November 7, 2019

REQUEST FOR QUALIFICATION STATEMENTS FOR ENGINEERING SERVICES FOR THE SOUTH SATSUMA DRAINAGE IMPROVEMENTS PROJECT

Infinity Engineering Consultants, LLC
4001 Division St., Metairie, LA 70002
504-304-0548
Federal Tax ID No. 20-0836083
Raoul V. Chauvin, III, P.E. – Principal
504-304-0548 (p), 504-355-0265 (f)
rchauvin@infinityec.com

Infinity Engineering Consultants, LLC

Request for Statements of Qualification
for
Engineering Services for the South Satsuma Drainage Improvements Project

Table of Contents

SECTION 1

Introduction

Infinity
Engineering Consultants, LLC

Infinity Engineering Consultants, LLC
504-304-0548 office | www.infinityec.com
Civil | Structural | Mechanical | Electrical | Marine | Transportation
4001 Division St., Metairie, LA 70002-3205

November 5, 2019

Ms. Heather Crain
Grant Coordinator
Livingston Parish Government Bldg.
20355 Government Blvd.
Livingston, LA 70754

Re: Request for Qualification Statements for Engineering Services for the South Satsuma Drainage Improvements Project

Ms. Crain:

With reference to the above stated project, **Infinity Engineering Consultants, LLC** is pleased to present our one (1) printed and one (1) electronic copy of our Statement of Qualifications for the Engineering Services for the South Satsuma Drainage Improvements Project.

To accomplish the requirements of the project, we have assembled a qualified team of professionals to perform all tasks specified. The design team of Infinity Engineering Consultants has more than 200 years of combined design and project management experience providing service to public and private entities.

In response to the Request for Qualifications, we offer this letter as **Item 1. Introduction**. Please find the following information corresponding to that requested in the Request for Qualifications.

a. **Infinity Engineering Consultants, LLC** understands that the Parish intends to enter into a contract for professional services for the complete H&H study, topographic surveys, environmental review and assessment, preliminary designs, data collection, final cost estimate, Phase 2 benefit cost analysis, adherence to DBE requirements, and project management for the South Satsuma Drainage Improvements Project. The project shall consist of designs to excavate the existing drainage canal at South Satsuma Road and provide rip-rap protection to prevent the burying of the pipes during flood events of the Colyell Creek tributary. Infinity has years of experience in engineering drainage solutions for local municipalities, from a $64M drainage study and pumping station expansion in Plaquemines Parish to simple, cost effective drainage solutions for roadway improvements. Infinity has included subconsultants **Quality Engineering and Surveying** to perform the Hydrologic and Hydraulic study and all necessary topographic surveys, and **Elos Environmental** to perform all environmental reviews and assessments. All members of our team have a great understanding of the needs of the project and the unique characteristics of providing engineering design services for similar projects in South Louisiana.
b. Infinity Engineering Consultants, LLC and the principal partners, William J. Thomassie and Raoul V. Chauvin, III, are all licensed to perform engineering services through the Louisiana Professional Engineering and Land Surveying Board.
    1. Infinity Engineering Consultants, LLC – LA No. EF.0003109 (2004)
    2. William J. Thomassie, P.E. (Principal) – Civil Engineering – LA No. 27421 (1997)
    3. Raoul V. Chauvin, III, P.E. (Principal) – Mechanical Engineering – LA No. 28272 (1999)
c. Neither the principal partners nor the staff of Infinity Engineering Consultants, LLC has engaged in any unethical practices within the last five years.
d. If awarded the contract, Infinity Engineering Consultants, LLC acknowledges the complete responsibility for the entire contract, including payment of any and all charges resulting from the contract.

e. Combined, Infinity's experience with multi-discipline projects of a similar scope throughout Southeast Louisiana puts us in a favorable position to qualify as the Prime Consultant for the South Satsuma Drainage Improvement Project. The diverse areas of expertise required for this project will be performed by our engineering staff in Metairie and/or local Louisiana-based team members.

   Our team has been strategically assembled to apply the invaluable lessons learned on similar projects such that the South Satsuma Drainage Improvement design services for Livingston Parish will realize the benefits of our experience. The Infinity team includes the following partners:

   Infinity Engineering Consultants, LLC:
   Project Management, Civil Engineering, Construction Management and Inspections

   Quality Engineering & Surveying:
   Hydrologic and Hydraulic Study; Topographic Surveying

   Elos Environmental
   Environmental Reviews and Assessments

f. The below signed Authorized Representative of Infinity Engineering Consultants, LLC is Principal Partner Raoul V. Chauvin, III, P.E.

If you have any questions or require additional information, please call me at (504) 304-0548.

Sincerely,

Infinity Engineering Consultants, LLC

Raoul Chauvin, P.E.
Principal Partner
rchauvin@infinityec.com

SECTION 2

Background and Experience

Infinity
Engineering Consultants, LLC

Background & Experience

A. **Infinity Engineering Consultants, LLC** was established as a limited liability company on March 4, 2004 by William J. Thomassie, P.E. and Raoul V. Chauvin, III, P.E. as a multi-discipline engineering firm specializing in civil, structural, mechanical and electrical engineering. Infinity's DUNS number is 192944556.

Infinity's staff includes (7) civil engineers, (4) structural engineers, (4) mechanical engineers, (3) electrical engineers, (8) draftsman and (6) administrative staff.

Infinity has been serving the New Orleans area and Louisiana for more than 15 years and has a staff of highly trained engineers and drafters with the experience and training needed to complete Livingston Parish's South Satsuma Drainage Improvements project on time and within budget.

Our qualified team is made up of the following members:

- **Quality Engineering and Surveying (QES)**, is a planning, engineering, and surveying consulting firm located in Port Vincent, Louisiana. They have performed services for parishes all throughout Louisiana. Collectively, Quality has 60 professionals and employees with the understanding and ability to provide excellent services to Livingston Parish. QES has been in business for more than 10 years and has vast knowledge of and experience with FEMA's HMGP funded projects.
- **ELOS Environmental**, is an environmental consulting firm located in Hammond, Louisiana with extensive knowledge of biology, microbiology, soil science, wetland ecology and forestry. Elos' key environmental staff is made up of more than 20 professionals with unique yet complementary skill sets. Combined, ELOS has more than 50 years of experience covering numerous sectors of the environmental industry.

B. Post-Katrina, Infinity Engineering has been integrally involved with the engineering design and reconstruction of several public and private facilities damaged by flooding. On many of these, we were called in weeks following the event to assist the owner with assessing damage, preparing reports for submittal to FEMA, working with the FEMA representatives to re-version project worksheets (PWs) and recover appropriate funds for repair, and subsequently preparing engineered construction documents for those repairs.

Hurricane Katrina made landfall in Buras, LA. Infinity prepared the $2,600,000 restoration design package for the Buras Wastewater Treatment Plant. Of 4000+ Project Worksheets, in February 2006, it was the first bid-ready design package advertised in Plaquemines Parish, post-Katrina. Since then, Infinity has worked on over 75 FEMA-funded projects for several local municipalities. We are well-versed in the requirements of the program.

In support of the Stafford Act, we followed FEMA 406 guidelines, utilizing hazard mitigation techniques where possible to reduce the risk of future damage, improving reliability and aiding in the recovery after future catastrophic events.

Several of our designs were put to the test in 2012. Hurricane Isaac flooded Plaquemines Parish East Bank with as much as 10' of water. Within days after residents were allowed back, the Braithwaite Auditorium (right) was used by then PPG President Billy Nungesser to host a public forum addressing the disaster. For this building, Infinity prepared the structural, electrical and mechanical design plans. The Dalcour and East Pointe a la Hache Water Treatment Plants, each designed with hazard mitigation techniques, were running within days after the flooding.

Our FEMA experience was gained in the post-Katrina era when understanding the regulations and a fast tracked implementation of hazard mitigation designs was critical. In the hard hit Plaquemines Parish, our design package for the repair of the $2.6MM Buras Wastewater Treatment Plant was the first bid-ready package advertised in the parish. Infinity is honored to have a personal letter of reference from the past Plaquemines Parish president and the current Lieutenant Governor William "Billy" Nungesser that specifically applauds our abilities to complete critical projects utilizing FEMA funds responsibly.

Additionally, Infinity has performed engineering designs and construction administration for several CDBG-funded projects over the past 15 years we have been in business.

Among these projects were the Livingston Parish Emergency Communications Tower, Jefferson Parish Wedmore and Bannerwood Drainage Improvement projects, and the Martin Luther King Resource Center Renovations in Kenner. Infinity is prepared to work within the regulations of the FEMA-Hazard Mitigation Grant Program. In the past we have complied with funding by preparing justifications for additional funding to provide additional scope as requested by the owner during construction. We were also able to prepare invoicing, with its associated backup, for CDBG approval. We also assisted in on-site unannounced audits where a representative would interview workers to discuss their pay and benefits to verify the general contractor was employing the correct pay grades and his paper work was accurate.

Quality Engineering and Surveying has vast knowledge of and experience with FEMA's HMGP funded projects. They have worked on HMGP projects in 23 Parishes throughout Louisiana and their employees have worked on HMGP projects in an additional 13 Parishes. They have been on the engineering design side of the project as well as Program and Grant managers for several projects. They have the unique opportunity to have seen all sides of the project and to bring knowledge to Livingston Parish. QES has worked closely with GOHSEP on several of their previous and current projects. They have strong relationships with GOHSEP employees and understand the time constraints in pushing projects forward and how to facilitate this.

ELOS Environmental, LLC (ELOS) is a Louisiana based environmental and cultural resources consulting firm with over 13 years of experience. Since its inception, ELOS has assisted Parishes throughout Louisiana, many of which are home to their employees, with recovery efforts in the wake of major natural disasters. ELOS has worked closely with government personnel, the public at large, engineers, and other important stakeholders to best utilize HMGP and CDBG funds to the greatest benefit of the recipients. In particular, ELOS has worked with Livingston Parish Government in the wake of the devastating 2016 flooding events to improve the overall drainage throughout crucial areas of the Parish in an attempt to mitigate impacts of future major storm events. ELOS is keen to provide our

expertise, coupled with our local knowledge of drainage in Livingston Parish to continue to aid the Parish in providing necessary drainage improvements.

Relevant FEMA-Funded Projects

Mid-City Street Repairs

New Orleans, LA
Total Cost: $6,307,000

Reference:
Louis Haywood
504-658-8056

Infinity provided the identification and quantification of Hurricane Katrina damages to roadways, driveway aprons, sidewalks, curbs, and drainage structures which aided in the ability of the City to obtain FEMA grant funding for this rehabilitatoin project. Our engineers developed a scoping report including the locations and descriptions of eligible repairs, added repairs, photo documentation and justification of additional repairs for DPW.

Designs include roadway pavement complete with curbs; a base for the roadway pavement; subsurface drainage, water and sanitary sewer installation, modifications, adjustments, and repair as required; adjustments as required at driveways, at intersecting streets, and at project termini. All final grades are compatible with adjacent properties and provide for a positive flow of water toward catch basins. All intersections, including medians, include the installation of ADA compliant ramps.

Gentilly Woods Neighborhood Street Repairs

New Orleans, LA

Reference:
Louis Haywood
504-658-8056

Infinity provided the identification and quantification of Hurricane Katrina damages to roadways, driveway aprons, sidewalks, curbs, and drainage structures. Developed a scoping report including the locations and descriptions of eligible repairs, added repairs, photo documentation and justification of additional repairs for DPW to obtain FEMA grant funding for this rehabilitation project. Infinity provided design services for necessary by creating construction documents.

Filmore Quadrant 1 Repair

New Orleans, LA
Total Cost: $16,500,000

Reference:
Louis Haywood
504-658-8056

Infinity provided the identification and quantification of Hurricane Katrina damages to roadways, driveway aprons, sidewalks, curbs, and drainage structures. Developed a scoping report including the locations and descriptions of eligible repairs, added repairs, photo documentation and justification of additional repairs for DPW to obtain FEMA grant funding for this rehabilitation project. Infinity provided design services for necessary by creating construction documents.

St. Roch Neighborhood Street Repairs

New Orleans, LA

Reference:
Louis Haywood
504-658-8056

Infinity provided the identification and quantification of Hurricane Katrina damages to roadways, driveway aprons, sidewalks, curbs, and drainage structures. Developed a scoping report including the locations and descriptions of eligible repairs, added repairs, photo documentation and justification of additional repairs for DPW to obtain FEMA grant funding for this rehabilitation project. Infinity provided design services for necessary by creating construction documents.

Ollie Drainage Pumping Station Expansion

Plaquemines Parish, Louisiana
Total Cost: $16,500,000

Reference:
Ken Dugas, P.E.
504-297-5343; ken_dugas@plaqueminesparish.com

This FEMA-funded project consists of the addition of (2) 300 cfs pumps, widening of suction and discharge basins, addition of a engine room and quiet room, new utilities, and replacement and reconfiguration of existing discharge pipes for existing pumps, generators, diesel fuel, tanks, and bridges.

Infinity served as the prime consultant for the design of the pump station addition, which included civil, structural, mechanical, electrical engineering design, and construction administration and inspections.

The Ollie Pump Station provides storm drainage for approximately seven (7) miles (3000 acres) of Plaquemines Parish's West Bank. Infinity performed a drainage study of the basin and the subsequent addition of two (2) new 300 CFS drainage pumps to an existing 60 year-old facility. The increased capacity accommodated an expanding population and the replacement of aging equipment. Infinity's expansion design included:

- New, pile supported pump building foundationpgrading an existing pump house with a steel frame, hurricane-resistant building
- Enlarging the existing suction and discharge basins to accommodate the new pumps and flowrate and modifying existing pumps discharge piping and deteriorated supports
- Specifying new pumps, diesel engines, and gears based on the hydraulic requirements, including future Corps of Engineers levee modifications
- Specifying compressed air and diesel fuel piping and storage utilities
- New operator quiet room with office and restroom facility
- New electrical power and lighting for station modifications

All components maintained operability of the station during construction.

AMORETTI SLUICE GATES

PLAQUEMINES PARISH, LOUISIANA
Total Cost: $250,000

REFERENCE:
Ken Dugas, P.E.
504-297-5343; ken_dugas@plaqueminesparish.com

This FEMA-funded project involved damage assessment and repair design for a drainage control station damaged by flooding from Hurricanes Katrina and Rita.

Infinity coordinated with Plaquemines Parish operations and FEMA personnel for strategic planning of repair operations, including hazard mitigation techniques.

Infinity prepared plans and specifications for detailed design of:

- Replacement of mechanical gates and gear mechanisms damaged by tidal surge;
- Hazard mitigation techniques included installation of corrosion-resistant materials;
- Minor repairs to concrete structure
- Replacement of security fencing
- Canal sloping and installation of slope stabilization pavers on all canal banks

FORT JACKSON SLUICE GATE

PLAQUEMINES PARISH, LOUISIANA
Total Cost: $250,000

REFERENCE:
Ken Dugas, P.E.
504-297-5343; ken_dugas@plaqueminesparish.com

This FEMA-funded project involved damage assessment and repair design for a drainage control station damaged by flooding from Hurricanes Katrina and Rita.

Infinity coordinated with Plaquemines Parish operations and FEMA personnel for strategic planning of repairs operations, including hazard mitigation techniques.

Infinity prepared plans and specifications for detailed design of:

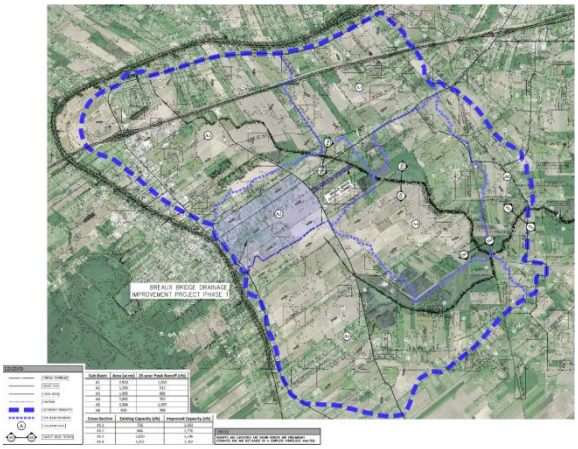
- Replacement of mechanical gates and gear mechanisms damaged by tidal
- surge and rescue vehicle traffic. Hazard mitigation techniques included installation of corrosion-resistant materials
- Hydraulic analysis of drainage basin for gate selection
- Replacement of two (2) 150 feet, 72” steel corrugated culverts and repair/replacement of levee drainage district separation and water seal
- Canal sloping and installation of slope stabilization pavers on all canal banks

Infinity coordinated the activities of the geotechnical engineer and selected sheet piles and timber piles based on recommendations from the geotechnical report. Infinity subcontracted and directed a land surveyor to map each drainage district canal, including slope and depths, and the 150’ land mass between the sluice gate and 72” culvert opening.

