


7. Brief résumé of key persons, specialists, and individual consultants anticipated for this project.	
<p>a. Name & Title</p> <p>Sid Trouard, P.E. Senior Project Manager</p>	<p>review of architectural/engineering invoices and final design documents, review/approval of bid tabulations and recommendations, oversight of monthly construction progress meetings, and processing of pay requests and change orders. While serving as a Program Manager, Mr. Trouard was responsible for nearly \$5 M in work previously deemed ineligible for reimbursement by FEMA as eligible for reimbursement, including coating of dry cans, wet wells, installation of CAMO (Control Assembly Mitigation Option) panels, and installation of rails and hatches in submersible stations.</p> <p>Mr. Trouard’s duties also included coordination with FEMA and State agency hurricane recovery officials, scope alignment reviews of FEMA project worksheets, identification and determination of potentially uncaptured damages, oversight and preparation, and packaging of documentation for Project Worksheet versions, and development and implementation of hazard mitigation proposals for review and approval by FEMA.</p> <p>FEMA Hurricane Recovery and Restoration – Biloxi Infrastructure Repair, Biloxi, Mississippi. A team consisting of HDCA and Thompson Engineering was recently selected to provide administrative and technical services for FEMA related projects in the City of Biloxi, Mississippi. Projects involved in the program included various types of roadway, water distribution, sewage collection and storm drainage systems; and sewer lift stations. The Infrastructure Repair Program includes all projects necessary for the repair and/or replacement of approximately:</p> <ul style="list-style-type: none"> • 426,000 linear feet of sewer main, • 485,000 linear feet of water main, • 48 sewer lift stations, • 320,000 linear feet of storm drainage, and • 100 miles of street paving. <p>Consultant services include, but are not limited to, preparation of standard front end bidding documents and graphical standards; coordinating with utility companies and permitting agencies; preparation of permits as required; developing standard technical specifications; completing the conceptual design and bid documentation for repair or replacement projects; completing final design and bid documentation; reviewing and approving of contractor invoices; preparation and/or reviewing and approving bid tabulations and recommendations; overseeing monthly construction progress meetings, pay requests and periodic change orders; and providing limited resident project representative services including the submittal of necessary as-builts. Other duties include assisting the Program Manager, as required, with activities such as coordination with FEMA and State agency hurricane recovery officials; performing scoping reviews of FEMA Project Worksheets; identification and eligibility determinations of potentially uncaptured damages; oversight, preparation and packaging of documentation for Project Worksheet versions; and development and implementation of hazard mitigation proposals for review and approval by FEMA.</p>
<p>b. Project Assignment</p> <p>Project Manager/Engineering/Design Services</p>	
<p>c. Name of firm with which associated</p> 	
<p>d. Years Experience</p> <p>With this Firm3 (2008) With other firms.....13 (1995)</p>	
<p>e. Education (Degree/Year/Specialization)</p> <p>B.S., 1995, Mechanical Engineering, Auburn University</p>	
<p>f. Active Registration (Year First Registered/Discipline)</p> <p>2002, Civil Engineer, Louisiana, No. 30412 2002, Civil Engineer, Alabama, No. 24753</p>	
<p>g. Other experience & qualifications relevant to the proposed project</p> <p>Mr. Trouard, a Senior Project /Client Manager for HDCA, has over a decade of experience in the design and management of civil and mechanical engineering projects. In this capacity, he is involved in a wide range of assignments in support of active engineering projects. His education and training have concentrated on engineering design, hydraulics, and drainage, water and wastewater transport and pumping. He has particular expertise in the design, permitting, and construction of wastewater collection, conveyance, and storage systems. Additionally, he has extensive experience in the review and approval of developers’ plans for sewerage systems and with the inspection of the systems as they are installed.</p> <p>HAZARD MITIGATION GRANT PROGRAMS AND FEMA HURRICANE RECOVERY AND RESTORATION PROJECTS</p> <p>Hurricane Recovery Administrative & Program Management, St. Bernard Parish, Louisiana. Providing administrative and technical services for Mr. Trouard served as a Program Manager and provided administrative and technical services for FEMA-funded projects in St. Bernard Parish. Mr. Trouard’s duties and involvement specifically included the oversight of the rehabilitation of the 92 sewer lift stations damaged by Hurricane Katrina. Mr. Trouard’s responsibilities included general oversight of technical aspects of the program, coordination with Parish personnel,</p>	

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FEMA Hurricane Recovery and Restoration - Sewer Lift Station Rehabilitation Package No. 7, St. Bernard Parish, Louisiana Responsible for the design, bidding, and construction administration for the rehabilitation of 11 sewer lift stations damaged by Hurricane Katrina including the replacement of pumps and control panels along with the implementation of various Hazard Mitigation measures. The construction cost of this project was \$1.8 M.

