerry was asked to serve as program manager for the City's \$160M capital program, as a result of his extensive experience with the DPW paving program. This included management of design, construction, scheduling, budgeting and coordination with S&WB and other utilities. He was responsible for initial implementation of the City's DBE Participation Policy on a DPW paving project.

**Sewerage & Water Board of New Orleans Sewer System Evaluation and Rehabilitation Program, New Orleans, LA.** Gerry served as program manager from program inception until 2000. The program involved a citywide sewer system evaluation study; repair of defects noted in the study; development of a computer model to evaluate capacity deficiencies; design and construction of projects to alleviate deficiencies in the sewerage system; development of standards, budgeting, scheduling, controls, and quality assurance. This was the first S&WB program to leverage scheduling and program control tools to track progress.

**Sewerage & Water Board of New Orleans Southeast Louisiana Urban Flood Control Program, New Orleans, LA.** Gerry served as program manager for this SELA urban flood control program, which was largely funded by the USACE. The \$400M program included development of a computer model of the stormwater drainage system to evaluate areas subjected to repeated flooding from storm water runoff, as well as design and construction of drainage projects to alleviate flooding. Gerry was responsible for all aspects of the program including development of standards, evaluation of the existing drainage system, design, construction, budgeting and scheduling.





## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
<b>Name &amp; Title:</b>	
Chris Munson, PE Civil Engineer	
<b>Project Assignment:</b>	
Environmental/Process Engineer	
<b>Name of Firm with which associated:</b>	
ARDURRA Group, Inc.	
<b>Years' experience with this Firm:</b>	
6 (20 years total)	
<b>Education: Degree(s)/Year/Specialization:</b>	
Master of Science / 1998 / Civil Engineering Bachelor of Science / 1997 / Civil Engineering	
<b>Active registration: Year first registered/discipline:</b>	
2003 / Professional Engineer Louisiana 2010 / Professional Engineer Mississippi 2012 / Professional Engineer Alabama 2015 / Professional Engineer Texas 2015 / Professional Engineer Florida	
<b>Other experience and qualifications relevant to the proposed Project:</b>	
<p>Chris has 20 years of experience in the evaluation and design of water and wastewater distribution and treatment facilities. The majority of Chris' water plant design experience has been focused within the Greater New Orleans area on facilities treating surface water from the Mississippi River. Experience relevant to this pursuit includes design of capital improvements for the Jefferson Parish West Bank Water Treatment Plant and the Sewerage and Water Board of New Orleans Algiers and Carrollton Water Purification Plants.</p> <p><b>Conceptual Engineering of Mississippi River Water Source for Laplace, St. John the Baptist Parish, LA.</b> Project manager for the conceptual design of pretreatment of Mississippi River water prior to treatment by the Parish's existing reverse osmosis membranes of the Woodlands Drive WTP site. The conceptual design consisted of chemical coagulation, flocculation and using the lamella sedimentation process followed by a filtration step using low pressure microfiltration or ultrafiltration membranes. The project also included the conceptual design of modification to the Parish's Lions WTP to assist with total organic carbon (TOC) reduction at the facility particularly during the summer months. The conceptual design consisted of the addition of reverse osmosis membrane treatment following the WTP's existing sedimentation and granular filtration processes.</p>	

## **TEC Professional Services Questionnaire**

**Carrollton Water Purification Plant Filter Pilot Study, Sewerage and Water Board of New Orleans, New Orleans, LA.** Project engineer during an eight-week filter pilot study and provided oversight of the daily pilot plant operations including the collection and analysis of headloss, turbidity, and particle count data.

**Sodium Hypochlorite Storage and Feed Facility, Carrollton Water Purification Plant, Sewerage and Water Board of New Orleans, New Orleans, LA.** Project manager and design engineer for the design of a sodium hypochlorite storage and feed facility consisting of a covered storage area containing eight 14,900-gallon FRP tanks to store sodium hypochlorite and a building containing five pumps to feed the sodium hypochlorite from the storage tanks to the disinfection feed point(s) within the WPP.

**Algiers Water Purification Plant On-Site Chlorine Gas/Sodium Hypochlorite Generation and Feed System, Sewerage and Water Board of New Orleans, New Orleans, LA.** Project engineer for the design of retrofitting the WPP's existing chlorine with a 1,250 pound per day (ppd) Klorigen® on-site chlorine gas generation system. The project included the design of all ancillary facilities (storage tanks and metering pumps) to facilitate the operation of the on-site chlorine generation system.

**West Bank Water Treatment Plant Expansion, Jefferson Parish LA.** Project engineer for the expansion of the existing 34 mgd WTP to a treatment capacity of 60 mgd. Designed upgrades to existing chemical feed systems, including the expansion of the disinfection system and upgrades to the polymer, fluoride, and PAC systems. Assisted with the design to raw water pumping improvements and assisted with the design of the high service pumping system.

**Carrollton Water Purification Plant Filter Upgrade, Sewerage and Water Board of New Orleans, New Orleans, LA.** Project engineer for the project and conducted preliminary design of an air scour system to improve filter backwashing, replacement of valves, valve actuators, and venturi meters. Also assisted with the analysis to optimize filter operation and backwash procedures.