BAYOU PORTAGE GUIDRY

Breaux Bridge, LA
Total Cost: $388,222

REFERENCE:
Heath Babineaux
334 – 394 - 2200
hbabineaux@stmartinparish.net



During recent years flooding has been problematic in the City of Breaux Bridge. The watershed in this area is prone to flash flooding. This flooding has impacted the Hospital, various residential neighborhoods, including Breaux Bridge Manor Apartments and others. Bayou Portage Guidry is located near Auguillard Road in the City of Breaux Bridge.

Approximately eight watersheds discharge into Bayou Portage. Due to limited flow capacity of Bayou Portage Guidry, backwater flooding has intensified on each of the channels discharging into the bayou. QES helped St. Martin Parish secure nearly $4.5 Million dollars in HMGP grant funding to increase conveyance in the channel that will provide protection to the City of Breaux Bridge and Unincorporated Portions of St. Martin Parish.

WEST DAVID DRIVE DRAINAGE IMPROVEMENT PROJECT

Hammond, LA
Total Cost: $35,775

REFERENCE:
Robby Miller
225 – 635 - 3861
rmiller@tangipahoa.org

The neighborhood of West David Drive in Tangipahoa Parish frequently experiences severe flooding. Elevation at the center line of West David Drive is at 44 ft. According to the FEMA Flood Insurance Rate Map, the site is in flood zone AE. The base flood elevation for the site is 45.5 ft. Surface water flows from properties directly into the existing subsurface drainage system that is located on each side of the road and then carries it to the outfall ditch. The newly paved roadway has no noticeable slope and water has no visible path to the roadside drop outlets. In addition, outfall culverts are half filled with direct and dense vegetation.

Quality Engineering & Surveying, LLC was selected to complete a hydrologic study and provide plans for the installation of a new subsurface system along West David Drive, cleaning of outfall ditches

and regrading of the pavement to the appropriate slope. Funding for this project was acquired from 2016 Floods HMGP.

ALLIGATOR BAYOU DRAINAGE AND BACKWATER FLOOD REDUCTION

Iberville Parish, LA
Total Cost: $77,000

REFERENCE:
J. Mitchell Ourso, Jr
(318) 473-2100

ELOS provided environmental assessment services for improvements to the water control structure at Alligator Bayou and Bayou Manchac in Iberville Parish. Iberville Parish Government received HMGP funds to replace the existing culverts, automate the floodgate, install communications and auxiliary power equipment, and construct a boat ramp and parking pad for access to the bayou for maintenance in order to reduce backwater flooding in the Spanish Lake Basin. The scope of work charged ELOS with developing the Environmental Review Record (ERR) in accordance with Housing and Urban Development (HUD) Community Development Block Grant (CDBG) rules coordinated by the Office of Community Development-Disaster Recovery Unit (OCD-DRU). ELOS prepared documentation including a comprehensive environmental compliance review, justification for activities within the floodplain (8-step process), Environmental Assessment Checklist, and public notices. The National Environmental Policy Act (NEPA) process concluded with a Finding of No Significant Impact (FONSI) and Request for Release of Funds (RROF) allowing Iberville Parish to proceed with final engineering and construction. ELOS also secured the jurisdictional determination (JD) for the project, prepared the Section 404/10 application, responded to public comments, and submitted a Scenic Stream Permit.

Other FEMA-Funded Projects:

Infinity Engineering Consultants, LLC

- New Orleans Fire Department Communications Building, New Orleans, LA
- City of New Orleans 4th District Police Station, New Orleans, LA
- City of New Orleans 1st District Police Station, New Orleans, LA
- Port Sulphur Water Treatment Plant, Plaquemines Parish, LA
- Port of New Orleans Industrial Canal Inspections, New Orleans, LA

- Port of New Orleans Sewer Lift Station Repairs, New Orleans, LA (6 Project Worksheets)
- Buras Waste Water Treatment Plant, Plaquemines Parish, LA
- Davant Oxidation Pond
- Davant Raw Water Siphon
- East Pointe a la Hache Water Treatment Plant, Plaquemines Parish, LA
- Dalcour Water Treatment Plant, Plaquemines Parish, LA
- Buras Sewer Lift Stations, Plaquemines Parish, LA (40 Project Worksheets)
- East Bank Sewer Lift Stations, Plaquemines Parish, LA (18 Project Worksheets)
- Boothville Booster Pumps, Plaquemines Parish, LA
- Mahalia Jackson Theater of Performing Arts, New Orleans, LA
- O'Brien Firehouse, Plaquemines Parish, LA
- Lake Hermitage Firehouse, Plaquemines Parish, LA
- Braithwaite Firehouse, Plaquemines Parish, LA
- Braithwaite Auditorium, Plaquemines Parish, LA
- East Bank Waste Water Treatment Plant Flood Gate, New Orleans, LA
- East Bank Waste Water Treatment Plant Administration Building, New Orleans, LA
- St. Bernard Parish St. Claude Substation, Arabi, LA
- St. Bernard Parish School Board Maintenance Building, St. Bernard Parish, LA
- Sewerage & Water Board of New Orleans Sewer Lift Stations, New Orleans, LA
- Sewerage & Water Board of New Orleans Drainage Pumping Stations, New Orleans, LA

Quality Engineering and Surveying

- Elevation/Acquisition Project, Tangipahoa Parish
- 2016 SRL/RL Elevation and Acquisition Project, Tangipahoa Parish
- Elevation of Residential Structures, Tangipahoa Parish
- Elevation/Acquisition of Residential Structures, Tangipahoa Parish
- RL/SRL Elevations and Acquisitions, Tangipahoa Parish
- David Dr Drainage Improvements, Tangipahoa Parish
- Skinner Dr Drainage Improvements, Tangipahoa Parish
- Elevation Project, Tangipahoa Parish
- River Rd Drainage Improvements, Tangipahoa Parish
- Elevation/Acquisition, Acadia Parish
- Church Point Community Center Wind Retrofit, Acadia Parish
- Church Point Public Works Safe Room, Acadia Parish
- Crowley Public Works Safe Room, Acadia Parish
- Rayne Civic Center Wind Retrofit Project, Acadia Parish
- Rayne Public Works Safe Room, Acadia Parish
- Rice Festival Building Wind Retrofit, Acadia Parish
- Allen Bayou Relief, Livingston Parish
- Early Warning System and Gauges, Livingston Parish
- Killian Water Storage Mitigation, Livingston Parish

- Pine Bluff Drainage, Livingston Parish
- Fire District #5 Safe Rooms, Livingston Parish
- Sawgrass at Royal Birkdale Drainage, Livingston Parish
- Scivique Rd Drainage, Livingston Parish
- City of Walker Sewer Mitigation, Livingston Parish
- Hwy 1033 Drainage, Livingston Parish
- Bayou Parc Perdu Regional Detention Project, Iberia Parish
- OEP Safe Room. Iberia Parish
- City of Denham Springs Acquisition Elevation Project
- City of Walker Rl/SRL Elevation Project
- Hazard Mitigation Plan Update, St. Mary Parish
- Safe Room (Pump Station 2 & 2A), St. Mary Parish
- Drainage Improvements Boudreaux to Gilmore, St. Mary Parish
- Breaux Bridge Manor Drainage Improvements, St. Martin Parish
- Breaux Bridge Manor Drainage Improvements (Reallocation), St. Martin Parish
- OEP Safe Room, St. Martin Parish
- Stephensville Safe Room, St. Martin Parish
- Wind Retrofit, Lafourche Parish

Relevant CDBG Projects

Infinity Engineering Consultants, LLC

WEDMORE DRAINAGE IMPROVEMENTS

OWNER: Jefferson Parish Drainage Department
Total Cost: $4,000,000

REFERENCE:
Reda Youssef, P.E.
504-736-6833; ryoussef@jeffparish.net

The project consisted of the design for drainage improvements to prevent localized flooding in Jefferson Parish funded by the Community Development Block Grant Program. The improvements consisted of upgrading subsurface drainage on four (4) out-falls of the drainage system in Wedmore Subdivision. The upgrade included miscellaneous improvements to lateral drainage connections and the replacement of disturbed portions of street, curbing, driveways, and sidewalks.

BANNERWOOD DRAINAGE IMPROVEMENTS
OWNER: Jefferson Parish Drainage Department
Total Cost: $4,000,000

REFERENCE:
Reda Youssef, P.E.
504-736-6833; ryoussef@jeffparish.net

Infinity provided engineering design and drainage improvement for the CBDG-funded, 3 quarter square mile neighborhood located in Jefferson Parish. Bannerwood Subdivision Drainage Improvements consisted of upgrading subsurface drainage on four (4) outfalls from the Bannerwood Subdivision to the Oakwood Canal, and improvements to subsurface drainage along Willowbrook Drive, all in accordance with the Jefferson Parish West Bank Subsurface Drainage Improvement Program prepared by Parish Engineers. The upgrading included miscellaneous improvements to lateral drainage connections and replacement of disturbed street, driveways, sidewalks, and utilities.

Other CDBG-Funded Projects

- Livingston Parish Emergency Communications Tower, Livingston, LA
- Washington Parish Emergency Operations Tower, Sheridan, LA
- Martin Luther King Resource Center, Kenner, LA
- Marrero Community Center, Marrero, LA

C. Infinity has a total firm size of 32 including 4 mechanical engineers, 3 electrical engineers, 7 civil engineers, 4 structural engineers and 8 draftsmen who may be required for the Livingston Parish South Satsuma Drainage Improvement project. We have a sufficient staff with the appropriate technical knowledge to complete any and all engineering tasks required. As the personnel resumes indicate, our firm members are skilled in project assessment, producing engineering designs, construction plans and specifications and providing construction administration. We are cognizant that time is of the essence and that completion of newly assigned projects is paramount. With a close-knit engineering and design staff and quick-response communication, Infinity is equipped to ensure expeditious prosecution of work for Livingston Parish.

Infinity's current workload is well-suited to provide engineering support services to Livingston Parish. Infinity has or is in the completion stage of projects that will allow necessary personnel the uninterrupted ability to focus on the South Satsuma Drainage Improvement project. Therefore, it is an ideal time for Infinity to take on additional work. Past experience working with numerous municipal entities makes Infinity an ideal engineering consultant for the Parish.

D. There should be no other relevant measure of evaluation of firms for this project than experience. In the last 15 years, Infinity has completely designed and administered construction of several drainage

improvement projects, of which many were funded by FEMA or CDBG. Besides our team's engineers familiarity with Livingston Parish's unique drainage needs, we have worked within the parameters of several, similarly-funded projects. Between Infinity and our teaming partners, we have completed at least (6) CDBG projects and well over (100) FEMA-funded projects (project worksheets). We intend to work closely with the Parish to navigate through the funding requirements using the valuable lessons learned on previous projects.

E. **INFINITY ENGINEERING CONSULTANTS, LLC** was founded by two life-long residents of Louisiana. Our office has been in operation in the New Orleans metropolitan area for 15 years and has been on the front line of recovery from damages by Hurricanes Katrina, Rita and Isaac in and around the state of Louisiana. Infinity's staff is dedicated and proud to be a part of the overall well-being and success of the state. As consultants, the most important element of our existence is our reputation. A good reputation takes years to develop, but when established, allows promoting the company that much easier. More often than not, new projects are acquired from past performance or from referrals. Infinity has a great track record for repeat customers and referrals and shares a favorable reputation in the local engineering and business community. As far as evidence of that, its' best to point to the reference letters written on our behalf in both the public and private sector that speak to Infinity's professionalism, quality of work, respect for cost and budget, and schedule.

F. Infinity is fully insured and maintains $2.0 million General Liability, $2.0 million Professional Liability, and $1.0 million each Auto & Workers Comp. Infinity also maintains a $4.0 million Umbrella Liability over these limits.

G. Infinity is well established firm with solid financials, averaging between $2.5 and $3.0 million in gross annual receipts since 2006. Infinity is fully solvent, has minimal debt, and benefits from a revolving line of credit that provides a reserve of 10% of gross receipts. Please find Infinity's certified financial statements and balance sheet in the separate, sealed envelope marked "Confidential Financial Statement."

H. **INFINITY ENGINEERING CONSULTANTS, LLC** is certified as the following:

- State & Local Disadvantaged Business Enterprise (SLDBE) – City of New Orleans
- Minority Business Enterprise (MBE) – Regional Transit Authority (RTA)and the Louisiana Unified Certification Program (LAUCP)
- Small Business Enterprise (SBE) – Regional Transit Authority
- Small Entrepreneurship (SE) – Louisiana Economic Development's Hudson Initiative
- Small and Emerging Business Enterprise (SEBE) – Department of Economic Development

ELOS ENVIRONMENTAL is certified as the following:

- Small and Emerging Business Enterprise (SEBE) – Department of Economic Development
- Small Entrepreneurship (SE) – Louisiana Economic Development's Hudson Initiative

Office of the Lieutenant Governor
State of Louisiana

BILLY NUNGESSER
LIEUTENANT GOVERNOR

P. O. Box 44243
BATON ROUGE, LOUISIANA 70804-4243
(225) 342-7009

May 10, 2016

To Whom It May Concern:

During my two terms as Plaquemines Parish President from 2007-2015, my administration worked to overcome the devastation caused by Hurricanes Katrina, Rita, Gustav and Isaac. Most of the lower Parish's water and wastewater treatment facilities, sewer lift stations, and water booster stations were severely damaged due to submergence in several feet of salt water for many weeks. Many of the Parish's buildings were severely damaged or destroyed by wind and waves from those same storms.

Based on our familiarity with Infinity Engineering through their design of the $16MM parish-funded Ollie Drainage Pump Station, the Parish contracted with them to aide in our recovery. With millions of federal (FEMA) funding at stake, and the technical requirements necessary for the rebuilding, we had the confidence in this firm to provide the expertise necessary and the strong financial ethics to responsibly utilize public funds.

Through the process, Infinity was accommodating, cooperative, and respectful of the Parish's needs in a time of crisis. My directors relayed that their designs were completed in a timely manner. I always felt Infinity was pleasant to work with and was committed to providing Plaquemines Parish with the best possible service.

I would recommend Infinity Engineering.

Sincerely,

William "Billy" Nungesser
Past Plaquemines Parish President
Current State of Louisiana Lieutenant Governor

WHN/lcs

Washington Parish Communications District
54100 Dollar Rd
Franklinton, Louisiana 70438
(985) 839-5625

August 28, 2014

During the events of Hurricane Katrina, it quickly became evident that Washington Parish was in need of enhanced communications and emergency management capabilities. Even as the cleanup operations were unfolding, discussions were held to determine the appropriate course of action to take to resolve the concerns of the various government entities of Washington Parish as well as our citizens.

The result was to proceed with a communications tower that would be situated adjacent to a new Emergency Operations Center. Richard C. Lambert Architecture, LLC was Washington Parish's choice to lead the design team. They assembled a group of professionals that consisted of various Architectural and Engineering disciplines. The Structural, Electrical and Mechanical Engineering portions were provided by Infinity Engineering Consultants, LLC of New Orleans, Louisiana.

The initial task was to assemble documentation to apply for a Federal CDBG grant for the tower as well as State of Louisiana and Homeland Security grants for the Emergency Operations Center. RCLA provided preliminary information to Washington Parish to determine the scope of the project. This was done in the months following Katrina.

The RCLA team worked in conjunction with the Owner's Representative through the development of the site layout which was necessary for the funding packages through the construction administration phases of both the projects. The 400 foot tall Communications tower was reviewed in both a self-supporting and a guyed scenario for the site.

The guyed tower was the appropriate option to meet the budget concerns created by the CDBG funds awarded to the Parish. Also included in the tower portion of the project was a communications shelter housing radio equipment and a 50 KVA UPS, plus an outdoor mounted 70 KW generator which would allow operations to continue during power failures.