Emergency Damage Assessment of Wastewater Infrastructure, City of Picayune, Mississippi. Immediately following the devastation of Hurricane Katrina in August 2005, conducted comprehensive assessment of impacts of the storm to the City's wastewater infrastructure. Performed detailed assessment of 52 pump stations as well as the City's wastewater treatment plant, obtaining written and photographic records in the field. The emergency assessment was conducted per FEMA requirements to facilitate Federal cost reimbursement.

Rehabilitation of North & South Florrisant Drainage Pump Stations, St. Bernard Parish, Louisiana. Responsible for the design and determination of hazard mitigation measures including an emergency generator for drainage pump stations damaged by Hurricane Katrina. The North Florrisant DPS has a capacity of 25 cfs and the South Florrisant DPS has a capacity of 68 cfs. Permanent generators were installed at both locations. The firm was also responsible for reviewing the associated FEMA Project Worksheets for scope and FEMA funding eligibility and preparation of the final bid documentation. Mr. Trouard served as Project Manager for the project, responsible for oversight of construction phase services.

Sewer Lift Station Rehabilitation Package No. 11, St. Bernard Parish Government, St. Bernard Parish, Louisiana. Responsible for the design, bidding, and construction administration for the rehabilitation of 12 sewer lift stations damaged by Hurricane Katrina including the replacement of pumps and control panels along with the implementation of various Hazard Mitigation measures. The design of this project was completed within a two week period and was successfully bid and awarded (\$2.2 M construction cost). Reviewed the associated FEMA Project Worksheets for scope and FEMA funding eligibility and preparation of the final bid documentation. Mr. Trouard served as Project Engineer/Project Manager for the project.

Damage Assessment and Planning for Wastewater Infrastructure, Jefferson Parish, Louisiana. Assessment of damages to wastewater facilities due to Hurricanes Katrina and Rita. Work involved field inspection of wastewater pump stations and their ancillary features (superstructure, control panel, emergency generator, etc.) on an emergency basis to be utilized for formulation of short term and long term planning against impacts of natural disasters. The emergency assessment was conducted per FEMA requirements to facilitate Federal cost reimbursement.

LCDBG-FUNDED PROJECTS

Plaquemines Parish Master Plan, Plaquemines Parish, Louisiana. Services include development of a new master plan for Plaquemines Parish. The plan will include guidance related to roads

(state and parish), drainage, sewerage, pump stations, utilities services, and development for the foreseeable future. HDCA is serving as a sub-consultant, providing services related to utilities and mapping. The development of this new Master Plan is funded by CDBG grants.

Yscloskey Ice House, St. Bernard Parish, Louisiana. HDCA has been selected to provide engineering and architectural services for the renovation/reconstruction of the old Yscloskey Ice House. Services include development of a cost opinion for renovation of the existing ice house and construction of a new ice house. The project is funded through Fisheries Improvements CDBG grants. Mr. Trouard served as Technical Advisor.

EDA-FUNDED PROJECTS

Jean Lafitte Sewer Force Main Program Management, St. Bernard Parish, Louisiana. Mr. Trouard served as Program Manager for the construction phase of this EDA-funded project. His duties included review of pay requests and general technical oversight of construction in accordance with EDA regulations.

WASTEWATER COLLECTION AND TREATMENT

Sewer Lift Station L12-3 Rehabilitation, Jefferson Parish, Louisiana. HDCA was recently selected to provide engineering analysis and design of rehabilitation measures and/or alternatives for flow re-routing or a new lift station for this lift station located on the west bank of Jefferson Parish. HDCA will provide preliminary design alternatives and design for the chosen alternative for this fast-track, high priority sewer lift station project.