**Risk Management Programs, Jefferson Parish, Louisiana and the Sewerage and Water Board of New Orleans, Jefferson Parish LA.** Project engineer for the development of Risk Management Plans (RMPs) for chlorination systems at the East and West Bank WTPs and the Bridge City, Harvey and Marrero WWTPs in Jefferson Parish, LA and for the Sewerage and Water Board of New Orleans, Algiers and Carrollton Water Purification Plants. Performed system hazard analyses and developed recommendations to improve the safety of the chlorination systems and/or system operating procedures.

## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
<b>Name &amp; Title:</b>
<b>Mark Arnold, PE</b> <b>Mechanical Engineer</b>
<b>Project Assignment:</b>
Senior Mechanical Engineer
<b>Name of Firm with which associated:</b>
<i>ARDURRA Group, Inc.</i>
<b>Years' experience with this Firm:</b>
20 (37 years total)
<b>Education: Degree(s)/Year/Specialization:</b>
Bachelor of Science / 1982 / Mechanical Engineering
<b>Active registration: Year first registered/discipline:</b>
1989 / Mechanical & Environmental Engineer Louisiana 2013 / Mechanical Engineer Florida
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>Mark has 37 years of experience in engineering planning, design, and program management of public works projects with a focus on stormwater pump stations, wastewater pump stations, water purification plants and wastewater treatment plants. Prior to joining ARDURRA, Mark was employed for 17 years by the Sewerage and Water Board of New Orleans. Relevant experience includes:</p> <p><b>Jefferson Parish Sewerage Capital Improvements Program, Jefferson Parish, LA.</b> Mark serves as program manager for the Parish's Sewerage Capital Improvements Program. His responsibilities include management of design and construction schedules to keep projects on track; review of comments submitted by engineers; construction status updates for reporting and scheduling; and overall support to the Department of Sewerage Director. Mark managed the following Jefferson Parish projects:</p> <ul style="list-style-type: none"><li>— master design and construction plan for the \$500M parish wide I&amp;I management plan.</li><li>— master plan for regionalization of future sewage pumping stations and the consolidation of existing redundant sewage pumping stations for the Westbank</li><li>— design and construction of \$14M five MGD expansion to the Marrero WWTP including rehabilitation of existing headwork's facility and construction of new primary clarifier, secondary</li></ul>

## **TEC Professional Services Questionnaire**

clarifier, and trickling filter

- design and construction of new \$5.5M gravity sewer and water system along Harvey Canal industrial area

**Assistant Program Manager, Sewerage & Water Board of New Orleans Southeast Louisiana Urban Flood Control Program, New Orleans, Louisiana** Responsible for coordinating all funding, design, and construction efforts for this \$585M program with the Sewerage & Water Board (S&WB) and USACE. Responsible for oversight and review of designs performed by other engineering firms; resolving design conflicts between USACE and S&WB standards; communicating with utility owners and assisting to finalize legal agreements; assisting in property acquisition; submitting budget figures for funding of design and construction; providing short term and long term forecasts; completing grant applications; tracking funding and grant monies; coordinating PR efforts required for disseminating info to affected residents; assisting USACE to resolve issues during construction. Cost: \$6.1M.

**Sewerage & Water Board of New Orleans East Bank of New Orleans Municipal Water Treatment Plant, New Orleans, LA.** Mark was responsible for review and coordination of design plans and specifications for the rehabilitation of a headwork's facility at the East Bank's 120 MGD WWTP. Work included rehabilitation of mechanically raked bar screens, screenings conveying, air diffuser system, grit pumping, washing and removal, valves, and piping.

**Sewerage and Water Board of New Orleans Various Projects, New Orleans, LA (1984-2001).** Mark was responsible for direction and supervision of the S&WB's mechanical engineering department; preparation and supervision of designs, plans and specifications of water, sewage and drainage pumping stations; review of contract submittals; coordination of projects with consulting engineering firms; administration of construction projects; hydraulic testing of pumps; and preparation of budgets for capital programs. Select projects include:

- preparation and supervision of design and review of technical submittals for the mechanical systems for two new  
1,700 GPM sewage pumping stations
- preparation and supervision of design for a facility to dry vacuum truck collected sludge to allow for disposal
- review and coordination of design and specifications for rehabilitation of a trickling filter and construction of a primary and secondary clarifier at West Bank of New Orleans 40 MGD WWTP

## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
<b>Name &amp; Title:</b>
David Dodgen, PE Civil Engineer
<b>Project Assignment:</b>
Senior Civil Engineer
<b>Name of Firm with which associated:</b>
ARDURRA Group, Inc.
<b>Years' experience with this Firm:</b>
22 (34 Total)
<b>Education: Degree(s)/Year/Specialization:</b>
Bachelor of Science / 1987 / Civil Engineering
<b>Active registration: Year first registered/discipline:</b>
1994 / Civil Engineer Louisiana
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>David has 34 years of experience in civil infrastructure planning, design, and construction throughout Louisiana. He has focused his career on coastal restoration, flood protection and hydraulic modeling. Relevant experience includes:</p> <p><b>Expanded Small Scale Physical Model (ESSPM) of Lower Mississippi River, LA.</b> The ESSPM simulates sediment transport and diversions of the Lower Mississippi River and replaces the SSPM that David and Ardurra completed in 2003. The ESSPM is 90-feet by 120-feet and will utilize cutting edge technology as a computer numerically controlled router will cut the model bed into foam panels.</p> <p><b>Louisiana Master Plan for Hurricane Protection, LA.</b> After Hurricane Katrina, David assisted the Integrated Planning Team of the Coastal Protection and Restoration Authority to develop a Master Plan for hurricane protection integrated with coastal restoration.</p> <p><b>Atchafalaya River Flows, LA.</b> David prepared a design report and subsequent construction documents to enlarge three natural distributary channels to enhance river sediment flow from the Atchafalaya River into the East Pass Delta Lobe. The design also included extension of the natural distributary channels configured to create three slack water coves in the contiguous shallow waters of Atchafalaya Bay to promote marsh creation.</p> <p><b>Mississippi River Diversion Project, LA.</b> David prepared a hydraulic study to examine the feasibility of diverting freshwater from the Mississippi River, overland through the Bonnet Carré Spillway wetlands, for filtration prior to entering Lake Pontchartrain. He developed overland flow scheme, applied hydraulic modeling using HEC-2, prepared cost estimates, developed conceptual design, prepared report, and presented findings to the Technical Group of the Bonnet Carré Steering Committee and the New Orleans District Corps of Engineers.</p>



## **TEC Professional Services Questionnaire**

**United States Army Corps of Engineers Hurricane Protection Projects, LA.** David prepared designs for multiple hurricane protection projects for the Corps under their accelerated program to restore protection to the City of New Orleans by 2011.

**Hurricane Andrew East Timbalier Island Breach, LA.** Unconfined hydraulic dredging operations were ineffective in repairing the breach of East Timbalier Island. David completed design report and prepared construction documents for closure of the breach with a rock dike to cut off tidal flows so that the dredged material could be placed.

**Marvin J. Braud Pumping Station East Ascension Consolidated Drainage Board, LA.** David prepared the design for the enlargement of all the bayous within the watershed of the Marvin J. Braud Pumping Station. The project encompassed one-third of the watershed of Ascension Parish.

**Salinity Control Structures, LA.** David furnished engineering planning and design services for multiple salinity control structures in coastal Louisiana including a sheet pile structure with 60-inch combination flap/slucice gate configuration near Hopedale, and offset rock dikes configured within Grand Bayou to choke tidal interchange.

**Ascension Parish Drainage Improvements, LA.** David served as technical advisor to the Ascension Parish Planning Commission to review and approve all subdivision, drainage, and development improvements within the Parish. He also prepared technical appeal of revised FEMA flood study and maps.

**Sorrento Flood Protection, LA.** David prepared the design for five miles of earthen levee to provide flood protection for the Town of Sorrento. The project included multiple drainage structures retrofits in wetland environments including two runs of 60" x 225' long culvert siphons installed by tunneling under ten existing gas pipelines.

**Bonnabel Canal Drainage Improvement Project, Jefferson Parish, LA.** This project involves planning and design for canal dredging, widening and bank stabilization to improve drainage through the Bonnabel Canal.

## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
<b>Name &amp; Title:</b>
<b>Ryan Ruiz</b> <b>Resident Inspection/CADD Designer</b>
<b>Project Assignment:</b>
Resident Inspection and CADD Designer
<b>Name of Firm with which associated:</b>
<b>ARDURRA Group, Inc.</b>
<b>Years' experience with this Firm:</b>
8 (24 Total)
<b>Education: Degree(s)/Year/Specialization:</b>
Bachelor of Science / 2006 / Information Technology Associate of Science / 2004 / Computer Network and Security Technology
<b>Active registration: Year first registered/discipline:</b>
N/A
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>Ryan has 24 years of experience in construction inspection, debris monitoring and database management. He played a key role in Katrina cleanup and debris management efforts responsible for development of procedures, database management, map software training and debris monitoring of commercial and residential areas as well as monitoring at debris drop off locations. Project experience includes:</p> <p><b>Site Inspector, Bonnabel Canal Drainage Improvement Project, Jefferson Parish, Louisiana.</b> This project involves planning and design for canal dredging, widening and bank stabilization to improve drainage through the Bonnabel Canal.</p> <p><b>Site Inspector, Lake Hermitage Marsh Creation Project, Plaquemines Parish, Louisiana.</b> Ardurra was selected to furnish engineering planning, design, and construction phases services for this project. Construction Restoration</p> <p><b>Resident Inspector, Gretna Boat Launch on the Mississippi River Project, Jefferson Parish, Louisiana.</b> Resident Inspector responsible for daily site inspections. Project entails driving pipe piles, concrete pile cap formations, steel girder installations, and electrical component relocation and installations. Work includes issuing daily reports, conduct Davis Bacon payroll interviews, coordinate with Kostmayer Construction on any project operation issues that may deviate from the contract plans and specifications, and review invoices and payment applications.</p>

## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
<b>Name &amp; Title:</b>
<b>William “Billy” Blackwell</b> <b>Construction Manager</b>
<b>Project Assignment:</b>
Construction Phase Services
<b>Name of Firm with which associated:</b>
<b>ARDURRA Group, Inc.</b>
<b>Years’ experience with this Firm:</b>
39 (59 Total)
<b>Education: Degree(s)/Year/Specialization:</b>
Multiple CM/I Certifications
<b>Active registration: Year first registered/discipline:</b>
N/A
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>Billy has 59 years of experience in construction, operation, and maintenance of public infrastructure throughout Louisiana. He has developed an expertise in the evaluation of plant operations, performing constructability reviews, development of O&amp;M manuals and leading operator training sessions. He also has extensive experience in design and construction of water, sewer and drainage and projects. He held senior roles in the following projects – evaluation, I&amp;I investigation and design of new pump and control systems for the Westbank and Eastbank Sewerage Mini Systems in Jefferson Parish; development of specifications and standard plans for the replacement and point repair of sewer mains throughout Jefferson Parish; construction of 25,000 LF of gravity main sewer line, three lift stations and 4,500 LF of force mains and manholes in Jefferson Parish.</p> <p><b>Jefferson Parish Drainage Capital Improvement Program, Jefferson Parish, LA.</b> Billy served on the program management team for this drainage CIP to include contractor supervision, resolution of ROW issues and construction scheduling and oversight</p> <p><b>Jefferson Parish Safe Houses and Large Horizontal Pumps, Jefferson Parish, LA.</b> Billy assisted with construction oversight of 13 safe houses as well as with design, planning and implementation of remote-control capabilities for the large horizontal pumps in Jefferson Parish. He was the Parish’s representative for upgrades to existing vertical pumps and engines to enable remote control as well as storm proofing 21 pump stations and retrofitting climber screens at two pump stations. He was involved in the frontage protection projects at various pump stations. His duties include daily site visits; attending progress meetings; review of plans, specifications, and contractor submittals; resolution of conflicts between design and actual implementation; facilitating cooperation between contractor, USACE and design team; developing modifications necessary for control of older equipment to be compatible with new remote system; and the development of O&amp;M manuals.</p>

## **TEC Professional Services Questionnaire**

**Jefferson Parish Various Roadway and Bridge Projects, Jefferson Parish, LA.** Billy was responsible for daily supervision of contractor activities and inspection laboratory on roadway and bridge projects in Jefferson Parish. Projects included multi-span bridge structures for Vintage Dr. crossing the Duncan Canal and Canal No 17; type II AASHTO girder structures on Breaux St. crossing Convent Canal and Patriot Street crossing Canal A.

**Jefferson Parish Cousins Pumping Station, Jefferson Parish, LA.** Billy served as project engineer for the construction of this \$7.3M drainage pumping station. Duties included interpretation of plans and specifications and verification of installation tolerances on mechanical equipment.

**Jefferson Parish Westbank and Eastbank Sewerage Mini Systems, Jefferson Parish, LA.** Billy was instrumental in the design of these two systems including evaluation of existing sewerage lift stations, I&I investigations and design of new pump and control systems.

**Jefferson Parish Replacement and Point Repair of Sewer Mains, Jefferson Parish, LA.** Project representative responsible for coordinating functions of contractor crews, field inspection personnel and personnel of Jefferson Parish Department of Sewerage.

**Jefferson Parish Pump Station Operations, Jefferson Parish, LA.** Billy helped the Parish with the development of modifications to the mechanical and electrical systems at multiple pumping stations. Modifications were made to components such as oil and water-cooling systems, valves, and siphons to prevent backflow, priming systems, fuel delivery systems, engines, and generator. He has directed the installation of various horizontal and vertical pumping units in Jefferson Parish stations.

**New Orleans Sewerage and Water Board Pump Stations, New Orleans, LA.** Billy helped with the damage assessment of multiple pump stations following Hurricane Katrina, for the USACE. The task included visits to 20 sites to investigate damage to mechanical equipment and to assist in the assessment of electrical equipment damage. He assisted with the preparation of final report including cost estimates.

## TEC Professional Services Questionnaire

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

### PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:				
<p><b>Plant Performance Evaluation Algiers and Carrollton Water Treatment Plants New Orleans, LA</b></p> <p>Sewerage &amp; Water Board of New Orleans 625 St. Joseph Street New Orleans, LA 70165</p> <p>Ron Spooner 504.865.0411</p>	<p>ARDURRA'S Adam Faschan as project manager, and Dan Gerrity as Principal-in-Charge, assessed the performance for future regulatory compliance of the Algiers and Carrollton WTPs – a combined peak daily capacities of 280 mgd. They reviewed proposed capital improvements, studies and recommendations provided by previous consultants for over \$100M of capital improvements. They evaluated previous proposals for upgrades to existing sedimentation systems, filter improvements, chemical feed improvements, chemical feed improvements, and disinfection requirements. Key recommendations included removing plate settlers and relocating lime addition from proposed sedimentation improvements to avoid potentially severe maintenance problems, eliminating a chlorine contact chamber for the Algiers WTP, and reassessment and potential elimination of capital-intensive ozone disinfection improvements. The evaluation also included developing risk management plans for both facilities. Upon completion of the evaluation a report was issued detailing the capital improvement recommendations and an implementation schedule.</p>				
Completion Date (Actual or estimated):	Estimated Cost:				
	<table> <tr> <th style="text-align: center;">Entire Project:</th><th style="text-align: center;">Work for which Firm was Responsible:</th></tr> <tr> <td style="text-align: center;">2000</td><td style="text-align: center;">\$400K (fee) 100%</td></tr> </table>	Entire Project:	Work for which Firm was Responsible:	2000	\$400K (fee) 100%
Entire Project:	Work for which Firm was Responsible:				
2000	\$400K (fee) 100%				

### PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:				
<p><b>Sedimentation Piloting &amp; Improvements at Carrollton Water Treatment Plant New Orleans, LA</b></p> <p>Sewerage &amp; Water Board of New Orleans 625 St. Joseph Street New Orleans, LA 70165</p> <p>Ron Spooner 504.865.0411</p>	<p>Adam Faschan, as Project Manager and Dan Gerrity, as Principal-in-Charge, assessed the performance for future regulatory compliance of the Algiers and Carrollton WTPs - a combined peak daily capacities of 280 mgd. They reviewed proposed capital improvements, studies and recommendations provided by previous consultants for over \$100M of capital improvements. They evaluated previous proposals for upgrades to existing sedimentation systems, filter improvements, chemical feed improvements, and disinfection requirement. Key recommendations included removing plate settlers and relocating lime addition from proposed sedimentation improvements to avoid potentially severe maintenance problems, eliminating a chlorine contact chamber for the Algiers WTP and reassessment and potential elimination of capital-intensive ozone disinfection improvements. The evaluation also included developing risk management plans for both facilities. Upon completion of the evaluation a report was issued detailing the capital improvement recommendations and an implementation schedule.</p>				
Completion Date (Actual or estimated):	Estimated Cost:				
	<table> <tr> <th style="text-align: center;">Entire Project:</th><th style="text-align: center;">Work for which Firm was Responsible:</th></tr> <tr> <td style="text-align: center;">2002</td><td style="text-align: center;">\$100K (fee) 100%</td></tr> </table>	Entire Project:	Work for which Firm was Responsible:	2002	\$100K (fee) 100%
Entire Project:	Work for which Firm was Responsible:				
2002	\$100K (fee) 100%				



## TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
<p><b>Disinfection Upgrades Algiers and Carrollton Water Purification Plants New Orleans, LA</b></p> <p>Sewerage &amp; Water Board of New Orleans 625 St. Joseph Street New Orleans, LA 70165</p> <p>Ron Spooner 504.865.0411</p>	<p>Adam Faschan, as Project Manager and Dan Gerrity, as Principal-in-Charge, assessed the performance for future regulatory compliance of the Algiers and Carrollton WTPs - a combined peak daily capacities of 280 mgd. They reviewed proposed capital improvements, studies and recommendations provided by previous consultants for over \$100M of capital improvements. They evaluated previous proposals for upgrades to existing sedimentation systems, filter improvements, chemical feed improvements, and disinfection requirement. Key recommendations included removing plate settlers and relocating lime addition from proposed sedimentation improvements to avoid potentially severe maintenance problems, eliminating a chlorine contact chamber for the Algiers WTP and reassessment and potential elimination of capital-intensive ozone disinfection improvements. The evaluation also included developing risk management plans for both facilities. Upon completion of the evaluation a report was issued detailing the capital improvement recommendations and an implementation schedule.</p>	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2013	\$1.8M	100%

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p><b>Hurricane Katrina Water Treatment Plant Repairs St. Bernard Parish, LA</b></p> <p>St. Bernard Parish 1125 E. St. Bernard Hwy. Chalmette, LA 70043</p> <p>Hillary Nunez 504.278.4317</p>	<p>Adam Faschan, as Project Manager and Dan Gerrity, as Principal-in-Charge, assessed the performance for future regulatory compliance of the Algiers and Carrollton WTPs - a combined peak daily capacities of 280 mgd. They reviewed proposed capital improvements, studies and recommendations provided by previous consultants for over \$100M of capital improvements. They evaluated previous proposals for upgrades to existing sedimentation systems, filter improvements, chemical feed improvements, and disinfection requirement. Key recommendations included removing plate settlers and relocating lime addition from proposed sedimentation improvements to avoid potentially severe maintenance problems, eliminating a chlorine contact chamber for the Algiers WTP and reassessment and potential elimination of capital-intensive ozone disinfection improvements. The evaluation also included developing risk management plans for both facilities. Upon completion of the evaluation a report was issued detailing the capital improvement recommendations and an implementation schedule.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2012	\$12M	100%