The Infinity Engineering's team worked smoothly to develop the initial design along with the Owner's Representative and other stakeholders who assisted the team in the development of a clear understanding of present and future needs for the tower facility and the adjacent Emergency Operations Center. RCLA and Infinity worked well to facilitate the project in a manner that would allow for these potential future additions and modifications to be accomplished in an economical manner.

The site is located in a rural part at the center of Washington Parish. The RCLA\Infinity team was onsite for progress meetings as well as for any issues that arose during construction. Due to the thoroughness of the design process and the subsequent construction documents produced, there were minimal changes required during construction. Thus, the project budget was kept on track and on budget.

As the Owner's Representative, I was glad to have had the RCLA/ Infinity team on this project. They facilitated both a tower plus an Emergency Operations Center project that, from its initial stages in 2006 to its final completion in 2013, is exceeding Washington Parish government's needs and expectations. I would be pleased to work with them again on the next project.

James Coleman
Chairman of the Board
Washington Parish Communications District

Livingston Parish

Office of Homeland Security and Emergency Preparedness

MARK HARRELL
Director

BRANDI JANES
Deputy Director

9/12/2017

To Whom It May Concern:

Infinity Engineering Consultants, LLC recently designed a new 715' guy wire tower and communications building for the Livingston Parish Department of Homeland Security and Emergency Preparedness. This was Infinity's first time performing engineering design services for the Parish, and I am writing today to say we are beyond pleased with the results.

The staff at Infinity was professional and worked with the Parish to meet all the needs of this tower. Their designs were completed on time and their budget was reasonable and fair. Infinity provided all structural, civil, mechanical and electrical designs, FCC licensing and FAA studies, and construction administration. Additionally, Infinity provided an intermodulation study to determine which government entities would benefit from being re-located from multiple towers and could co-exist on the new tower sharing antennas wherever possible. The tower houses communications for several different government entities in and around Livingston Parish, including police, fire, EOC, and council to name a few.

We are pleased to recommend Infinity Engineering Consultants, LLC and look forward to working with them in the future.

Sincerely,

Mark Harrell,
Director
Livingston Parish Office of Homeland Security and Emergency Preparedness

P.O. Box 1060, Livingston, LA 70754
225-686-3066 225-686-7280 Fax

JEFFERSON PARISH
DEPARTMENT OF CAPITAL PROJECTS
PUBLIC WORKS

WWW.JEFFPARISH.NET

JOHN F. YOUNG, JR.
PARISH PRESIDENT

REDA M. YOUSSEF, P.E.
DIRECTOR

June 13, 2013

To Whom It May Concern:

Jefferson Parish Government uses many engineering consultants for infrastructure improvement projects. Our consultants' responsibilities may include architectural, electrical, civil, structural, and foundation design, as well as feasibility studies, drainage studies, and environmental evaluations throughout the parish.

Infinity Engineering Consultants has successfully completed the designs for the Wedmore and Bannerwood Drainage projects, as well as the design for the parish's new EOC tower. Their team is competent, easy to work with, and communicate well. I would highly recommend Infinity for these types of projects.

Sincerely,

Reda Youssef, P.E.
Director, Capital Projects

RY/GEL

cc: Kazem Alikhani, Director – Public Works

JOSEPH S. YENNI BLDG - 1221 ELMWOOD PARK BLVD - SUITE 906 - JEFFERSON, LA 70123
P.O. BOX 10242 - JEFFERSON, LOUISIANA 70181-0242 - OFFICE 504.736.6333 - FAX 504.736.6739

STATE & LOCAL DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

1340 Poydras Street, Suite 1800 | New Orleans, LA 70112

September 12, 2019

VIA EMAIL

VIA EMAIL
Raoul V. Chauvin, III, PE
Infinity Engineering Consultants, LLC
4001 Division Street
Metairie, LA 7002
rchauvin@infinityec.com

RE: SLDBE Re-certification Approval

Dear Raoul Chauvin:

We are pleased to inform you that **Company Name** has been approved for re-certification as a State & Local Disadvantaged Business Enterprise (SLDBE). This approval represents certification with: City of New Orleans, Sewerage & Water Board of New Orleans, Louis Armstrong New Orleans International Airport and Harrah's New Orleans Casino & Hotel.

Your firm's contact information will be active on the online SLDBE Directory (http://www.nola.gov/economic-development/supplier-diversity/directory/). It will reflect your areas of certification. Your specialties will be listed as:

CERTIFICATION DESCRIPTION: CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL ENGINEERING SERVICES

NAICS CODE 541330: CIVIL ENGINEERING SERVICES
NAICS CODE 541330: ELECTRICAL ENGINEERING SERVICES
NAICS CODE 541330: ENGINEERING DESIGN SERVICES
NAICS CODE 541330: ENGINEERING SERVICES
NAICS CODE 541330: MECHANICAL ENGINEERING SERVICES

A re-certification notice will be emailed to you prior to your renewal anniversary date. **However, should you not receive notification from this office for your re-certification, it is your responsibility to contact us.** Submittal of this information is necessary to ensure that there is no interruption in your certified status during your certification period. If a re-certification application is not received, we will proceed with decertification procedures.

We invite you to view City of New Orleans, Sewerage & Water Board of New Orleans, Louis Armstrong New Orleans International Airport and Harrah's New Orleans Casino & Hotel websites for SLDBE opportunities.

If we can be of further assistance, you may contact us at 504-658-4275 or via e-mail at saoliva@nola.gov.

Sincerely,
Sonia Oliva
Certification Coordinator
Office of Supplier Diversity | City of New Orleans
1340 Poydras Street | Suite 1800 | New Orleans, LA 70112

Regional Transit Authority
2817 Canal Street
New Orleans, LA 70119-6301

504.827.8300

www.norta.com

December 5, 2018

Mr. Raoul Chauvin, III, P.E.
Infinity Engineering Consultants
4001 Division St.
Metairie, LA 70002

Dear Mr. Chauvin,

The Regional Transit Authority has reviewed your No Change Affidavit and supporting documentation and is pleased to inform you that your firm continues to meet the Disadvantaged Business Enterprise (DBE) program certification eligibility standards set forth in 49 CFR Part 26.

This certification allows your firm to participate as a DBE in the Louisiana Unified Certification Program (LAUCP). If there is a change in certification that affects your ability to meet size, disadvantaged status, ownership, or control requirements or any materials change in the information provided in your initial application, you must provide written notification to this agency within thirty (30) days of the occurrence of the change. Failure to provide this information is a ground for denial of the certification based on failure to cooperate pursuant to 49 CFR 26.109©.

Your firm's name will appear in the LAUCP Directory, which is used by prime contractors/consultants, as well as other agencies to solicit participation of DBE firms. The directory can be accessed at www.laucp.com. Your firm's name will appear in the LAUCP Directory under the following:

541330 Engineering Services
C10 Management
C09 Civil Engineering
C07 Electrical Engineering
C05 Structural Engineering
C02 Mechanical Engineering

Should you have any questions or need further assistance, please don't hesitate to contact me at (504) 827-8308.

Sincerely,

Regional Transit Authority of New Orleans

Judith Dangerfield
DBE Compliance Manager

Regional Transit Authority
2817 Canal Street
New Orleans, LA 70119-6301

504.827.8300

www.norta.com

February 5, 2019

Infinity Engineering Consultants, LLC
4001 Division St.
Metairie, LA 70002

Dear Chauvin:

We are pleased to inform you that your firm has been certified as a Small Business Enterprise (SBE). Your firm remains certified in the SBE Program until there are any changes to your company or to your personal net worth that exceed the SBE eligibility criteria. Please note that you must notify our office immediately regarding any changes which affect the economic disadvantage, size, ownership or control of your firm.

In order to maintain eligibility, you are required to submit an annual affidavit stating that your firm continues to meet the eligibility requirements of the program. If you are both DBE and SBE certified you will receive a Disadvantaged Business Enterprise Annual Affidavit approximately 4 weeks prior to your DBE Certification anniversary date. The annual affidavit for the DBE program will automatically apply to your SBE certification. If you are SBE certified only, you will receive a Small Business Enterprise Annual Affidavit approximately 4 weeks prior to your SBE Certification anniversary date.

We reserve the right to withdraw this certification if at any time it is determined that SBE certification was knowingly obtained by the submission of false, misleading, or incorrect information. We further reserve the right to request additional information and/or conduct an on-site visit at any time during your certification period.

If we can be of further assistance, please contact the Office of Small Business Development at (504) 827-8387.

Sincerely,

Eliza Eugene,
Office of Small Business Development

LOUISIANA ECONOMIC DEVELOPMENT

DIVISION OF SMALL BUSINESS SERVICES

This certification acknowledges that

Infinity Engineering Consultants, LLC

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

This certification is valid from 7/2/2019 to 7/2/2020 .

Certification No. 8402

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

DEPARTMENT OF ECONOMIC DEVELOPMENT

Division of Small and Emerging Business Development

SEBD CERTIFICATION

Infinity Engineering Consultants, LLC

is hereby certified as a
Small and Emerging Business Enterprise
providing services in the following areas:

Civil, Structural, Mechanical, Electrical, Plumbin

This Certification is valid beginning 9/27/2010 and supersedes any registration or listing previously issued. At any time there is a change in ownership or control of the firm, notification must be made immediately to the Division of Small and Emerging Business Development.

This Certification expires on:	*9/27/2020*
Issued at Baton Rouge, Louisiana:	*9/27/2010*
CERTIFICATION NO.	*8402*

John W. Matthews, Jr., Executive Director
Small Business Services

LOUISIANA ECONOMIC DEVELOPMENT

DIVISION OF SMALL BUSINESS SERVICES

This certification acknowledges that

ELOS Environmental, LLC

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

This certification is valid from 12/19/2018 to 12/19/2019 .

Certification No. 11198

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

LOUISIANA ECONOMIC DEVELOPMENT

Division of Small and Emerging Business Development

SEBD CERTIFICATION

ELOS Environmental, LLC

is hereby certified as a Small and Emerging Business Enterprise.

This certification is valid beginning 12/21/2018 and supersedes any registration or listing previously issued. At any time there is a change in ownership or control of the firm, notification must be made immediately to the Division of Small and Emerging Business Development.

Issued at Baton Rouge, Louisiana 12/21/2018

This certification expires on: 12/21/2028

Certification No. 11198

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

SECTION 3

Specialized Knowledge

Infinity
Engineering Consultants, LLC

Specialized Knowledge

Infinity Engineering Consultants, LLC offers a wide range of Civil Engineering services, including all forms of earthwork, roadway and drainage designs. We recognize that great civil design is the foundation for a successful project. Infinity is committed to providing civil solutions that will do more than just work. Our goal is to provide solutions that work effectively and efficiently. Civil Engineering Projects include:

- Site Planning, Earthwork & Foundations
- Drainage Systems and Roadway Design
- Water and Wastewater Facilities
- Parking Lot Layout & Design
- Highway Infrastructure Evaluation
- Asphalt and Concrete Paving Systems
- Traffic Marking Layout & Design
- Wetland Delineations

Infinity offers complete and comprehensive Structural Engineering services, including the design of new structures, the rehabilitations of old, and all stages in between. We have extensive experience in most modern building materials, including steel, concrete, timber, and composites. All of our structural designs are performed utilizing powerful finite element software under the direction and control of an experienced engineer. Structural Engineering capabilities include:

- Steel and Concrete Frames
- Marine Dock Structures
- Bulkheads
- Commercial Buildings
- Trestles & Causeways
- Offshore Modules & Skids

Structural design includes structural foundations. We have experience in designing foundations for all types of load and soil conditions: everything from founding upon soft sedimentary soils (such as those found in south Louisiana) to bedrock materials found in most other parts of the world. We can design drive pile foundations, auger cast foundations, and rock anchors – practically any type of foundation on every type of soil.

Construction Permitting often involves every level of government, including local, state and federal concerns. Permits will often control the critical path of your project. This is why it is important to have an experienced consultant who understands how to pursue and ultimately obtain permitting approval for your project – as timely as possible. Infinity's engineers have experience securing permits from a wide variety of agencies. Whether it is approval from the State Fire Marshall, the EPA, Minerals Management Service, or the U.S. Army Corps of Engineers, Infinity understands the process and can assist you every step of the way.

Infinity can provide Construction Management and Inspection Services for projects involving civil, structural, mechanical or marine construction. We can provide an experienced construction manager who oversees all phases of construction, from contract award through commissioning. Having an experienced QA/QC inspector who is familiar with the nature of the work, and the support of a qualified engineering staff, is critical to the success of the job. Our inspectors will coordinate between the contractor and the client, understand budget, deadlines, and will be there to resolve deviations in the field, as they occur.

Computer Design Capabilities

Infinity Engineering Consultants is equipped to handle all of our clients' drafting needs. Due to the diverse array of services offered, our drafting team is familiar and skilled at providing the multi-disciplinary effort that is often

required to complete a job. Infinity offers drafting services in the most up-to-date versions of AutoCAD, REVIT, Civil 3D, Plant 3D, Navisworks, and Advance Steel. Drawings may be converted to older versions of AutoCAD as required to meet client needs.

Quality Engineering and Surveying, LLC (QES) is a full-service engineering, planning, landscape architecture, and surveying firm with an established team of professionals located in Port Vincent, Louisiana. Our team consists of professional engineers and survey crews with over two centuries of experience in projects throughout Louisiana. QES melds the technical aspects of civil engineering with the understanding of public interest to provide innovative solutions to projects that are vital in the effort to enhance the quality of life for Louisiana residents.

QES provides complete civil engineering design services from preliminary concepts to final construction for projects of all sizes and complexity. Our licensed and support staff of engineers, surveyors, grant specialists, landscape architects, and planners provides the expertise, professionalism, and innovative approaches fundamental to the execution of successful design solutions. Our multi-disciplinary approach provides our clients the opportunity to procure our services in: Engineering, Landscape Architecture, Planning, Land Surveying, and Program Management.

Collectively, QES and our team of professionals have been in the consulting, engineering and planning field for more than a century. Our team was founded on the principle that long-lasting relationships between team members and our clients are based on our reputation to provide excellent services. In addition to the length of time our firm has been in business, we have principal planners, engineers, and designers that have more than twenty-five years of experience individually. The experience that our firm's team will provide is a perfect match for the needs of Livingston Parish. The abilities of our staff have been demonstrated in every community we have provided services related to state and federally funded grant programs.

ELOS Environmental, LLC (ELOS) is an expert in regulatory affairs related to environmental permitting and compliance. ELOS's environmental professionals provide data-supported analysis to federal, state, and local agencies along with private clients in order to secure environmental clearances, permits, and authorizations as required by the National Environmental Policy Act (NEPA), Sections 404 and 401 of the Clean Water Act, Section 10 of the Rivers and Harbor Act, and Section 14 of the Rivers and Harbor Act as codified in 33 USC 408 (Section 408) for modifications to federal projects, and Section 106 of the National Historic Preservation Act. In addition to the above-listed permits, we have been providing the following products to our clients for over 10 years: Wetlands assessments, delineations, and findings reports (for NEPA compliance); Requests for Wetlands Jurisdictional Determinations (JD); Wetlands restoration design, implementation, and monitoring; Phase I Environmental Site Assessment (ESA) for hazardous, toxic, and radioactive waste (HTRW) evaluations; Cultural resource, threatened and endangered (T&E), essential fish habitat (EFH), migratory bird, and other surveys; Environmental monitoring (seismic and other oil field related activities); GIS mapping for environmental impact analysis.

LAKE PARK DRAINAGE

Belle Chasse, LA
Total Cost: $250,000

REFERENCE:
Ken Dugas, P.E.
504-297-5343
ken_dugas@plaqueminesparish.com

The Lake Park Drainage project involved the analysis of drainage in the Lake Park Subdivision and the design for corrective improvements.

Based on a drainage study of the Lake Park Subdivision performed by Infinity Engineering Consultants in 2005, the existing street drainage did not have adequate drainage culvert capacity to accommodate the drainage needs of the street to reduce localized street flooding. Infinity's analysis and design of the new drainage improvements included:

- Review of CCTV tapes of all main culverts and branch lines;
- Identification of damaged pipes and joints and accumulated debris;
- Construction drawings and specifications indicating the placement of new RCP culverts and catch basins. Plans for culvert modifications were designed to minimize street repair.