Terrebonne Parish Lift Station Rehabilitation (Bobbie Lou, Brittany, and Elysian), Terrebonne Parish, Louisiana. HDCA has been selected by Terrebonne Parish Consolidated Government (TPCG) to provide design services related to the complete reconstruction of three sewer lift stations in Houma. HDCA is preparing preliminary design report, as well as plans and specifications for the project, which includes the conversion of these self-priming stations to submersible stations. Mr. Trouard is serving as Project Manager.

New Sewer Lift Stations, Town of Lecompte, Louisiana. HDCA provided design services for two new submersible pump stations to be connected to pre-installed force mains by the Town of Lecompte. Unique to this project was the long force main run through a small diameter force main (over one mile) leaving one station which required large pumps to successfully convey wastewater through the force main. The two stations were designed for a capacity of 140 and 160 gallons per minute, respectively. Services included selection of pumps and development of site plans. Mr. Trouard served as Project Manager.

Wastewater Collection System Hydraulic Modeling, Jefferson Parish, Louisiana. Conducted field survey of sewer manholes and pump stations utilizing GPS equipment (GPS System 500) and SKI-Pro software (both from Leica Geosystems), data entry into database and management of database (MS Access) to create and maintain Jefferson Parish's intricate wastewater collection

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system network in ArcGIS software. He was involved in the mapping of the system's features, and analyzed results of sewer hydraulic modeling to develop alternative solution scenarios for further modeling and optimization.

Sewer Relocation Associated with the Huey P. Long Bridge Widening, Jefferson Parish, Louisiana. Developed plans and specifications for the relocation of the sanitary sewer system on both the East Bank and West Bank of the Mississippi River. Approximately forty manholes and several thousand feet of gravity sewer lines were relocated due to the new locations of the expanded highway. The project also included the design of a new sewer pump station with three submersible pumps each having a capacity of 2500 gpm and the accompanying 1900 lf of 16" force main. The construction cost for the sewer portion of this project was \$2 M.

Infiltration/Inflow Sewerage Management Program, Jefferson Parish, Louisiana. Analyzed the flow monitoring and rainfall data to determine wet-to-dry flow ratios, amounts of rain derived infiltration and inflow, and problem areas throughout the collection system. Developed alternatives for upgrades and rehabilitation to the sewerage system and associated cost estimates.

FY'06 Sewer Pump Station Rehabilitation Project, Slidell, Louisiana. Developed plans and specifications for the rehabilitation of eight sewer lift stations. Repairs included the replacement of pumps, valves, control panels, and other miscellaneous equipment.

Sewerage Improvements to the Kelly, Todd, and Ricouard Street Area, St. Bernard Parish, Louisiana. Designed the lift station, the accompanying force main, and over 6000 feet of gravity sewer for the area. Assembled the contract document and project specifications, and provided construction management services.

Improvements to Sewerage Components, Lift Stations, and Force Mains, St. Charles Parish, Louisiana. Mr. Trouard calculated the required capacity and developed site plans for three new lift stations. He was responsible for the design of the force mains, and assembled the contract document and project specifications.

St. Bernard Parish Oxidation Pond, St. Bernard Parish, Louisiana. Developed a pond survey plan including establishing temporary benchmarks as well as staking of gridlines. Managed the hydrologic profile and dissolved oxygen profile of the pond.

Wastewater Treatment Consolidation Project, City of Kenner Department of Public Works, Kenner, Louisiana. Design of mechanical, process, electrical, and instrumentation systems required to expand the City of Kenner's Wastewater Treatment Plant No. 3A to an Average Daily Flow capacity of 13.83 million gallons per day from its then-current average daily flow capacity of 4.95 million gallons per day. The project cost approximately \$9 M. After completion, the City transferred flow from two smaller plants to the expanded plant and, therefore, consolidated wastewater treatment within the city.

Infiltration/Inflow Sewerage Management Program, St. Charles Parish, Louisiana. Mr. Trouard analyzed the flow monitoring and rainfall data to determine wet-to-dry flow ratios, amounts of rain derived I/I, and problem areas throughout the system. He developed alternatives for upgrades and rehab to the sewerage system and all associated cost estimates.