## TEC Professional Services Questionnaire

<b>PROJECT NO. 5</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<p><b>Sewer &amp; Water System Repairs Plaquemines Parish, LA</b></p> <p style="text-align: center;">Plaquemines Parish 8056 Highway 23, Suite 200 Belle Chasse, LA 70037</p> <p style="text-align: center;">Ken Dugas 504.297-5343</p>	<p>ARDURRA's Adam Faschan and Steve Price were responsible for management, planning, design, hazard mitigation and construction oversight of various facilities damaged by Hurricane Katrina. The program included 54 sewer lift station repairs in the Port Sulphur and Boothville service areas; Diamond water booster pump station; Port Sulfur WWTP; Boothville WWTP; and the Boothville WTP. A major portion of this work included the development of a scope of work for Hazard Mitigation Program at the facilities to prevent similar damage in the future. The team was provided copies of the FEMA Project Worksheets (PWs) for each facility that was used to document the required repair costs and establish the eligible reimbursement amount by FEMA. Through in-depth review of damaged facilities, the team identified additional Hazard Mitigation Program work that was accepted by FEMA to be included in the projects. Repairs included the removal and replacement of damaged equipment and redesign and retrofit of equipment that were considered obsolete or no longer met code. Hazard mitigation for the lift stations included the design of raised platforms to house the control panels for the lift stations.</p>	
<b>Completion Date (Actual or estimated):</b>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
2011	\$815K (fee)	100%

<b>PROJECT NO. 6</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<p><b>Carrollton Water Purification Plant Filter Upgrades New Orleans, LA</b></p> <p style="text-align: center;">Sewerage &amp; Water Board of New Orleans 625 St. Joseph Street New Orleans, LA 70165</p> <p style="text-align: center;">Ron Spooner 504-865-0411</p>	<p>Adam Faschan, Dan Gerrity and Chris Munson served as senior technical advisor, principal in charge and design engineer, respectively, for the filter pilot study and preliminary design of filter upgrades at the Carrollton WPP. The filter pilot study consisted of an eight-week pilot including oversight of the daily pilot plant operations along with the collection and analysis of head loss, turbidity, and particle count data. The preliminary design of filter upgrades included a new air scour system to improve filter backwashing, replacement of filter valves and valve actuators and the replacement of venturi meters. The preliminary design also included analysis of filter operations and provided recommend- dations to improve filter performance and backwash procedures.</p>	
<b>Completion Date (Actual or estimated):</b>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
Delayed due to funding constraints	\$120K (fee)	100%

## TEC Professional Services Questionnaire

<b>PROJECT NO. 7</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<p><b>Annual Contract for Replacement or Repair of Waterlines Jefferson Parish, LA</b></p> <p>Jefferson Parish Dept. of Public Works 1221 Elmwood Park Blvd., Suite 904 Jefferson, LA 70123</p> <p>Neil Schneider 504.349.5800</p>	<p>ARDURRA was responsible for development of specifications for annual maintenance of Parish waterlines.</p>	
<b>Completion Date (Actual or estimated):</b>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
1998	N/A Annual Contract	100%

<b>PROJECT NO. 8</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<p><b>Drainage Capital Improvement Program, SELA Program Jefferson Parish</b></p> <p>Jefferson Parish Department of Public Works 1221 Elmwood Park Blvd. Suite 904 Jefferson, LA 70123</p> <p>Neil Schneider 504.349.5800</p>	<p>ARDURRA furnished program management services for this \$900M drainage CIP. Responsibilities include coordination of all funding, design, and construction efforts with the Parish and USACE. Work includes oversight and review of designs completed by other engineering consulting firms; resolving conflicts between Parish and USACE standards; communicating with utility owners; finalizing utility legal agreements; assisting with property acquisition; development of short and long term forecasts; coordinating PR efforts related to the CIP to affected residents; and assisting USACE on daily basis to resolve problems during construction to include technical design, conflicting utilities and coordination with Parish and state agencies.</p>	
<b>Completion Date (Actual or estimated):</b>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
2015	\$325K (fee)	100%

## TEC Professional Services Questionnaire

<b>PROJECT NO. 9</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<p style="text-align: center;"><b>Jefferson Parish W. Esplanade Avenue Crossing of Elmwood Canal Jefferson Parish, LA</b></p> <p>U.S. Army Corps of Engineers New Orleans District P. O. Box 60267 New Orleans, LA 70160</p> <p style="text-align: center;">504-862-1799</p>	<p>ARDURRA prepared a design report followed by design, specifications, and engineering during construction services for bridge demolition and replacement as part of the USACE SELA program. The work includes demolition of two bridges, channel excavation and paving in Elmwood Canal and Canal No 2, temporary detouring of traffic, new bridges, new culvert, and roadway paving. The bridge replacements contain two 12-foot vehicular lanes with four-foot pedestrian sidewalks with curbs. ARDURRA was also responsible for ROW drawings and disposition of all utility relocations required for construction.</p>	
<b>Completion Date (Actual or estimated):</b>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
2011	\$13.75M	100%