CONCESSION STREET DRAINAGE IMPROVEMENTS

Belle Chasse, LA
Total Cost: $215,000

REFERENCE:
Ken Dugas, P.E.
504-297-5343
ken_dugas@plaqueminesparish.com

Infinity Engineering Consultants provided design of drainage improvements for existing drainage system, which involved replacement of pipes and catch basins. Infinity provided civil design and construction administration. The project required conflict resolution to design around an existing major natural gas transmission line.

SEATRAIN ROAD DRAINAGE IMPROVEMENTS

Belle Chasse, LA
Total Cost: $500,000

REFERENCE:
Ken Dugas, P.E.
504-297-5343
ken_dugas@plaqueminesparish.com

Infinity provided design and contract documents for roadway and subsurface utility (water lines, sewage, and drainage) improvements for approximately 700 lf of Seatrain Road. The project involved mill, overlay and widening.

KOSTMAYER AVENUE ROADWAY & DRAINAGE IMPROVEMENTS

Slidell, LA
Total Cost: $500,000

REFERENCE:
Tim Mathison
985-646-4330
tmathison@cityofslidell.org

This project provided roadway repair and replacement design and all utility improvements for the Kostmayer Avenue rehabilitation project in the City of Slidell. The project included the asphalt mill and overlay of 3,300 linear feet of street, including striping, drainage improvements, street alignment and handicap sidewalk ramps.

The design and construction of this project was carefully scheduled to avoid interfering with activities of a major school on the stretch of repair.

NORTH GALVEZ STREET REPAIRS

New Orleans, LA
Total Cost: $6,000,000

REFERENCE:
Nguyen Phan
504-658-8043
ndphan@nola.gov

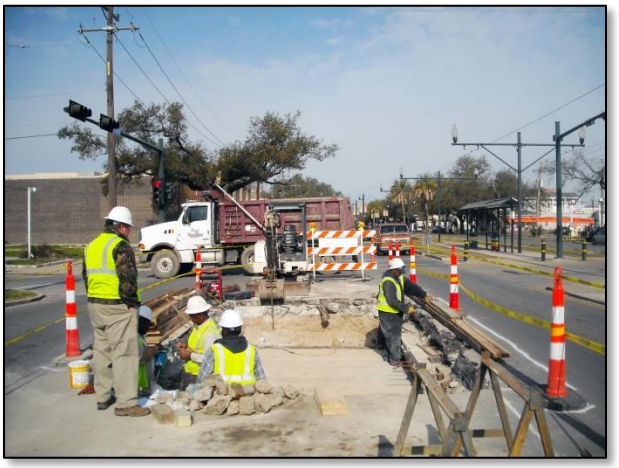
Infinity provided roadway repair and replacement and all utility improvements for the City of New Orleans project which is funded by bond money. The North Galvez Street Rehabilitation is part of the Rebuilding of the Lower Ninth Ward and involves civil design and construction administration of 5,000 feet of roadway on a major thoroughfare. Infinity designed the roadway, subsurface drainage, plans and profile, and sidewalk and driveway reconstruction.

VA MEDICAL CENTER INFRASTRUCTURE IMPROVEMENTS

New Orleans, LA
Total Cost: $500,000

REFERENCE:
Nguyen Phan
504-658-8043
ndphan@nola.gov

Infinity provided Civil and Electrical engineering design to correct deficiencies for streets and utilities to support the new medical complex located in Mid-City New Orleans.



Utility conflict resolution involved weekly and daily coordination meetings with Sewerage and Water Board of New Orleans, City of New Orleans, Department of Public Works, City of New Orleans Parks and Parkways, Entergy, and other private utility companies, engineers, managers and operations personnel.

Infinity designed subsurface drainage, sewer force main reroutes, water main reroutes, and underground electrical power distribution reroutes.

Infinity also designed all roadway pavings, including concrete and asphalt, curb and gutter, and drainage improvements. Infinity maintains positive working relationship with these entities. Our office location in Mid-City New Orleans allowed quick access to these entities, the City of New Orleans Department of Public Works, and the work site.

Design of the modifications were planned to reduce the effect on the community. This included the establishment of new electrical feeders which supported the RTA streetcar catenary power and decorative street lighting, surrounding businesses, and a S&WB major sewer lift station.

ENTERGY EVERGREEN BRIDGES & DRAINAGE

Plaquemines Parish, LA
Total Cost: $90,000

REFERENCE:
Chris Normand
225-753-5857

Infinity provided the design of two (2) vehicular bridges to replace aging timber bridges on the approach to Entergy's Evergreen Substation. Infinity provided the new bridge designs, which included steel reinforced piles, decking, and a reinforced retaining wall/abutment. Engineering designs and construction drawings were developed for environmental permitting in support of the Wetland Delineation Report, lay down area, improvements to Dean Road, drainage along Dean Road near the bridge, passing lanes along Dean Road for trucking material, isolating tree-trimming/clearing along Dean Road. Final design also included a load rating.

MICHOUD BOULEVARD REPAIRS

New Orleans, LA
Total Cost: $1,800,000

REFERENCE:
Nguyen Phan
504-658-8043
ndphan@nola.gov

The project involves removal and reconstruction of nearly 1 mile of roadway (concrete with asphalt alternate) and curbs, including new subsurface drainage, utility relocations including water and sewer mains, structures, and service lines, tree protection, striping and markings for multi-use facility sharing, traffic control and detour plans, temporary construction plans, rebuilt sidewalks and driveways, and curb ramps for the handicapped. Work involved in this project included quality and cost estimates and specifications according to the standard specifications, plans, and details of the City of New Orleans DPW and SWBNO. The project is 100% designed and is awaiting City of New Orleans funding for construction bidding.

WEST METAIRIE AVENUE REHABILITATION

Kenner, LA
Total Cost: $7,050,000

REFERENCE:
Gene Gillen, P.E.
504-832-4878
Gene.gillen@aptim.com

Infinity was the prime consultant for the restoration of West Metairie Avenue between Roosevelt Boulevard and David Drive. The designs included the replacement of intermittent sections of West Metairie Avenue pavement, adjacent canal bank stabilization, side street outfall pipe replacement, side street turnout pavement, adjustments of longitudinal and transverse slopes, adjustment of existing and addition of new drain inlets, removal and replacment of sidewalk pavement at reconstructed side street turnouts to meet ADA criteria, driveway apron removal and replacement, and striping.

SKINNER DRIVE DRAINAGE IMPROVEMENT PROJECT

Hammond, LA

Total Cost:

REFERENCE:
Robby Miller
225 – 635 - 3861
rmiller@tangipahoa.org

Skinner Drive is located in the Green Acres Subdivision in south Tangipahoa Parish. The elevation at Skinner Drive is 39.5 ft. The purpose of this project is to provide solutions for drainage issues along Skinner Drive. The area is located in Flood Zone X according to the FEMA Flood Insurance Rate Map with base elevation for the site at 42.3 ft. The surface water has historically sheet flowed from properties directly on the road which carried it towards the outfall location. The outfall is located at the north-east corner of the subdivision, where runoff water collects in the grate inlet and gets taken away to the existing channel.

A hydrologic model was developed to simulate the rainfall-runoff process within the drainage basin. The National Resources Conservation Service (NRCS) TR-55 Method was employed as the loss rate method, and the NRCS Travel-Time Method was used to calculate times of concentration. Green Acres Subdivision doesn't have any drainage structures to carry the water. All of the runoff sheet flows along the curbing of the road towards the outfall. Existing vegetation on the curbing obstructs current path to the outfall. The road is crowned at the center, making it harder for water to cross the street at the intersections with adjacent streets (Charles Dr., Beckie Dr., Claire Dr.)

Quality Engineering & Surveying, LLC was selected to provide a hydrologic study and develop plans for the installation of a new subsurface system along the street to provide a clear path to the outfall location.

BOUDREAUX STREET TO GILMORE STREET DRAINAGE IMPROVEMENT PROJECT

Breaux Bridge, LA
Total Cost: $172,272.50

REFERENCE:
Henry "Bo" Legrange
337 – 828 - 4100
hlegrange@stmaryparishla.gov

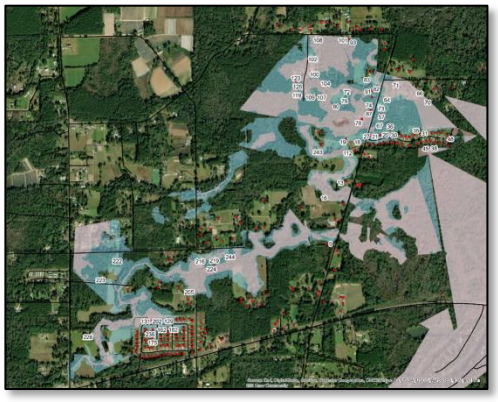
The Boudreaux Street to Gilmore Drive Drainage Improvements project will convert an 1,117 lineal feet earthen ditch into a subsurface drainage system that back-up and causes water to pond in a residential subdivision in which houses flood on a regular basis. In addition to drainage structures, additional pumps will be installed at the existing pump station to increase pumping capacity of the existing station.

The project includes working with residents to determine what happens with drainage during rain events; completing surveying and hydraulic and hydrology studies; development of construction plans, bids and specifications. Resident inspection services during construction are also being performed.

RIVER ROAD DRAINAGE IMPROVEMENT PROJECT

Ponchatoula, LA
Total Cost:

REFERENCE:
Robby Miller
225 – 635 - 3861
rmiller@tangipahoa.org



River Road is a local road in city of Ponchatoula, Tangipahoa Parish. It is located north of Highway 22, just west of the Tangipahoa River. It serves as the access road to Country Rivers Subdivision and multiple homes along River Road. There are two ditches that cross the road and outfall into the Tangipahoa River. Ditch one is located approximately 2,000 feet away from Highway 22 intersection, it utilizes 2-42" CMP culverts to cross the road. Ditch two is located approximately 2,800 feet away from Highway 22 and uses 1-36" CMP culvert.

The centerline of River Road ranges between elevations of 16.5' to 17.0' During the 10-year storm events and higher, both locations of cross-drains get backed up by Tangipahoa River causing the water to get out of banks of the ditch flooding in the area and inundating River Road. The observed affected area is located north of Louisiana Highway 22 near and along River Road in Tangipahoa Parish, Louisiana. It is understood that the impacted area contains approximately seventy- two (72) single family residences, 52 of which will have no form of outlet once the area is inundated.

To address flooding issues existing cross-drain culverts are proposed to be replaced with 72" RCP culverts with back flow preventers as well as raising the road approaches to the crossing locations. These improvements will reduce flooding to neighborhoods around and west of River Road and north of Highway 22 while also reducing the roadway flooding problem on River Road.

ETHEL STREET DRAINAGE PROJECT

Tallulah, LA

Total Cost: $154,875

REFERENCE:

Mayor Gloria Hayden

318 – 574 - 0964

ghayden@tallulah-la.gov

In the City of Tallulah, Ethel Street has numerous storm events in which flooding of the neighborhood occurs. The original drainage system consisted of a series of drainage ditches supported by culverts under the roadway intersections, sidewalks and driveways. In many locations along the 2,000 feet of Ethel Street, the drainage ditches do not have positive outfall into Panola Bayou. Quality Engineering & Surveying, LLC was selected to provide a Hydraulic and Hydrologic Study to determine a solution to the drainage problems in the area. In addition, it appears as though subsurface drainage systems located near Ethel Street were not being used to maximum capacity.

BREAUX BRIDGE MANOR DRAINAGE IMPROVEMENT PROJECT

Breaux Bridge, LA

Total Cost: $91,150

REFERENCE:

Heath Babineaux

334 – 394 - 2200

hbabineaux@stmartinparish.net

Breaux Bridge Manor Apartment Complex lies near the intersection of Highway 347 and Doyle Melancon Road. An existing drainage ditch lies south of most of the developed area. This ditch carries drainage from the developed area to the outfall east of Doyle Melancon Road. With our firm's in- house surveying capabilities, we performed surveys and field verification of drainage concern. We included wetland scientist to provide us with an environmental review of areas affected by the proposed upgrades along the drainage route. Upon completion of the preliminary assessment and the Hydraulic and Hydrologic Study, we provided the parish a preliminary design complete with plans, specifications and an engineer's cost estimate.

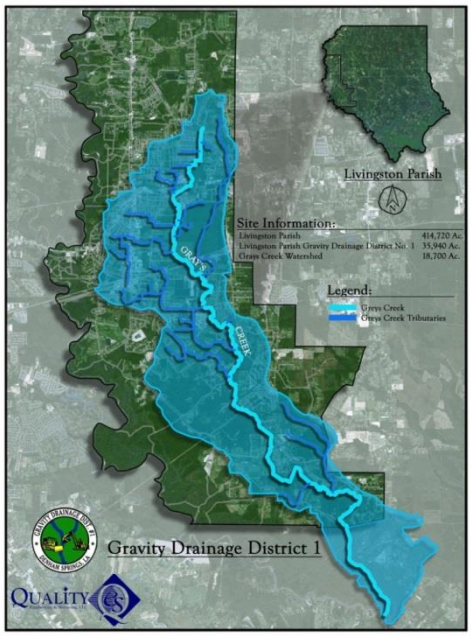
GRAY'S CREEK DRAINAGE IMPROVEMENT PROJECT

Livingston Parish, LA

Total Cost:

REFERENCE:
Wesley Kinnebrew
225 – 664 - 5827
wesley@lpgdd1.net

Quality Engineering and Surveying, LLC was selected to provide surveying and engineering service to improve drainage for Gray's Creek in Livingston Parish. At approximately eighteen (18) mile, Gray's Creek is the largest drainage project to be undertaken in Livingston Parish. Quality Engineering & Surveying, LLC utilized five full time survey crews, staff, and professional engineers over the span of 3 months to develop a retainage system to reduce the effect of inland flooding in Livingston Parish. The scope of the land surveying work was to collect field data on Gray's Creek Crossings and tributary intersections for purpose of developing HECRAS model. Some of the field data included cross sections adjacent to crossings, cross section upstream of crossing (50' for culvert crossing; 300' for bridge crossing).



WALLACE ACRES DRAINAGE IMPROVEMENT PROJECT

Gonzales, LA

Total Cost: $67,615

REFERENCE:
Ron Savoy
225 – 450 - 1200
rsavoy@apgov.us

Quality Engineering and Surveying worked on drainage improvements for Wallace Acres Subdivision in Ascension Parish. Due to flooding issues that have been accruing in Wallace Acres Subdivision, QES was tasked to analyze existing drainage systems that consisted of cross-drain culverts, driveway culverts, grate inlets, roadside ditches, and rear yard ditches and come up with a possible solution to resolve the issue.

The survey crew had to complete topographic survey of the entire subdivision that included, inverts of every culvert, cross-sections of existing ditches, as well as locations of existing utilities, mailboxes, and fences. After the topographic survey was completed and processed, drainage analysis had to be done to identify problematic areas and to ensure that the proposed drainage system is adequate and can carry existing flows. With the support of the hydrologic software HydroCAD, construction plans were created with proposed improvements that covered culvert replacements, ditch regrading, erosion control, quantities, and standard plans for installation.

JESUIT BEND DRAINAGE IMPROVEMENT PROJECT

Belle Chase, LA
Total Cost: $148,042

REFERENCE:
Ken Dugas, PE
504 – 297 - 5349
ken@ppgov.net

Quality Engineering & Surveying, LLC will provide professional services to Plaquemines Parish to improve drainage in the area of Jesuit Bend on LA Highway. The proposed project will improve drainage by allowing water to convey from the east side of LA Hwy 23 to the west side to the existing drainage system.

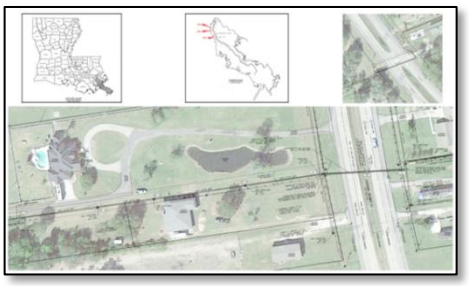
This is a crucial project to Plaquemines Parish since flooding would occur due to the highway acting as a levee, floodwaters would pond over the road surface making it impossible for traffic to pass. In addition to flooding along the highway, a railway would incur damages on an annual basis due to the water not being able to run-off properly.