Infiltration/Inflow Management Program, Luling Collection System, St. Charles Parish, Louisiana. Developed flow monitoring program to pinpoint I/I sources, and performed pump tests on lift stations to determine capacity. The project also included the acquisition of field data for hundreds of manholes and lift stations using GPS. Mr. Trouard further developed hydraulic model of system, and made recommendations for improvements.

Wastewater Collection System Modeling, City of Picayune, Mississippi. Developed a map of the collection system using ArcView software based on as-builts and data acquired with GPS equipment. Performed inspections and capacity tests on numerous lift stations. Created a hydraulic model of the collection system using SewerCAD software and provided specific recommendations for the required improvements based on the modeling.

Lecompte Wastewater Treatment Plant Repairs, Town of Lecompte, Louisiana. Renovation of treatment pond to include an emergency generator, floating covers, trickling filters, and polishing reactors to meet more stringent discharge requirements. Also included Infiltration/Inflow work to reduce loads on pond. Project funded through USDA Rural Utilities Service Grants.

DRAINAGE

Lake Cataouatche Hydraulic Study, St. Charles Parish, Louisiana. Mr. Trouard oversaw the preparation of a hydraulic analysis of a potential construction alternative for a USACE levee contractor. The analysis centered around substituting open channels for 54 in. diameter pressurized conduits.

Mechanical Bar Screen Cleaners & Platform Project, City of Slidell, Louisiana. HDCA was recently selected to perform design engineering and construction administration for the installation of automated bar screen cleaners at the City Barn Drainage Pump Station. HDCA will be responsible for the mechanical and electrical design of the cleaners, as well as foundations for the equipment and the construction of a concrete work deck. This hazard mitigation project is funded by HMGP funds.

City Barn Floodgate Replacement Project, City of Slidell, Louisiana. The two-phase project, which involves the replacement of three 72 in x 72 in cast iron flood gates, consists of a procurement phase and installation phase. HDCA prepared all relevant documents. The installation phase consists of dewatering the site, installation of new cast-iron slide gate assembly. The project also included electrical plans and specifications for installation of a diesel-fueled emergency generator.

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City of Tallulah Drainage Redirection Project (Harlem Street Area to Brushy Bayou), City of Tallulah, Louisiana. HDCA is serving as the consulting engineer for the design of drainage improvements to the Harlem Street area of Tallulah, an area suffering from repetitive flooding. As part of this FEMA-HMGP funded project, HDCA has prepared a hydrology and hydraulics study and is responsible for preparation of preliminary and final design of a new drainage ditch to redirect drainage in the area beneath US Highway 80 to Brushy Bayou. Based on the results of the H&H Study, HDCA is assisting the client in seeking additional funding for further improvements. Mr. Trouard is serving as Project Manager/Technical Advisor.

USACE W912-P8-08-D-0062 National Levee Safety Program (Periodic Levee Inspections) Caernarvon to Phoenix, Plaquemines Parish, Louisiana. The SBSA Group has been selected to provide levee inspection services to the New Orleans District of the United States Army Corps of Engineers. This task order involves a visual inspection of levees, floodwalls, pump stations, relief wells, flood control structures, and flood gates contained within levee systems as part of the National Levee Safety Program Periodic Inspections. This particular task order includes levee reaches in Orleans Parish, St. Bernard Parish, and on the east bank of Plaquemines Parish.

USACE W912-P8-08-D-0062, National Levee Safety Program (Periodic Levee Inspections) Venice to St. Jude, Plaquemines Parish, Louisiana. The SBSA Group has been selected to provide levee inspection services to the New Orleans District of the United States Army Corps of Engineers. This task order involves a visual inspection of levees, floodwalls, pump stations, relief wells, flood control structures, and flood gates contained within levee systems as part of the National Levee Safety Program Periodic Inspections. This particular task order includes levee reaches on the west bank of Plaquemines Parish, and includes inspection of levees, floodwalls, nine drainage pump stations, and the Empire Flood Gate. Mr. Trouard was the Mechanical Engineer on the team that inspected all of the pump stations, including the generators.