<b>PROJECT NO. 10</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<p style="text-align: center;"><b>Jefferson Parish Sewer Capital Improvement Program Jefferson Parish, LA</b></p> <p>Jefferson Parish Dept. of Public Works 1221 Elmwood Park Blvd., Suite 904 Jefferson, LA 70123</p> <p style="text-align: center;">Neil Schneider 504.349.5800</p>	<p>ARDURRA furnished program management services as well as civil/environmental, hydraulic, mechanical, and structural engineering services for this sewer CIP from 1996 to 2006. Work included design firm supervision, construction scheduling and oversight for 90+ projects on the east and west bank. Projects included: sewer studies, sewerage collection system improvements, repairs to the collection system, WWTP improvements and construction of new sewer pumping stations. ARDURRA developed design consultant project scopes and contracts; managed master design and construction schedules; performed design review; construction oversight; managing design and construction for \$500M parish-wide I&amp;I management plan; managed master plan for regionalization of future sewage pumping stations and consolidation of existing redundant sewage pumping stations for the westbank; managed design and construction of \$14M, 5 mgd expansion to the Marrero WWTP; and coordinated with design consultants, various Parish departments as well as local, state and federal agencies.</p>	
<b>Completion Date (Actual or estimated):</b>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
2007	N/A	100%

### TEC Professional Services Questionnaire

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

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



## TEC Professional Services Questionnaire

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

### **ABOUT ARDURRA GROUP, INC.**

Headquartered in Metairie, Ardurra has been providing engineering services throughout Louisiana since 1987. The firm has developed an expertise in civil works projects - specifically drainage, flood control, sewer, water, wastewater, and streets for local public agencies. In this regard, Ardurra's staff of over 350 professional and technical personnel have completed in excess of \$2B in assessment, design, development of O&M manuals, construction management and program management of related facilities in the region.

### **1. PROFESSIONAL TRAINING & EXPERIENCE**

Ardurra has carefully crafted a team of seasoned professionals with the experience and capabilities to lead a successful project. Proposed personnel have been extensively involved in the hydraulic modeling of numerous drainage basins in Jefferson and Orleans Parishes. Notable experience includes hydraulic design of the Harahan Pump to the River project involving pumping 1,200 cfs through over 8,700 LF of triple pressure pipes, hydraulic design for City of New Orleans master drainage plan, and urban flood control projects for Jefferson Parish involving feasibility studies for canal and roadway drainage. Key personnel:

#### ***Gerald Preau, PE, Senior Civil Engineer***

- 43 years of experience in civil engineering planning, design, and construction
- worked or S&WB for 15 years overseeing all aspects of drainage, sewerage, and water projects
- program manager for Sewerage & Water Board (S&WB) of New Orleans SELA and SSERP, two of the largest S&WB programs prior to Hurricane Katrina

#### ***Adam Faschan, PhD, PE, Senior Civil & Environmental Engineer***

- 36 years of experience in assessment and design of drainage, water, sewer, and wastewater treatment facilities
- held senior technical and oversight roles for infrastructure design projects at the largest water and wastewater treatment facilities in LA and MS
- implemented hazard mitigation for a variety of water and wastewater infrastructure
- led third party damage assessments of the S&WB's entire infrastructure post-Katrina

#### ***David Dodgen, PE, Senior Civil Engineer***

- 34 years of experience in drainage, water, sewer, and street planning, design, and construction oversight
- key role in drainage projects in Jefferson Parish and improvements to Bonnabel Canal
- technical advisor to Ascension Parish Planning Commission for drainage projects
- planned and designed enlargement of all bayous without the Marvin Braud Pumping Station for the East Ascension Consolidated Drainage Board

#### ***Mark Arnold, PE, Senior Mechanical Engineer***

- 37 years of experience in assessment and design of local drainage, water, and wastewater facilities
- served as program manager for the Jefferson Parish Sewer CIP
- managed the design and construction of Jefferson Parish's \$500M I&I plan, \$14M five MGD expansion to Marrero WWTP, new \$5.5M gravity sewer and water system along the Harvey Canal

## TEC Professional Services Questionnaire

Industrial area, and prepared a master plan for consolidation of sewage pumping stations on Westbank

- employed by S&WB for 17 years where he managed mechanical engineering department

### ***Billy Blackwell, Construction Manager***

- 59 years of construction related experience and cost estimating experience in southeast Louisiana
- Extensive experience in the construction of roadway, water, sewer, and drainage projects in Jefferson Parish

## EDUCATION & EXPERTISE OF PROPOSED STAFF

Name	Years of Exp	Education	Expertise	Jefferson Parish Experience
Ann Springston Shires, PE	37	BS in Civil Engineering	Program Management, Water, Sewer, Drainage	Yes
Joseph Becker, PE, CSM	32	BS in Civil Engineering	Program Management, Water, WW, Sewer, Hazard Mitigation	Yes
Adam Faschan, PhD, PE	34	PhD, MS & BS in Civil Engineering	Water, WW, Hazard Mitigation	Yes
Gerald Preau, PE	41	MS & BS in Civil Engineering	Roadway, Drainage, Sewer, Water	Yes
David Dodgen, PE	32	BS in Civil Engineering	Drainage, Water, Sewer, WW	Yes
Mark Arnold, PE	35	BS in Mechanical Engineering	Drainage, Water, Sewer, Pump Stations, Process Engineering	Yes
Bhuban Ghimire, PhD, PE	20	PhD, MS & BS in Civil Engineering	Hydrology, Hydraulics, Modeling	Yes
Ryan Ruiz	22	AutoCAD 1, 2, 3 & 12 Upgrade	Roadway, Drainage, Sewer, Water, WW, Streets, Inspection	Yes
Billy Blackwell	57	Multiple CM/I Certifications	Roadway, Construction, O&M	Yes

## TEC Professional Services Questionnaire

### 2. CAPACITY FOR TIMELY COMPLETION OF NEWLY ASSIGNED WORK

Ardurra's professional, technical, construction and support personnel proposed for Jefferson Parish projects are currently available and mobilized to begin work. Ardurra has multiple contracts that are in the final stages of completion, which makes available several professional and construction personnel. Ardurra's significant newly assigned work includes disaster recovery work, which draws upon a different skillset than required for Jefferson Parish routine engineering services. Ardurra's track record with Jefferson Parish projects is a testament to our project managers' and professional staff's ability to deliver projects on time and within budget.