ELOS
environmental
a wetland services company

JESUIT BEND DRAINAGE

Belle Chasse, LA
Total Cost: $78,000

REFERENCE:
Jeffrey Burst
(225) 368-2869
jburst@hntb.com



Plaquemines Parish and its Engineering Consultant tasked ELOS with the environmental evaluation of a wide-area local drainage improvement project involving the maintenance and replacement of culvert crossings under Louisiana Highway 23, and the installation of sub-surface drainage infrastructure south of Belle Chasse, Louisiana. ELOS was contracted to provide all services required for a formal jurisdictional determination from the USACE, and the coordination of all environmental permitting for the project. This project primarily involved science and technical staff from ELOS who conducted field investigations, data collection, wetland mapping, technical document preparation and regulatory agency coordination for both the determination and permitting process. ELOS received a Preliminary Jurisdictional Determination from the Department of the Army Operations Division, Surveillance and Enforcement Section, a Coastal Use Permit Exemption Letter for from the Department of Natural Resources, Office of Coastal Management, a No Objection Letter from the Department of the Army Operations Division, Operations Manager, and a NOD-22 Permit from the Department of the Army Operations Division, Eastern Evaluation Section.

LIVINGSTON PARISH OXIDATION PONDS

Livingston Parish, LA
Total Cost: $688,000

REFERENCE:
Mark Harrell
(225) 686-3066
loshep@lpgov.com

ELOS Environmental, LLC was contracted to perform a wetland delineation to submit to the USACE to assist with their jurisdictional determination of the presence/absence of wetlands and/or waters of the U.S. on a parcel adjacent to the Livingston Parish Detention Center. ELOS coordinated with LDEQ and other relevant regulatory agencies to update approvals or secure authorization to conduct closure of the wastewater treatment plant (WWTP) previously serving the Detention center and to coordinate implementation of the appropriate closure procedures for the subject WWTP in Livingston Parish, LA.

LIVINGSTON NRCS WATERWAY DEBRIS REMOVAL

Livingston Parish, LA
Total Cost: $688,000

REFERENCE:
Mark Harrell
(225) 686-3066
loshep@lpgov.com

Livingston Parish is participating in the Natural Resources Conservation Service (NRCS)-sponsored Emergency Watershed Program (EWP) in its continued recovery from the significant flooding of 2016. The effort consists of removing large woody and other accumulated debris in the waterways of the parish in order to restore the pre-storm drainage capacity of the parish's primary waterways. ELOS has been assisting in this effort by providing professional services for obtaining environmental permits, field investigations, identification of jurisdictional waterway types, recording data to support damage survey reports (DSRs), desktop delineations of all canals, providing field monitors to monitor removal of debris, preparation of reports documenting proper removal of debris for the NRCS, providing cultural resources evaluations when needed, correspondence with government agencies, and correspondence with landowners coordinating right of entries for access.

LIVINGSTON PARISH GOVERNMENT
CPRA – PARISH RESTORE ACT MATCHING OPPORTUNITIES PROGRAM ASSISTANCE

Livingston Parish, LA
Total Cost: $5,000

REFERENCE:
Mark Harrell
(225) 686-3066
loshep@lpgov.com

ELOS assisted Livingston Parish in preparing grant application documentation for watershed drainage improvements projects proposed by the Parish. ELOS addressed documentation of the needs and justification for funding the project as well as assisting in providing best practice recommendations for completing the project. ELOS has continued work with the Parish during implementation of the project

SECTION 4

Personnel/Professional Qualifications

Infinity
Engineering Consultants, LLC

Personnel/Professional Qualifications

A. Infinity's firm members are skilled in project assessment, producing engineering designs, construction plans and specifications and providing construction administration. Infinity has a total firm size of (32), including (7) civil engineers, (4) structural engineers, (3) electrical engineers, (4) mechanical engineers, (8) draftsmen and (6) administrative staff. With a close-knit engineering and design staff and quick-response communication, Infinity is equipped to ensure expeditious prosecution of work.

Some of our key staff is as follows:

As Principal Partner of Infinity Engineering Consultants, **William J. Thomassie, P.E.** is responsible for all civil / structural designs. Included in those responsibilities are site inspection and evaluation, cost estimating, permitting, specification development, project execution, design, and drafting supervision. He provides the criteria for QA / QC and participates in all project review meetings. As required, he coordinates project relevant activities between the Company, sub-contractors, and the client.

Mr. Thomassie's 27+ year career has typically included management of multi-disciplinary projects. With many of these projects requiring up to $45,000,000 for installation or modifications, his detailed structural designs, along with construction support, enabled completion on schedule and with minimal adverse impact on commerce in the area. Mr. Thomassie has been a licensed professional engineer in the State of Louisiana since 1997. He is also licensed in Alabama, Arkansas, Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Mississippi, Ohio, Pennsylvania, Tennessee, Texas, and West Virginia.

As Principal Partner of Infinity Engineering Consultants, **Raoul V. Chauvin, III, P.E.** is responsible for all mechanical system designs. Included in those responsibilities are client interface, site inspection and evaluation, contract negotiation, project management, design, and drafting supervision. He participates in project review meetings and coordinates project relevant activities between the Company and the client.

Mr. Chauvin's professional 29+ year career has revolved around providing cost effective, efficient design solutions for municipalities, offshore oil and gas facilities, inland marine terminals, and chemical plants. Projects were completed according to a schedule dictated by the Client, weather conditions, budget limitations or equipment availability. Mr. Chauvin has prepared cost estimates, budgets, and completed projects under budget. He has been a licensed professional engineer in the State of Louisiana since 1999. He is also licensed in Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Mississippi, Ohio, Tennessee, and Texas.

Chief Engineer **Rachel Kenney, P.E.** holds a Bachelor of Science degree in Civil Engineering from University of Virginia, Charlottesville, and more than 16 years of experience in the field. Ms. Kenney specializes in structural design, civil design engineering, specification development, and bid package development. She has been licensed in the State of Louisiana since 2013.

Civil Engineering Manager **Ricardo Contreras, P.E.** holds a Bachelor of Science in Civil Engineering from the University of New Orleans and more than 23 years of experience in the field. As a Civil Engineer, Mr. Contreras has experience in program management, design, and construction administration of various projects including roadways, bridges, drainage improvements, water and wastewater improvements, site development, and flood control structures. Mr. Contreras has been licensed in the State of Louisiana since 1999.

Operations and Quality Control Manager **Louis Jackson, P.E.** holds a Bachelor of Science in Civil Engineering from the University of New Orleans and has more than 24 years of engineering design, project management and operations management. His project experience includes subsurface infrastructure, stormwater management, disaster recovery, and project and program management. Mr. Jackson has been licensed in the State of Louisiana since 2001.

Project Engineer **Karson Kall, P.E., PMP** holds a Bachelor of Science in Civil Engineering from Louisiana State University and more than 12 years of experience in the field. Mr. Kall has experience in coordination, supervision, and time management while being responsible for numerous multi-million dollar federal funded projects while simultaneously performing the necessary duties as staff engineer. Mr. Kall has been licensed in the State of Louisiana since 2012.

Project Engineer **Cincy Gallo, P.E.** holds a Bachelor of Science in Civil Engineering from the University of New Orleans and has more than 5 years of experience in the field. Ms. Gallo is responsible for the development of designs, specifications and bid packages for civil and structural engineering projects. Ms. Gallo has been licensed in the State of Louisiana since 2019.

QUALITY Engineering & Surveying, LLC

QES has been in business for more than 10 years and during this time, we have grown from a one-man operation to a fifty-person operation. Our philosophy is to employ personnel based upon our current and future workload. We spend the appropriate time when hiring each employee to ensure that we have the perfect collaboration of experience and expertise. Therefore, we have grown into the types of projects that we engage.

Principal-in-Charge and President **Deric J. Murphy, P.E., LSI** holds a Bachelor of Science in Civil Engineering from Louisiana State University and has more than 21 years of experience in the land development industry. He has designed commercial and retail facilities, new sewer systems, highways, drainage and storm water improvements, pump station design, residential subdivisions and construction phasing plans.

Senior Engineer and Engineering Department Manager **William Purser, P.E.** holds a Bachelor of Science in Civil Engineering from the University of Idaho and more than 24 years of experience in the field. His experience spans increasing responsibility in civil engineering and public works projects in Tennessee, Mississippi, Louisiana, Texas, and Alabama. Mr. Purser has extensive experience across core civil engineering disciplines of roadway/transportation, drainage, water line, and site design.

Civil Engineer **Jeff Loup, P.E.** holds a Bachelor of Science in Civil Engineering from Louisiana State University and more than 18 years of experience in the field. Mr. Loup has experience in project management, design, and construction engineering in a wide variety of civil engineering projects involving state highways, roadways, off-system bridges, drainage canal improvements, storm drainage systems, detention ponds, water system expansions and improvements, sewer treatment plants, pumping stations, force mains and collection systems, earthwork, and erosion control.

Engineer Intern **Evgeny Khandoga, E.I.** holds a Bachelor of Science in Civil Engineering from Louisiana State University with three years of experience in the field. Mr. Khandoga is involved with civil construction plans production, project cost estimates, municipal projects involving drainage analysis and drainage improvements, and reviews and evaluates 3rd party engineering documents.

Principal Land Surveyor **Seth J. Mosby, PLS** holds a Bachelor of Science in General Studies from Louisiana State University and has more than 17 years of experience in the field of land surveying. Mr. Mosby has experience using several widely used computer software packages including but not limited to Microsoft Office, AutoCAD, Land Development Desktop, Eagle Point and GIS applicatoin internet sites. With his experience he has produced plats, legal descriptions, elevation certificates, and quantity calculations.

Survey Technician **Gage Spell, LSI** holds a Bachelor of Science in Physical Geography and a Minor in Surveying from Louisiana State University and 8 years of experience in civil engineering and land surveying. Mr. Spell has experience in hazard mitigation work in Louisiana for Livingston and Tangipahoa parishes providing damage assessment and improvements for area damaged by the August 2016 flood. He oversees the drone flying for inspection, volumetric survey, and worksite survey.

Professional Land Surveyor **Philip Goppelt, PLS, E.I.** holds a Bachelor of Science in Civil engineering from Louisiana State University and 6 years of experience. Mr. Goppelt has experience in surveying and engineering with highway projects, drainage projects, sewer projects, elevation certificates, preliminary plats, drainage impact studies, and traffic impact studies.

ELOS environmental
a wetland services company

ELOS Environmental's key environmental staff is comprised of over 20 professionals, each with unique experience yet complementary skill sets – resulting in a vast knowledge base. Combined, ELOS has 50+ years of experience covering numerous sectors of the environmental industry.

Principal Environmental Scientist **Lucas M. Watkins** holds a Bachelor of Science in Forest Management from Louisiana State University and a Master of Science in Biology (Wetland Ecology) from Southeastern Louisiana University with extensive experience identifying and addressing environmental compliance issues with cover numerous sectors of the environmental industry. His experience includes wetland delineations, wetland permitting, coastal use permits, Section 10 and 404 permits, environmental assessments, Phase I ESAs, endangered species surveys, timber and forestry management, and mitigation issues.

Senior Project Manager **Flynn Daigle** holds a Bachelor of Science in Environmental Management Systems from Louisiana State University and extensive experience in many phases of environmental compliance, including National Environmental Policy Act (NEPA), Section 10 and 404 permitting, wetland delineations, Phase I and II Environmental Site Assessments, Executive Order 11988-Floodplain Management, and much more. Mr. Daigle is a certified Floodplain Manager under the Association of State Floodplain Managers.

Senior Environmental Scientist **Brian Fortson** holds a Bachelor of Science in Wetland Ecology from Southeastern Louisiana University and a Juris Doctorate in Civil Law from Loyola University of Law and has more than 25 years of experience in Federal, State, and Local environmental regulatory processes involved with road, bridge, and drainage civil works infrastructure. Mr. Fortson leads permitting efforts for multiple projects for local development and infrastructure improvement efforts.

Program Manager and NEPA Specialist **Maria Bernard Reid** holds a Bachelor of Science in Forest Management and Wildlife and a Master of Science in Agribusiness and Economics from Louisiana State University with more than 18 years of experience in National Environmental Policy Act (NEPA) compliance in both the public and private sectors. She has managed, planned, and participated in environmental projects in Louisiana, Mississippi, Alabama, Michigan, New York, Georgia, Tennessee, Florida, Arkansas, Texas, California, New Mexico, and Arizona.

Geographic Information Systems Manager **Jesse McQuigg** holds a degree in Drafting and Design, specializing in AutoCAD from Northshore Technical Community College and is silled in all aspects of GIS data collection ranging from geospatial analysis to mapping and cartography, AutoCAD software conversions, ArcGIS tools, and online/offline mapping applicatoins.

Infinity Engineering Consultants, LLC

William J. Thomassie, P.E. (1)
Principal-in-Charge
Structural Engineer

Rachel Kenney, P.E. (3)
Chief Engineer
Structural Engineer

Civil Engineering

Ricardo Contreras, P.E. (3)
Civil Engineering Manager
Louis Jackson, P.E. (2)
Operations & QC Manager
Karson Kall, P.E. (3)
Senior Civil Engineer
Cindy Gallo, P.E. (4)
Structural Engineer

QUALITY Engineering & Surveying, LLC

H&H Studies & Surveying

Deric J. Murphy, P.E., LSI (1)
Principal in Charge; President
William Purser, P.E. (2)
Senior Engineer
Jeff Loup, P.E. (3)
Civil Engineer
Evgeny Khandoga, E.I. (7)
Engineering Intern
Seth J. Mosby, PLS (6)
Principal Land Surveyor
Gage Spell, LSI (9)
Survey Technician
Phillip Goppelt, PSL, EI (6)
Professional Land Surveyor

ELOS environmental a wetland services company

Environmental

Lucas Watkins (1)
Principal in Charge
Flynn Daigle (2)
Project Scientist
Brian Fortson (3)
Senior Scientist
Maria Reid (3)
Senior Scientist
Jesse McQuigg (8)
Senior CAD Technician

RESUME

William J. Thomassie, P.E.
Structural Engineer

4001 Division Street
Metairie, LA 70002
504-304-0548 – office
504-355-0265 – fax
wthomassie@infinityec.com
www.infinityec.com

Personal

Experience:
27 years

Discipline:
Civil/Structural Engineer

Education:
University of New Orleans
B.S. Civil Engineering 1992

Registration:
Professional Engineer

Alabama No. 30709-E

Arkansas No. 17041

Illinois No. 062.070857

Indiana No. PE11800689

Iowa No. P24957

Kentucky No. 34102

Louisiana No. 27421

Michigan No. 6201067893

Minnesota No. 56472

Mississippi No. 17667

Ohio No. 71129

Pennsylvania No. 74568

Tennessee No. 121975

Texas No. 90808

West Virginia No. 15980

TWIC holder

Associations:
American Society of Civil Engineers
American Concrete Institute
UNO Civil Engineering Advisory Board, 2005-2013 Chairman

Professional Experience

Infinity Engineering Consultants, LLC

Principal Partner

As Principal Partner of Infinity Engineering Consultants, William J. Thomassie, P.E. is one of the registered Supervising Professionals for the firm and is responsible for the management of all engineering production. Included in those responsibilities is the oversight of staff managers. For special projects, his education, training and experience in structural engineering is relied upon as he directly provides site inspection and evaluation, cost estimating, permitting, specification development, project execution and design supervision. He provides the criteria for QA / QC and provides principal oversight in project review meetings. As required, he coordinates project relevant activities between the Company, sub-contractors, and the client.

Mr. Thomassie's 27+ year career has typically included supervision of multi-disciplinary projects. With many of these projects requiring up to $45,000,000 for installation or modifications, his guidance and shaping of project designs, along with construction support, enabled completion on schedule and with minimal adverse impact on commerce in the area.

Plaquemines Parish Government– Lake Park Drainage Improvements
Principal for the drainage system evaluation for the Lake Park Subdivision in Belle Chasse, LA. Evaluation included video inspection of underground culverts, collecting topographic survey information, and evaluating the flow characteristics of the drainage basin.