Soniat Canal Construction Management (West Napoleon Avenue to Veterans Memorial Boulevard), Jefferson Parish, Louisiana. Responsible for quality control of the construction project and supervision of the resident project representative, reviewing submittals and shop drawings, evaluating testing results, handling construction issues, and processing invoices. The project involved drainage improvements to increase the capacity of Soniat Canal from West Napoleon Avenue to Veterans Memorial Boulevard. The canal capacity was increased from 3,000 to 5,200 cfs by constructing a u-shaped concrete flume (103 ft wide by 2,900 ft in long), utility relocations, and sheet piling transitions. The joint Jefferson Parish/Federal Government project was part of the Southeastern Louisiana Urban Flood Control Prevention (SELA) program. The project construction cost was \$20 M. Mr. Trouard served as Project Engineer.

Soniat Canal Construction Management (Veterans Memorial Boulevard Crossing), Jefferson Parish, Louisiana. Responsible for quality control of the construction project and supervision of the resident project representative, reviewing submittals and shop drawings, evaluating testing results, handling construction issues, and processing invoices. The project involved drainage

improvements to increase the capacity of Soniat Canal at the Veterans Memorial Boulevard crossing. The canal capacity was increased from 3,000 to 5,200 cfs by constructing a u-shaped concrete flume, utility relocations, three box culverts (each 18 ft H x 36 ft W) and sheet piling transitions. The joint Jefferson Parish/Federal Government project was part of the Southeastern Louisiana Urban Flood Control Prevention (SELA) program. The project construction cost was \$5.2 M. Mr. Trouard served as Project Engineer.

Soniat Canal Construction Management (West Napoleon Crossing), Jefferson Parish, Louisiana. Responsible for quality control of the construction project and supervision of the resident project representative, reviewing submittals and shop drawings, evaluating testing results, handling construction issues, and processing invoices. The project involved drainage improvements to increase the capacity of Soniat Canal at the West Napoleon crossing. The canal capacity was increased from 3,000 to 5,200 cfs by constructing a u-shaped concrete flume, utility relocations, West Napoleon Avenue vehicular bridges with three box culverts (each 18' H x 36'W) and sheet piling transitions. The joint Jefferson Parish/Federal Government project was part of the Southeastern Louisiana Urban Flood Control Prevention (SELA) program. The project construction cost was \$5.5 M. Mr. Trouard served as Project Engineer.

Larose to Golden Meadow Hurricane Protection, U.S. Army Corps of Engineers, New Orleans District, Louisiana. HDCA served as an equity partner of a joint venture corporation, The SBSA Group, Ltd., which was Prime Contractor for a USACE IDIQ contract. The SBSA Group was authorized to perform services involved in a USACE-assigned task order for a hurricane protection project, which was part of the Larose to Golden Meadow Hurricane Protection Project in LaFourche Parish; HDCA was responsible for project management and civil engineering tasks on portions of the issued task orders. The projects of interest included the Intracoastal Floodwall & Gate Structures, South Lafourche Crawfish Farm Pump Station and Floodwall, Pump Station #4, Loop T-Wall and Sheet pile Wall, Texaco Dock Floodwall & Gate Structure, Golden Meadow Pump Station, Floodwall & Gate Structure, Pump Station #1, and Pump Station #2 and Bason's Marina Access Road. Services included preparation of an Engineering Alternatives Report (EAR) for the selected sites; performing an analysis of existing structures; developing design alternatives and preliminary cost estimates for what is required to stabilize the protection at its existing elevation as well as to the authorized levels; review of existing documentation pertaining to the sites, and; providing detailed engineering and design (E&D) consisting of various design data as well as investigations and information for the EAR. The EAR included detailed geotechnical analysis and design and a structural analysis and design of the project's components for the existing and authorized elevations.

Schneider Canal Drainage Pump Station Rehabilitation, Slidell, Louisiana. Developed plans and specifications for repairs to the station. This FEMA funded project included repairs to the six pumps, installation of a new control panel, dewatering of the site, and temporary by-pass pumping. Total construction cost was \$2.2 M.

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Harahan Pump-to-the-River Project, Jefferson Parish, Louisiana. Engineering design for the Detailed Design Report phase. Features include a drainage pumping station (capacity of 1200 cfs), suction canal, discharge piping (three 84 in diameter parallel pipes), a reinforced concrete levee crossing, and a reinforced concrete discharge basin.