### 3. LOCATION OF PRINCIPAL OFFICE WHERE WORK WILL BE PERFORMED

All work will be completed in Ardurra's office located at **3012 26th Street, Metairie Louisiana 70002, in Jefferson Parish.**

### 4. ADVERSARIAL LEGAL PROCEEDINGS BETWEEN THE PARISH & THE FIRM

Ardurra is not involved in any current, or previous legal proceedings with Jefferson Parish.

### 5. PRIOR SUCCESSFUL COMPLETION OF PROJECTS OF THE TYPE AND NATURE OF ROUTINE ENGINEERING SERVICES

Ardurra has provided program management services to Jefferson Parish for the \$52M CIP, which includes routine engineering services related to drainage and flood control. These services were expanded include program management for the federally funded and cost shared Southeast Louisiana Flood Control Program. Since 1997 the program has invested \$500M in drainage improvements for which Ardurra has led the interface with the U. S. Army Corps of Engineers (USACE). Other routine engineering services contracts and similar projects include:

Project	Description	Client Reference
USACE New Orleans District Hurricane Katrina Flood Protection Projects	Design of floodwalls along Inner Harbor Navigation Canal, design of control structures for Bayous Bienvenue and Dupre, and design of temporary closure structures at several outfall canals	Chris Dunn, 504.862.1799
USACE New Orleans District West Esplanade Ave Crossing of Elmwood Canal	Preliminary and final design as well as construction supervision of this canal crossing	Chris Dunn, 504.862.1799
Ascension Parish \$63M Sewer Capital Program	Part of program management team, design, and construction oversight for WWTP improvements	Bill Roux, 225.450.1340
South Florida Water Management District S-5A Pump Station Refurbishment	Design report for feasibility of modernization of existing horizontal drainage pumps and their driver machinery and automation of station operations at this pumping station. Design and construction oversight for refurbishment of pumping station	Richard Virgil, 561.682.6759

## TEC Professional Services Questionnaire

### 6. SIZE OF FIRM

Ardurra has ample manpower, professional qualifications, and direct and relevant experience to furnish Jefferson Parish with routine engineering tasks to include project evaluation, design, drafting of technical plans, development of technical specifications and construction administration. Nationwide, Ardurra has 900+ staff in 48 offices which includes the following staff by discipline:

Discipline	# Staff
Administration, Accounting, CADD, Drafting, Designers, IT, HR	204
Civil Engineers	194
Structural Engineers	12
Environmental Engineers	18
Mechanical Engineers	2
Engineering Interns & Engineers in Training	76
Project Managers	81
Environmental Professionals & Scientists	21
Ecologists	4
Landscape Architects	6
Land Surveyors	95
Grant Fund / Disaster Recovery Specialists	28
Construction Managers & Inspectors	104
Other	82
<b>Total</b>	<b>927</b>

### 7. PAST PERFORMANCE ON PARISH CONTRACTS

For 44 years Ardurra has been providing engineering services within the metropolitan area to include multiple Parishes, the Sewerage & Water Board of New Orleans, and the City of New Orleans Public Works Department. Ardurra has successfully completed more than 20 projects for Jefferson Parish and is currently furnishing program management services to for Jefferson Parish's Drainage \$1B CIP/SELA program. Other recent Jefferson Parish work includes drainage improvements to Bonnabel Canal and Hoey's Pump to the River Economic Study. In each case, Ardurra completed projects on time, without cost overruns, and without design inadequacies. Ardurra has delivered multiple projects efficiently and within expectations - Ardurra personnel have not been held at fault for errors or omissions on previous projects. Some of Ardurra's Jefferson Parish projects include:

- Power Boulevard Phase I West Esplanade Avenue to Vintage Drive
- Power Boulevard Phase II I-10 to West Esplanade Avenue
- West Esplanade Avenue at Houma Boulevard
- Drainage Improvements Suburban Canal Veterans Blvd. to West Esplanade Avenue
- Drainage Improvements Huey P. Long Bridge Westbank Traffic Circle
- Cousins Pumping Station Addition

### **TEC Professional Services Questionnaire**

- Intersection Improvements Clearview Parkway/West Metairie Avenue
- Manhattan Boulevard Phase I Gretna Blvd. to Lapalco Blvd.
- Manhattan Boulevard Phase II Westbank Expwy to Gretna Blvd.

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

**Signature:** Joseph R. Becker **Print Name:** Joseph R. Becker, PE

**Title:** Client Service Manager **Date:** March 30, 2022







[www.ardurra.com](http://www.ardurra.com)