Plaquemines Parish Government – Ollie Drainage Pumping Station Expansion
Principal for the Ollie Drainage District capacity evaluation project. This **FEMA-funded** project included the evaluation of runoff characteristics for a 3,000 acre basin and the evaluation of the adequacy of an existing pumping station with 5 pumps. Project Manager for the design of the 600 cfs drainage stormwater pump station addition ($16,200,000 total construction cost). Responsible for overall project coordination and design. Supervised all civil and structural designs including deep foundations, concrete structures, steel building structures, dredging, vehicular bridges, roads, and canals. *REFERENCE: Ken Dugas, P.E.; 504-297-5343; ken_dugas@plaqueminesparish.com*

Plaquemines Parish Government – Concession Street Drainage Improvements
Provided design of drainage improvements for existing drainage system, involved replacement of pipes and catch basins. Infinity provided civil design and construction administration. Project required conflict resolution to design around an existing major natural gas transmission line.

Jefferson Parish Government – Wedmore Drainage Improvements
Mr. Thomassie is the Project Manager for the engineering design for the **CDBG-funded** drainage improvement project to prevent localized flooding in Jefferson Parish. Designs included upgrading subsurface drainage on four (4) out-falls of the drainage system in Wedmore Subdivision. The upgrade included miscellaneous improvements to lateral drainage

connections and the replacement of disturbed portions of street, curbing, driveways, and sidewalks. *REFERENCE: Neil Schneider; 504-736-6833; nschneider@jeffparish.net*

Jefferson Parish Government – Bannerwood Drainage Improvements

Mr. Thomassie is the Project Manager for the **CDBG-funded** engineering design for drainage improvement the ¾ square mile neighborhood in Jefferson Parish. Designs consisted of upgrading subsurface drainage on four (4) outfalls from the Bannerwood Subdivision to the Oakwood Canal, and improvements to subsurface drainage along Willowbrook Drive, all in accordance with the Jefferson Parish Subsurface Drainage Improvement Program prepared by Parish Engineers. The upgrading included miscellaneous improvements to lateral drainage connections and replacement of disturbed street, driveways, sidewalks, and utilities. *REFERENCE: Neil Schneider; 504-736-6833; nschneider@jeffparish.net*

City of New Orleans – N. Galvez Street Reconstruction

Project Manager for the roadway repair and replacement and all utility improvements designs for 5,000 lf of subsurface utilities on a major thoroughfare. Infinity designed the roadway, subsurface drainage, plans and profile, and sidewalk and driveway reconstruction.

City of New Orleans – VA Medical Center Street Reconstruction

Project Manager for the design of 3,000 lf of streets and utilities to correct deficiencies and support a new medical center.

City of Slidell – Kostmayer Ave. Resurfacing and Drainage Improvements

The city of Slidell requested that Infinity Engineering Consultants present various options to improve Kostmayer Ave. Mr. Thomassie was the Lead Project Manager in the drainage design, material quantities, and cost estimating.

Plaquemines Parish – Sewer and Wastewater System Rehabilitation

Chief Engineer for the structural and civil rehabilitation of the sewer and wastewater systems for Plaquemines Parish following Hurricane Katrina and Hurricane Rita. Project involved coordination of repairs with **FEMA**. Project sites included the Port Sulphur WTP, East Pointe a la Hache WTP, Daclour WTP, and the Buras WWTP. The project included assessment of mechanical, electrical, civil and structural damages due to flooding and wind, writing project worksheets with construction cost estimates for submittal to FEMA, preparing plans and specifications for repairs, and construction administration. Engineered designs also incorporated components to mitigate future damages to equipment. *REFERENCE: Ken Dugas, P.E.; 504-297-5343; ken_dugas@plaqueminesparish.com*

City of New Orleans – Mahalia Jackson Theater of the Performing Arts

Lead Civil/Structural Engineer for **FEMA-funded** emergency repair of the theater damaged by Hurricane Katrina. The project includes assessment of structural damages due to flooding and wind, writing project worksheets with construction cost estimates for submittal to FEMA, and preparing plans and specifications for repairs. Engineered designs also incorporated components and structures to mitigate future damage to equipment. Provided detailed structural design for new stage lift systems. *REFERENCE: Miriam Lemann; 504-685-8666; mflemann@nola.gov.*

Plaquemines Parish Government – Percy Griffin Community Center

Mr. Thomassie was the Project Manager for the **FEMA-funded** demolition and replacement of the Percy Griffin Community Center. He was responsible for the oversite and project management of all mechanical, electrical and structural design of the new 14,000 sqft community center. *REFERENCE: Ken Dugas, P.E.; 504-297-5343; ken_dugas@plaqueminesparish.com*

RESUME

Rachel Kenney, P.E.
Chief Engineer

4001 Division Street
Metairie, LA 70002
504-304-0548 – office
504-355-0265 – fax
rkenney@infinityec.com
www.infinityec.com

Personal

Experience:

15 Years

Discipline:

Civil/Structural Engineer

Education:

University of Virginia
B.S. Civil Engineering 2001

Registration:

Professional Engineer

Louisiana
No. 37666

TWIC holder

Associations:

American Society of Civil Engineers

Louisiana Engineering Society

Professional Experience

Infinity Engineering Consultants, LLC
Chief Engineer

Chief Engineer responsible for structural design, civil design engineering, specification development, and bid package development. Specific project experience includes the following:

Plaquemines Parish Government – Lake Park Drainage
Performed a drainage study of the Lake Park Annex subdivision to determine the cause of local flooding. The study included a topographic survey of streets, home slabs, manholes, and inverts, and a video inspection of the drainage system. Sources of the drainage problem were identified and recommendations for corrective measures were provided.

Sewerage & Water Board – East Bank Waste Water Treatment Plant Flood Protection
Provided civil and structural designs for a new flood protection berm at the Waste Water Treatment Plant. For the $30 Million Construction project, plans and specifications were provided for the design of secure flood gates, flood walls, electrical transmission and road and piping crossings for plant flood protection.

City of New Orleans – Mahalia Jackson Theater of the Performing Arts
Structural Engineer responsible for the FEMA-funded emergency repair of this building. Her responsibilities included assessment of structural damages to due flooding and wind, and preparing plans and specifications for repair. *REFERENCE: Miriam Lemann; 504-685-8666; mflemann@nola.gov.*

Plaquemines Parish Government – O'Brien Firehouse
Project Engineer responsible for managing a project team for the FEMA-funded Structural, Mechanical, and Electrical design of the new 2,500 sq ft firehouse. Ms. Kenney was responsible for project management, structural design, and construction administration for the pile supported building, which has a first floor elevation above the Base Flood Elevation (16'-6") and is designed to withstand Category 4 hurricane force winds. Foundation design included review of geotechnical reports. *REFERENCE: Ken Dugas, P.E.; 504-297-5343; ken_dugas@plaqueminesparish.com*

Plaquemines Parish Government – Davant Community Center
Managed a project team for the FEMA-funded Structural, Mechanical, and Electrical design of the 14,000 sq ft community center. Ms. Kenney was responsible for project management, structural design, and construction administration. The building is designed to withstand Category 4 hurricane force winds, and has a main floor elevation above the Base Flood Elevation (14'-2"). Structural design included timber piles, pile caps and grade beams supporting 24" square reinforced concrete columns. Columns support a grid of concrete beams upon which the main floor hollow core concrete panels rest. CMU walls enclose the main floor and, along with steel columns and bracing, support the steel roof trusses. Foundation design included review of geotechnical reports. *REFERENCE: Ken Dugas, P.E.; 504-297-5343; ken_dugas@plaqueminesparish.com*

Plaquemines Parish Government – Lake Hermitage Firehouse

Project Manager responsible for managing a project team for the FEMA-funded Structural, Mechanical, and Electrical design of the new 3,200 sq ft firehouse. Ms. Kenney was responsible for project management, structural design, and construction administration for pile supported building, which has a first floor elevation above the Base Flood Elevation (17'-2") and is designed to withstand Category 4 hurricane force winds. Foundation design included review of geotechnical reports. *REFERENCE: Ken Dugas, P.E.; 504-297-5343; ken_dugas@plaqueminesparish.com*

Sewerage & Water Board – Lift Station Repair, Meco and Southern Scrap Pumping Stations

Provided structural and civil designs for two new pumping stations, which replaced those destroyed by Hurricane Katrina. The two story structures are supported by composite piles and have reinforced concrete basement slabs below grade. Concrete walls extend to grade and support CMU walls and a steel stud framed, standing seam metal roof. Design also included steel access stairs, concrete paving, and supports for mechanical and electrical equipment.

Richard Lambert Architects – Washington Parish 911 Tower

Ms. Kenney provided structural engineering and related construction administration for the CDGB-funded project. Designs included a 400' tower and 5,000sqft administration building. REFERENCE: James Coleman; 985-735-9031

Perez – St. Bernard Parish Government – St. Claude Avenue Sheriff's Substation

Project Structural Engineer for the design of a new FEMA-funded 3-story criminal sheriff's administration building, incorporating high security aspects as required by the St. Bernard Parish Sheriff's Department. The building consists of steel-reinforced concrete with the bottom of the second floor above the BFE. *REFERENCE: Kyle Christiansen, Perez; 504-584-5100; kchristiensen@e-perez.com*

RESUME

Ricardo Contreras, P.E.
Senior Engineer

4001 Division Street
Metairie, LA 70002
504-304-0548 – office
504-355-0265 – fax
rcontreras@infinityec.com
www.infinityec.com

Personal

Experience:

23 years

Discipline:

Civil Engineer

Education:

University of New Orleans
Bachelor of Science
Civil Engineering, 1994

Registration:

Professional Engineer

Louisiana
No. 28533

Florida
No. 64381

TWIC holder

Certifications:

Traffic Control Supervisor & Technician – LA State Specific (ATTSA), 12/ 2014

Associations:

American Society of Civil Engineers

Professional Experience

Infinity Engineering Consultants, LLC

Senior Engineer

Mr. Contreras has more than 23 years of experience in the field of civil engineering. His responsibilities include engineering design, preparation of plans and specifications, preparation of cost estimates, collaboration with owners for various construction projects. Specific major project experience from throughout his career includes the following:

Jefferson Parish – Bannerwood Drainage Phase II

Responsible for construction management of project. Mr. Contreras' duties included overseeing and managing construction progress and schedules, submittal reviews, review and approval of invoices, and project closeout for this CDBG-funded project. *REFERENCE: Neil Schneider; 504-736-6833; nschneider@jeffparish.net*

City of Slidell – Sgt. Alfred Drive Roadway Improvements

Mr. Contreras is the Project Manager for the engineering design for the paving repairs of approximately 6,000 lf of asphalt and concrete repairs and associated elevation adjustments of manhole covers and drop inlet grates.

St. John the Baptist Parish – Belle Point Drainage Pump

Mr. Contreras is the Project Manager for the design of two new pump stations to improve the existing drainage of the Belle Point neighborhood. The pumping stations include submersible pumps and power systems located below grade in a wet well within the right-of-way of the street and will be capable of handling 70,000 GMP of storm water.

Jefferson Parish – W. Metairie Ave. Rehabilitation

Roadway and drainage improvements for W. Metairie Avenue, work included the removal and replacement of concrete paving panels and the repair and adjustment of select drainage outfalls that cross beneath the avenue and enter the canal within the median, and implementation of stabilization measures to the embankments of the canal.

Responsible for overall design, preparation of plans and specifications, provided cost estimation and coordinated all aspects of the project with the Owner and sub consultants.

Jefferson Parish – Trapp Canal

Responsible for the design of approximately 14,500 linear feet of concrete slope paving, various drain line extensions, and sediment removal within Trapp Canal. Repairs included 54,800 cubic yards of excavation, 46,300 cubic yards of lightweight aggregate (expanded clay) for backfill, 216,000 square feet of vinyl sheet pile, placement of 43,800 tons of rip rap, and the construction of 34,000 square yards of concrete slope paving. *REFERENCE: Jitendra Shah; 504-885-9892*

Jefferson Parish – Westgate Drainage Improvements

Responsible for the design and coordination of multi-discipline consultants for drainage improvements for sub-basin 1 thru 11 for Jefferson Parish. Scope of work included the design and construction of two pump stations, the addition of drainage check valves in canal, electrical

requirements, structural design for generators and fuel tanks, and partial reconstruction of an existing roadway. Repairs include approximately 3,200 linear feet of 36" reinforced concrete pipe arch, 8,800 square yards of concrete roadway replacement, relocation of utilities, including, water and sewer house connections, and construction of a 30 cubic foot per second and 25 cubic foot per second pump stations.

Plaquemines Parish Government – Breach & Scour Repairs - Citrus Lands Levees – Laressite-Myrtyle Grove

Responsible for the design and construction administration for breach repairs and levee reconstruction of approximately 300 linear feet and scour repairs for approximately 69,966 linear feet along the existing levee as a result of Hurricanes Gustav and Ike. Repairs included 43,350 cubic yards of clay embankment, 270 tons of rip rap for armoring, removal of 3,000 cubic yards of storm generated debris, and hydro-mulching 25 acres of the existing levee - Plaquemines Parish.

Plaquemines Parish – Emergency Repairs To The Braithwaite / Scarsdale Levee

Responsible for the design and construction administration of repairing scour holes and restoring approximately 89,700 linear feet of the existing levee to pre-Hurricane Gustav and Ike conditions, repairs to a failed section of the levee approximately 290 linear feet, and realignment of an existing drainage canal and backfilling of the old canal. Repairs included removal of 3,901 cubic yards of storm generated debris, placement of 7,745 tons of 610 limestone, and 142,445 cubic yards of clay embankment.

St. Bernard Parish – Sediment and Debris Removal of Bayou La Loutre

Responsible for the contract administration for sediment and debris removal for 11,134 linear feet of drainage canals, which included the excavation and disposal of 1,200 cubic yards of sediment, debris removal along the length of the canal, coordination with NRCS, LaDNR, and Parish officials.

Temporary Levee Repairs for the Citrus Lands Back Levee – Plaquemines Parish

Responsible for the design and construction administration for coordination with the National Guard to airlift 3,000 pound sand bags via Chinook Helicopters to temporarily close a 200 linear foot breached section of levee as a result of Hurricane Gustave, reconstruction of approximately 200 linear feet of levee by utilizing 10,861 tons of various classes of rip rap to close the breach and armoring of the flood side of the existing levee, 6,958 tons of limestone, and 58,196 cubic yards of clay embankment; scour repairs to approximately 15,800 linear feet of levee, construction of two access roads totaling approximately 15,840 linear feet to access the breached section, minimized impacts to adjacent wetlands by coordinating with the Office of Coastal Management and the Corps of Engineers.

Emergency Repairs To The Citrus Lands Back Levee From Tower Road South To La. Hwy 23 – Plaquemines Parish

Responsible for the design and construction administration for coordination with the National Guard to airlift 3,000 pound sand bags via Chinook Helicopters to temporarily close a 300 linear foot breached section of levee as a result of Hurricane Ike, reconstruction of approximately 300 linear feet of levee utilizing 4,917 tons of various classes of rip rap to close the breach and armoring of the flood side of the existing levee, 5,292 tons of limestone, and 109,072 cubic yards of clay embankment; scour repairs to approximately 10,600 linear feet of levee, construction of two access roads totaling approximately 10,560 linear feet to access the breached section, installation of 1,500 linear feet of 48" diameter polymer coated corrugated pipe, filled in 500 linear feet of an existing drainage canal, minimized impacts to adjacent wetlands by coordinating with the Office of Coastal Management and the Corps of Engineers

4001 Division Street
Metairie, LA 70002
504-304-0548 – office
504-355-0265 – fax
ljackson@infinityec.com
www.infinityec.com

RESUME

Louis Jackson, P.E.