Kenner Drainage Study, City of Kenner, Louisiana. Analyzed existing drainage system and developed hydraulic model using PCSWMM software to locate areas prone to flooding. Recommended improvements for problem areas to alleviate flooding for a ten-year storm and provided opinions of probable construction cost.

Canal No. 17, Canal No. 7, and Parish Line Pump Station, Jefferson Parish, Louisiana. Project engineering services to collect required data to create a computerized hydraulic model (in HEC-RAS) of the Parish Line Pump Station service area. This model identified deficiencies in drainage infrastructure and needed improvements to drainage facilities from different storm scenarios (10, 50, & 100 year storm events.)

Soniat Canal (Veterans Memorial Blvd. to Canal No. 3), Jefferson Parish, Louisiana. The project involved drainage improvements to increase the capacity of Soniat Canal from Veterans Blvd. to Canal No. 3. For this project, Mr. Trouard designed a wider concrete canal in place of the existing earthen canal, so that the capacity was increased from 3,000 to 5,200 cfs in a 1,600 linear foot section, including a 103-foot-wide concrete flume and a modified trapezoidal section, utility relocation, Veterans Blvd. bridges, and sheet piling transitions. The joint Jefferson Parish/Federal Government project, part of the Southwestern Louisiana Flood Control Prevention (SELA) program, had a construction cost of \$24 M.

London Avenue Canal Storm Water Treatment Feasibility Study, Sewerage & Water Board of New Orleans, Louisiana. Developed method to determine the amount of floatables and debris that are currently in the canal. Managed installation and program operation.

WATER

St. Bernard Water Treatment Plant, St. Bernard Parish, Louisiana. Includes complete mechanical and electrical reconstruction and expansion of 12 million gallon per day (MGD) surface water treatment plant. HDCA is serving as a subcontractor to BKI and is responsible for site and drainage design. This project is funded by LCDBG Grants. Mr. Trouard is serving as Project Manager/Technical Advisor.

One Million Gallon Ground Storage Reservoir, Calera, Alabama. Designed the 117-foot tall reservoir and connecting water line, which included boring under I-65, to provide water for fire protection for the Calera North Industrial Park.

TRANSPORTATION

Seventh Street Resurfacing Project, City of Slidell, Louisiana. HDCA was selected to provide engineering services for the resurfacing of Seventh Street from Gause Boulevard to Fremaux Avenue. Services include preparation of budgetary analysis for various resurfacing alternatives and preparation of plans and specifications for the selected option. HDCA has provided technical support for funding negotiations and will also provide services related to drainage improvements.

US Highway 61 and Kansas City Southern Railway Bridges over the Comite River Diversion Canal; U.S. Army Corps of Engineers, New Orleans District – East Baton Rouge Parish, Louisiana. The SBSA Group, Ltd. (an HDCA Joint Venture Company) has been tasked with the design of two bridges along the proposed Comite River Diversion Canal. One bridge will provide a crossing for US Highway 61 over the canal and the other bridge will provide a crossing for the Kansas City Southern Railway over the canal. Both bridges will be located in northern East Baton Rouge Parish, Louisiana. HDCA is acting as the Joint Venture Task Order Manager. The project also includes the relocation of local roadways to tie into the new highway alignment, relocation of numerous utilities throughout the proposed corridor, installation of a temporary “shoofly” bypass track for the KCSRR and a temporary four-lane highway detour road for US 61 during construction.

Hickory Avenue (Relocated LA 3154), Jefferson Parish, Louisiana. Development of urban roadway construction plans and specifications for a one-mile segment of this minor arterial on the West Bank of New Orleans, Louisiana. Prepared drainage and geometric calculations in accordance with Louisiana DOTD design guidelines.

Wall Boulevard Rehabilitation, Jefferson Parish, Louisiana. Responsible for plans and specifications necessary to reconstruct a 4,000-ft. segment of minor arterial roadway. Involved the adjustment of grades, vertical curvature, and drainage inlets.

County Road 207 and Highway 78 Utility Relocation Project, Lincoln, Alabama. Project consisted of managing the design, preparation of plans and specifications, and overseeing the construction of over six miles of water and sewer lines.