Civil Engineer

Personal

Experience:

23 Years

Discipline:

Civil Engineer

Education:

University of New Orleans
B.S. Civil Engineering 1995

Registration:

Professional Engineer

Louisiana
No. 29314

TWIC holder

Professional Experience

Infinity Engineering Consultants, LLC

Operations & Quality Control Manager

Mr. Jackson has more than 23 years of engineering design, project management and operations management. His project experience includes subsurface infrastructure, stormwater management, disaster recovery, project management, and program management. He serves as the Operations and Quality Control Manager for Infinity. Specific project experience includes the following:

City-Wide Drainage Master Plan, New Orleans, Louisiana

Mr. Jackson served as the project manager for the CDBG-funded $2M City of New Orleans Drainage Master Plan Project. Project Management responsibilities included development of a detailed budget for completion of the project along with development of a detailed project work plan which addressed a multitude of project aspects, including communications and coordination of efforts and quality management. Additionally, internal responsibilities included facilitating a clear line of communication between all members of the project team. External responsibilities included maintaining communications with DPW director and project manager. Post project activities have involved becoming a noticeable and credible resource to both governmental and non-governmental organizations seeking to further stormwater management in the New Orleans Metropolitan Region. *REFERENCE: Keith Lagrange, Director of Public Works; 504-658-8000; klagrange@nola.gov.*

Pontilly Stormwater HMGP Project, New Orleans, Louisiana

Mr. Jackson served as the senior project manager as well as task leader for the Environmental Assessment, Permitting, Cost Estimating, and Community Outreach tasks for the Pontilly Stormwater HMGP Project. Responsibilities included development of initial and updated project budgets and schedules, completion of a preliminary and final Draft Environmental Assessment, participation in multiple formal and informal community meetings, and completion of required permit applications and cost estimates. Because of the nature of the project close coordination has been required across multiple agencies and departments who have a stake in the success of the project. *REFERENCE: Brenda Breaux, Executive Director, New Orleans Redevelopment Authority; 504-658-4400; bbreau@nola.gov*

Broadmoor Drainage Upgrades and Green Infrastructure Project, New Orleans, Louisiana

Mr. Jackson was the senior project manager and lead engineer to guide a multi-disciplined team through the development of a schematic design report and schematic design documents for a HMGP-funded project aimed at improving stormwater management within multiple New Orleans Neighborhoods on a very aggressive schedule. Responsibilities included managing landscape architects and civil engineers through the development of a systematic approach to improving the stormwater management aspects of the existing system, effectively increasing the capacity of the system at a lower cost than traditional methods. *REFERENCE: Keith Lagrange, Director of Public Works; 504-658-8000; klagrange@nola.gov.*

RESUME

Karson Kall, P.E., PMP
Civil/Structural Engineer

4001 Division Street
Metairie, LA 70002
504-304-0548 – office
504-355-0265 – fax
kkall@infinityec.com
www.infinityec.com

Personal

Experience:

11 Years

Discipline:

Civil/Structural Engineer

Education:

Louisiana State University
B.S. Civil/Structural Engineering 2007

Registration:

Professional Engineer

Louisiana
No. 37258

Mississippi
No. 25583

Texas
No. 117632

Colorado
No. 51497

PMI PMP
No. 1980788

FAA Part 107 sUAV
No. 3928689

TWIC holder

Certifications:

Offshore Water Survival – (HUET) – METS Model 5 – Personnel Transfer Basket/Swing Rope

Aerial and Scissor Lift Safety – 29 CFR 1926.453 – 2 Hours – 2017 – Cert. No. 77050

Fall Protection – OSHA Subpart M 1926.500-503 – 2 Hours – 2017 – Cert. No. 77058

Professional Experience

Infinity Engineering Consultants, LLC
Project Engineer

Mr. Kall has more than 11 years of experience with coordination, supervision, and time management while being responsible for numerous multi-million dollar federal funded projects, while simultaneously performing the necessary duties as staff engineer. Productive interaction and constant coordination with the multiple disciplines; including architectural, civil, structural, and mechanical engineering firms; as well as producing quick and effective resolutions to day-to-day issues, either at the office or on-site, were necessary for roles as both project manager and staff engineer.

Plaquemines Parish Hurricane Katrina Recovery Program

Responsibilities included serving as Owner's representative for approximately $90 million of FEMA-funded projects, from scope development phase through construction completion. Some notable facilities include:

- Port Sulphur Medical Complex – replacement of a 38,660 SF complex; $19,505,800.00
- Boothville-Venice Fire House – replacement of a 15,677 SF fire station; $7,165,700.00
- Braithwaite Auditorium – replacement of a 7,829 facility; $2,908,000.00
- Port Sulphur Water Treatment Plant – repair of existing plant; $7,000,000.00
- Buras Waste Water Treatment Plant – repair of existing facility; $3,997,224.00
- Buras Sewer Lift Stations – repairs to 40 stations; $1,805,181.00
- Buras Water Tower – 500, 000 gallon water tower replacement; $1,106,450.00
- Parish-wide Roads Repairs – storm-related repairs to 83 local roads; $3,340,894.00
- Venice Marina Road – full depth replacement and overlay; $3,000,000.00
- Empire Ship Yard – repair of existing facility; $422,888.00

REFERENCE: Ken Dugas, P.E.; 504-297-5343; ken_dugas@plaqueminesparish.com

City of New Orleans – N. Galvez St. Project

Mr. Kall was the Project Manager for the construction administrative services for a replacement of an existing waterline, sewer lines, and drainage including valves, fire hydrants, house connections, service connections, siphon lines, manholes and full street replacement for a mile long section of N. Galvez in New Orleans, LA. Construction cost $8,333,904.00.

City of New Orleans – South Galvez Streetscape

Project Manager responsible for construction administration services and overseeing the resident inspector. Provide engineering support for the construction of a new 8" WL along Tulane Ave, a 12" WL along S. Galvez, raising S. Galvez St, replacing existing sidewalks along S. Galvez, tying in new driveways on S. Galvez, drain line replacement along Canal Street and the installation planters, decorative paths, sculptures and lighting; $5,274,690.51.

Livingston Parish – Communications Tower

Project Engineer responsible for the design of a CDBG-funded new 719 ft. guided communications tower which included a deep foundation for both the tower, anchor points and

elevated equipment building, site grading, cable tray system, communications equipment (400-900 MHz) and startup coordination; $1,788,689.00. *REFERENCE: Mark Harrell; 225-686-3066; lohsep1@lpgov.com*

City of New Orleans – DPW Filmore Group B

Project Engineer responsible for the complete street reconstruction for the City of New Orleans spanning just over 1000 LF. Responsible for designing new domestic sewer, water and drainage. Establish new grade lines and tie into new systems in to existing. Drainage was completed utilizing HYDRA6000 for drain inlet spacing and HYDRA6020 for sizing. Establish proposed grade line (PGL), establish inverts, regrade ROW, joint layouts, striping, signage and cross sections established.

City of New Orleans – Mid City Street Repairs Group B

Complete street reconstruction for the City of New Orleans spanning just over 1000 LF. Responsible for designing new domestic sewer, water and drainage. Establish new grade lines and tie into new systems in to existing. Drainage was completed utilizing HYDRA6000 for drain inlet spacing and HYDRA6020 for sizing. Establish proposed grade line (PGL), establish inverts, regrade ROW, joint layouts, striping, signage and cross sections established. Additional 64 blocks included identification and quantification of Hurricane Katrina damages to roadways, driveway aprons, sidewalks, curbs, and drainage structures. Create pavement only drawing package and a separate package containing repairs associated with waterline, sewer line repairs and drainage point repairs. Develop repairs and create construction documents; estimated to be $24,000,000.

City of New Orleans – DPW Read Group C

Scope included identification and quantification of Hurricane Katrina damages to roadways, driveway aprons, sidewalks, curbs, and drainage structures. Create pavement only drawing package and a separate package containing repairs associated with waterline, sewer line repairs and drainage point repairs. Develop repairs and create construction documents; estimated to be $4,500,000.

RESUME

Cindy Gallo, P.E.

Civil/Structural Engineer

4001 Division Street
Metairie, LA 70002
504-304-0548 – office
504-355-0265 – fax
cgallo@infinityec.com
www.infinityec.com

Personal

Experience:

5 Years

Discipline:

Civil/Structural Engineer

Education:

University of New Orleans
B.S. Civil and Environmental Engineering
2014

Registration:

Professional Engineer

Louisiana
P.E. No. 43357

TWIC holder

Professional Experience

Infinity Engineering Consultants, LLC

Project Engineer

Ms. Gallo is a civil/structural project engineer with 5 years of experience responsible for the development of designs, specifications and bid documents of civil, structural and marine construction packages, as well as providing engineering services during bid selection and construction phases of a variety of project types. Her past project experience is as follows:

Jefferson Parish Government – Bannerwood Drainage

Ms. Gallo was responsible for checking inverts on contractor's red lines in the CDBG-funded Bannerwood Drainage project. This project consisted of providing engineering design and drainage improvements for the 3 quarter square mile neighborhood located in Jefferson Parish. *REFERENCE: Neil Schneider; 504-736-6833; nschneider@jeffparish.net*

Jefferson Parish Government – Bannerwood Drainage Phase II

Ms. Gallo was responsible for reviewing the design plans and specifications, responding to and addressing Owner comments, and preparing documents to be submitted For Bid. She was the project manager during bidding and construction, hosting the pre-bid conference and construction meetings, reviewing submittals, responding to RFI's, and approving Pay Applications. This CDBG-funded project consisted of providing engineering design and drainage improvements for the 3 quarter square mile neighborhood located in Jefferson Parish. *REFERENCE: Neil Schneider; 504-736-6833; nschneider@jeffparish.net*

City of New Orleans – City Bridges Inspections and Load Ratings

Ms. Gallo assembled technical reports for Infinity's submittal to the City Bridges Project and performed moment and shear calculations on bent caps. This project consisted of performing a condition inspection and evaluation of twelve (12) bridges around the City of New Orleans.

City of New Orleans – Joe Brown Park Bridge Rehabilitation

Ms. Gallo was the project manager responsible for organizing the preparation and delivery of a construction drawing and specification package, coordinating with the Owner and the Department of Parks and Parkways, and scheduling all design progress meetings. She was on the structural team that prepared the design for the new bridge and foundation. This project consisted of civil, structural and electrical design for the removal and replacement of an existing vehicular bridge deemed to be in poor condition.

St. John the Baptist Parish Government – Belle Point Drainage Pump

Ms. Gallo assisted with the initial drainage calculations using the Louisiana DOTD Hydraulics Program, HYDR2009. This project consisted of a Hydrology and Hydraulic Study for the watershed area in a Belle Point subdivision to identify subdivision flood susceptibility and the design of submersible storm water pump stations to address existing flooding within the neighborhood.

City of New Orleans – Jackson Square Renovations

Ms. Gallo was the project manager of the team responsible for the design of the civil, mechanical and electrical modifications to Jackson Square in preparation for the 300th anniversary of the City of New Orleans. She was responsible for all civil/architectural modifications including expansion joint repairs, damaged paving repairs, miscellaneous iron work repairs, trash receptacle replacements and granite step repairs. She also assisted with the specification of a new, automatic irrigation system. During construction, Ms. Gallo provided CA services consisting of hosting bi-weekly construction meetings, reviewing submittals and pay application requests, and regularly visiting the project site to observe progress.

City of New Orleans – Bridge Inspections and Load Ratings

Ms. Gallo was the project manager of a team responsible for performing field inspections and load rating calculations on a total of 12 City of New Orleans bridges. She performed superstructure and substructure calculations using the AASHTOWARE Bridge Rating Software (BrR, V6.8), MOVLOADS, and RAM Elements in combination with hand calculations. She assembled the final load rating reports to include the inspection forms, photos, and calculations for Infinity's submittal. This project consisted of performing a condition inspection and evaluation of twelve (12) bridges around the City of New Orleans.

Natchitoches Parish Port Commission – Dock 3 Replacement

Ms. Gallo was the project manager responsible for leading a team to provide engineering services associated with a proposed replacement dock at the Natchitoches Parish Port (Phase 1) and developing a Conceptual Engineering Report. She coordinated with a geotechnical engineer and survey team, both as sub-consultants to Infinity, in order to report on the existing conditions of the dock and perform an engineering analysis to determine the cause of failure. Phase 2 of this project consisted of Ms. Gallo leading a team of civil and structural engineers responsible for the preparation and delivery of a detailed construction drawing and specification package for the replacement of Dock No. 3. She also assisted the client in soliciting bids, as well as provided CA services throughout construction including reviewing submittals, approving pay apps, and monitoring overall construction progress. This project was federally funded by FEMA.
REFERENCE: Travis Tyler; 318-356-9686; nat-port@cp-tel.net

West Feliciana Parish – MS Riverfront Development

Ms. Gallo was the project manager responsible for organizing the preparation and delivery of a front-end design study which identified potential development options for the Mississippi Riverfront property in St. Francisville, La. She coordinated with the team's architect, landscape architect, permitting and environmental specialist, surveyor, and geotechnical engineer, as well as the Owner and representatives from West Feliciana Parish and the Mississippi riverboat companies to gather input on needs and wants for the project site. Ms. Gallo was on the structural team that prepared conceptual designs and cost estimates for a docking facility for up to three riverboat cruise ships, as well as a welcome center pavilion. This project consisted of civil and structural design, as well as site layout, to prepare and submit a proposed development plan that included improved access to riverboat docking facilities, a welcome center and passenger terminal, visitor parking, bus access, fishing services, walking trails, pavilions, an amphitheater, a kayak launch, and other recreational amenities.

DERIC J. MURPHY, PE, LSI

PRINCIPAL IN CHARGE
PRESIDENT

Deric Murphy is a graduate of Louisiana State University, receiving his Bachelor's degree in Civil Engineering in 1996, and receiving his Professional Engineering License in 2001. Since then, he has concentrated on serving the land development industry. He has designed, drafted and managed hundreds of projects ushering them from conceptual design to completion. He has represented projects at planning commission and parish council meetings. His experience includes design, supervision and general coordination of sub-consultants for various civil and municipal projects as well as the preparation of detailed construction plans, reports, technical specifications, contract documents, bid packages, cost estimates, hydraulic calculations and field studies. The types of projects he has been associated with include commercial and retail facilities, new sewer systems, highways, drainage and storm water improvements, pump station design, residential subdivisions and construction phasing plans. His experience in working one on one with the client and local governing agencies allows him to provide quality projects, thus ensuring that each one meets or exceeds even the most stringent timelines and budgets.

Breaux Bridge Manor Drainage Improvements, St. Martin Parish
QES was selected to complete the studies and design of the Breaux Bridge Manor Drainage Improvement project. The project will remove an existing box culvert that is set at the wrong elevation along Doyle Melancon Road in Breaux Bridge, LA. A larger culvert will replace the existing culvert and will be set at the appropriate elevation to ensure proper conveyance of water in the drainage area.

Ethel Street Drainage Project, Madison Parish
Quality Engineering & Surveying was selected to provide engineering service to improve drainage in the Ethel Street area of the City of Tallulah. During hard rain events the streets are overtopped with water and residential structures flood. This project required completing a study of 45 acres and will be a substantial overhaul of the existing drainage structures to protection to resident up to a 25 year event.

Boudreaux to Gilmore Drainage Improvements, St. Mary Parish
Mr. Murphy is the Principal Design Engineer on this project. His role included civil site design and project oversight. The Boudreaux Street to Gilmore Drive Drainage Improvements project will convert a 1,117 lineal feet earthen ditch into a subsurface drainage system that backs- up and causes water to pond in a residential subdivision in which houses flood on a regularbasis.

EDUCATION
LOUISIANA STATE UNIVERSITY
BACHELOR OF SCIENCE IN CIVIL ENGINEERING

REGISTRATIONS

- PROFESSIONAL ENGINEER LOUISIANA NO. 29602
- PROFESSIONAL ENGINEER MISSISSIPPI NO. 27232
- LAND SURVEYOR INTERN LOUISIANA NO. 427

EXPERIENCE

- QES - 10 YEARS
- TOTAL - 21 YEARS

CONTACT
(225) 698 - 1600 (P)
(225) 698 - 3367 (F)
DMURPHY@QESLA.COM

WILLIAM PURSER, PE

SENIOR ENGINEER
ENGINEERING DEPARTMENT MANAGER

Mr. Purser has twenty years of increasing responsibility in Civil Engineering and Public Works projects in Tennessee, Mississippi, Louisiana, Texas, and Alabama. Mr. Purser demonstrates excellent skills in engineering, project design, cost estimation, and working within tight budgets and timelines. As an experienced project manager, he has been responsible for seeing multiple projects through from initial surveys and planning to final bid and completion. Mr. Purser has extensive experience across core civil engineering disciplines of roadway/transportation, drainage, water line, and site design.

Grays Creek Drainage Improvements, Livingston Parish
Mr. Purser is the Senior Engineer on this project. His role includes overseeing the drainage study and recommendations. QES was selected to provide surveying and engineering services for a drainage improvement project for Gray's Creek. At approximately eighteen (18) miles, Gray's Creek is the largest drainage project to be undertaken in Livingston Parish. QES utilized three (3) full time survey crew and staff and professional engineers to develop a solution to reduce the effect of inland flooding in Livingston Parish.

Audubon Bridge, West Feliciana Parish, LA
Mr. Purser was the Civil Engineer on this project with a previous employer. Provided design and analysis of storm drainage for the preliminary designs for the two and four lane roadways as well as final design for the two-lane roadway. Also, provided and designed culverts for the temporary construction road. Designed the relocation of the water line at the intersection of the new roadway with U.S. 61.

Boudreaux to Gilmore Drainage Improvements, St. Mary Parish
Mr. Purser is the Senior Engineer on this project. His role includes overseeing the drainage study and recommendations. The Boudreaux Street to Gilmore Drive Drainage Improvements project will convert a 1,117 lineal feet earthen ditch into a subsurface drainage system that backs-up and causes water to pond in a residential subdivision in which houses flood on a regular basis.

Breaux Bridge Manor Drainage Improvements, St. Martin Parish
Mr. Purser is the Senior Engineer on this project. His role includes overseeing the drainage study and recommendations. QES was selected to complete the studies and design of the Breaux Bridge Manor DrainageImprovement project. A study of 603 acres was completed. The project will remove an existing box culvert that is set at the wrong elevation. A larger culvert will replace the existing culvert and will be set at the appropriate elevation to ensure proper conveyance of water in the drainage area.

EDUCATION
UNIVERSITY OF IDAHO
BACHELOR OF SCIENCE IN CIVIL ENGINEERING

REGISTRATIONS
- PROFESSIONAL ENGINEER LOUISIANA NO. 29357

EXPERIENCE
- QES - 5 YEARS
- TOTAL - 24 YEARS

CONTACT
(225) 698 - 1600 (P)
(225) 698 - 3367 (F)
WPURSER@QESLA.COM

JEFF LOUP, PE

CIVIL ENGINEER

Mr. Loup has experience in project management, design, and construction engineering in a wide variety of civil engineering projects that will benefit Livingston Parish. These projects have involved design and construction administration of: state highways and other public roadways, off-system bridges, drainage canal improvements, storm drainage systems, detention ponds, water system expansions and improvements, sewer treatment plants, pumping stations, force mains and collection systems, earthwork, and erosion control. Mr. Loup also has experience in the approval process for COE 404 permits, DEQ WPS-g permits for sewer treatment plants, DHH permits for sewer and water systems, DOTD permits for driveways, road bores and construction within state rights-of-way, boundary surveys and ALTA/ASCM survey maps. Mr. Loup has trained several engineering interns and drafting technicians in preparing plans, specs and cost estimates. He has demonstrated exceptional ability in the areas of resource coordination and client communications.

Grays Creek Drainage Improvements, Livingston Parish
QES was selected to provide surveying and engineering services for a drainage improvement project for Gray's Creek. At approximately eighteen (18) miles, Gray's Creek is the largest drainage project to be undertaken in Livingston Parish. QES utilized three (3) full time survey crew and staff and professional engineers to develop a solution to reduce the effect of inland flooding in Livingston Parish.

Florida Avenue Bridge Over the Inner-Harbor Navigational Canal, East Baton Rouge Parish
Mr. Loup was the Civil Engineer on this project with a previous employer. As an Engineer Mr. Loup performed technical reviews and coordinated with LADOTD on the vertical and geometric design for the elevated roadway, ramps, and approaches to the high-rise bridge; The project included highway and bridge design, intersection design, utility relocation, drainage, and coordinating with several specialty consultants.

Breaux Bridge Manor Drainage Improvements, St. Martin Parish
QES was selected to complete the studies and design of the Breaux Bridge Manor Drainage Improvement project. A study of 603 acres was completed. The project will remove an existing box culvert that is set at the wrong elevation. A larger culvert will replace the existing culvert and will be set at the appropriate elevation to ensure proper conveyance of water in the drainage area.

EDUCATION

LOUISIANA STATE UNIVERSITY
BACHELOR OF SCIENCE IN CIVIL ENGINEERING

REGISTRATIONS

- PROFESSIONAL ENGINEER LOUISIANA NO. 31277

EXPERIENCE

- QES - 6 YEARS
- TOTAL - 18 YEARS

CONTACT

(225) 698 - 1600 (P)
(225) 698 - 3367 (F)
JLOUP@QESLA.COM

EVGENY KHANDOGA, EI

ENGINEER INTERN

Mr. Khandoga graduated from Louisiana State University in 2016 with a Bachelor of Science degree in Civil Engineering. He joined Quality Engineering and Surveying team not long after graduation as an Engineer Intern. Although he is new to the engineering profession, he has extensive experience that allows him to work effectively and deliver high-quality service to every client. At QES, he is involved with civil construction plans production, project cost estimates, municipal projects that involved drainage analysis and drainage improvements, and reviews and evaluates 3rd party engineering documents.

Wallace Acres, Ascension Parish
QES worked on drainage improvements for Wallace Acres Subdivision in Ascension Parish. Due to flooding issues that have been accruing in Wallace Acres Subdivision, QES was tasked to analyze existing drainage systems that consisted of cross-drain culverts, driveway culverts, grate inlets, roadside ditches, and rear yard ditches and come up with a possible solution to resolve the issue. The survey crew had to complete topographic survey of the entire subdivision that included, inverts of every culvert, cross- sections of existing ditches, as well as locations of existing utilities, mailboxes, and fences. With the support of hydrologic software HydroCAD, construction plans were created with proposed improvements that covered culvert replacements, ditch regrading, erosion control, quantities, and standard plans for installation.

Grays Creek Drainage Improvements, Livingston Parish
QES was selected to provide surveying and engineering services for a drainage improvement project for Gray's Creek. At approximately eighteen (18) miles, Gray's Creek is the largest drainage project to be undertaken in Livingston Parish. QES utilized three (3) full time survey crew and staff and professional engineers to develop a solution to reduce the effect of inland flooding in Livingston Parish.

Livingston Parish Gravity Drainage District #1 (LPGDD1)
LPGDD1 is the governmental operation located in Denham Springs, LA. The Drainage District was created to open and maintain all-natural drains in the district, where drainage is accomplished using the force of gravity. This may be accomplished by cutting and opening new drains, ditches, and canals. The Drainage District is governed by a board of commissioners consisting of nine (9) members of the parish council who represent any portion of the Wards. Quality Engineering and Surveying has a retainer contract with Livingston Parish Drainage District to conduct all surveying and engineering services.

EDUCATION

LOUISIANA STATE UNIVERSITY
BACHELOR OF SCIENCE IN CIVIL ENGINEERING

REGISTRATIONS

- ENGINEER INTERN
  LOUISIANA NO. 46138

EXPERIENCE

- QES - 3 YEARS
- TOTAL - 3 YEARS

CONTACT

(225) 698 - 1600 (P)
(225) 698 - 3367 (F)
EKHANDOGA@QESLA.COM

SETH J. MOSBY, PLS

PRINCIPAL LAND SURVEYOR

EDUCATION

LOUISIANA STATE UNIVERSITY
BACHELOR OF SCIENCE IN GENERAL STUDIES

REGISTRATIONS

- PROFESSIONAL LAND SURVEYOR LOUISIANA NO. 5073
- PROFESSIONAL LAND SURVEYOR MISSISSIPPI NO. 30078

EXPERIENCE

- QES - 3 YEARS
- TOTAL - 17 YEARS

CONTACT

(225) 698 - 1600 (P)
(225) 698 - 3367 (F)
SMOSBY@QESLA.COM

Mr. Mosby is a graduate of Louisiana State University. He has worked on a variety of commercial, residential, municipal, industrial, transportation, and right-of-way projects. His experience includes both office and field time. Mr. Mosby has experience using several widely used computer software packages including but not limited to Microsoft Office, AutoCAD, Land Development Desktop, Eagle Point and GIS application internet sites. With his experience he has produced plats (including but not limited to boundary, topographic, as- built, ALTA/ACSM and right-of-way acquisitions), legal descriptions, elevation certificates and quantity calculations. He has served as crew coordinator and Head Survey Technician as well. His office experience also includes courthouse research for legal descriptions, deeds, plats and other pertinent documents for all types of projects. In the field he is experienced in all types of land surveys including elevation, boundary, subdivision, topographic, route, right-of-way, and as-built surveys as well as construction staking for clearing, drainage, sewer and roadway construction. He has experience with Topcon, Sokkia and Nikon manual and robotic total stations. He also has experience with Trimble, Topcon and Sokkia GPS technologies. Mr. Mosby also has experience using multiple types of field data collectors utilizing SMI, TDS and Carlson Survey Plus.

Ward 2 Water Waterline Expansion, Livingston Parish
Mr. Mosby served as field crew supervisor for a 10 mile water line expansion along LA- Highway 16 and LA-Highway 447. The project included Right of Way Surveying and staking for the entire proposed water line route. This also included staking of the proposed water line servitude.

Entergy Transmission Line Expansion, East Baton Rouge, Livingston, and Tangipahoa Parishes
Mr. Mosby served as a project manager and field survey party superintendent for an approximately 50 mile transmission line expansion starting from the Vignes Substation then North into Livingston and from there East through Tangipahoa. The project included Right of Way Surveying and staking for the entire proposed transmission line route. This also included calculating and staking of the proposed transmission line servitude. This also included property owner research, right of entry acquisition, and right-of-way plats.

Waste Management New Cell Construction, Livingston Parish
Mr. Mosby was involved in all areas of the preliminary surveying of the site of the new trash cells as well as construction staking, and review of field work and office prepared documents. He was also involved with the on-going surveying of the existing cells.

EDUCATION

LOUISIANA STATE UNIVERSITY
BACHELOR OF SCIENCE IN PHYSICAL GEOGRAPHY, MINOR IN SURVEYING

REGISTRATIONS

- CERTIFIED REMOTE PILOT NO. 4052158
- LAND SURVEY INTERN LOUISIANA NO. 686

EXPERIENCE

- QES - 6 YEARS
- TOTAL - 8 YEARS

CONTACT

(225) 698 - 1600 (P)
(225) 698 - 3367 (F)
GSPELL@QESLA.COM

GAGE SPELL, LSI

SURVEY TECHNICIAN

Mr. Spell graduated from Louisiana State University in December 2017 with a Bachelor of Science in Physical Geography and a Minor in Surveying. Since being part of the QES team, Mr. Spell has been the field inspector for many projects that have consisted of topographic surveys, hydrographic surveying locating geotechnical boring locations and identifying and locating existing utility and improvement locations. Mr. Spell is a Land Surveying Intern in Louisiana with 3 years in construction. He has 5 years of experience in surveying and civil engineering. Mr. Spell has experience in hazard mitigation work in Louisiana for Livingston and Tangipahoa parishes providing damage assessment and improvements for area damaged by the August 2016 flood. He oversees the drone flying for inspection, volumetric survey, and worksite survey.

Grays Creek Drainage Improvements, Livingston Parish
QES was selected to provide surveying and engineering services for a drainage improvement project for Gray's Creek. At approximately eighteen (18) miles, Gray's Creek is the largest drainage project to be undertaken in Livingston Parish. QES utilized three (3) full time survey crew and staff and professional engineers to develop a solution to reduce the effect of inland flooding in Livingston Parish.

Jesuit Bend Drainage Improvement, Plaquemines Parish
Mr. Spell acted as a field inspector and corrected drawings for this project. QES secured funding from GOSHEP/FEMA to complete designs studies and surveys of area to improve drainage in the Jesuit Bend area on Highway 23. The proposed project included replacing existing culverts and installing new culverts at three different locations. Three studies or more than 60 acres were completed.

Boudreaux to Gilmore Drainage Improvements, St. Martin Parish
Quality Engineering & Surveying, LLC provided preliminary H&H studies to provide recommendation for drainage improvements in the Berwick area of St. Mary Parish. Once complete with recommendations, QES will engineer and design the drainage improvements to an existing earthen channel of 1,711 linear feet and existing culverts to a proposed subsurface drainage system in order to properly drain the areas of flooding in the area.

Breaux Bridge Manor Drainage Improvement, St. Martin Parish
QES provided preliminary H&H studies to provide recommendations for drainage improvements in the Berwick area of St. Mary Parish. Once complete with recommendations, QES will engineer and design the drainage improvements to an existing earthen channel of 1,711 linear feet and existing culverts to a proposed subsurface drainage system in orderto properly drain the areas of flooding in the area.

EDUCATION

LOUISIANA STATE UNIVERSITY
BACHELOR OF SCIENCE IN CIVIL ENGINEERING, MINOR IN SURVEYING AND STRUCTURAL ENGINEERING

REGISTRATIONS

- ENGINEER INTERN LOUISIANA NO. 32125
- PROFESSIONAL LAND SURVEYOR LOUISIANA NO. 5200

EXPERIENCE

- QES - 1 YEARS
- TOTAL - 6 YEARS

CONTACT

(225) 698 - 1600 (P)
(225) 698 - 3367 (F)
PGOPPELT@QESLA.COM

PHILIP GOPPELT, PLS, EI

PROFESSIONAL LAND SURVEYOR

Mr. Goppelt earned his Bachelor of Science in Civil Engineering degree at Louisiana State University in 2014. There he was certified as an LSU Distinguished Communicator. As a student researcher, he became familiar with advanced mechanics of materials principles by reviewing published academic papers and learning about numerical methods for modeling the behavior of materials. He also researched the effects of strain rate on the strength characteristics of materials in nano indentation tests and designed the website for the LSU Computational Solid Mechanics Lab, and created figures in AutoCAD illustrating the dislocations produced by an indenter. Before joining QES, Mr. Goppelt gained experience in surveying and engineering with highway projects, drainage projects, sewer projects, elevation certificates, and much more. As a rodman he assisted with topographic surveying, construction surveying and boundary surveying. His office role was to review drainage impact studies for the Livingston Parish Engineering Review Agency. His review of these studies and HEC-RAS models was vital for the overall acceptance of large projects.

Since joining QES, Mr. Goppelt has transitioned from surveying to engineering opportunities including public works projects and Planning Commission reviews for Livingston Parish and other jurisdictions. In addition, his work has included preliminary plats, drainage impact studies, traffic impact studies, construction plans for residential subdivisions, final plats for residential subdivisions, maintenance bond amount checks, resub plats (for a city), final site plans for commercial/multi-family developments.

Foxglove Residential Development, Livingston Parish
Mr. Goppelt helped analyze survey data to provide an exhibit for proposed turn lane along the existing road for a proposed road, and updated drainage studies and construction plans for a 138-acre residential subdivision based on LiDAR data.

Bellarosa Residential Development, East Baton Rouge Parish
Mr. Goppelt produced a set of grading plans for particular phases of this project, including showing specific drainage and erosion control measures needed. This involved analyzing survey data to develop an existing conditions and demolition plan. He also assisted with the preparation of infrastructure plans and quantity estimates for all phases of this 179-acre residential subdivision.

Lucas Watkins, Principal

Anticipated Level of Involvement: Full-time.
On-Site Availability: Available for on-site commitment.

EDUCATION:
MS, 2005, Biological Science, Southeastern Louisiana University, Hammond, LA
BS, 2000, Forest Management, Louisiana State University, Baton Rouge, LA

TRAINING:
2010, LA Department of Agriculture and Forestry, Arborist, License No. 19-1827

TECHNICAL EXPERIENCE
Section 10/404 Clean Water Act Permitting, NEPA Assessments, Stormwater Management, ASTM Phase I and Phase II Environmental Site Assessments, FERC Compliance, Nuisance Wildlife Control Operator, LDAF Arborist, LDAF Horticulturist

FUNCTIONAL EXPERIENCE:
Marsh and Ridge Restoration, Mitigation Bank Creation and Monitoring, Regulatory Agency Consultation, Project Management, Environmental Permitting and Compliance

PROFESSIONAL PROFILE:
Mr. Watkins is a biologist and regulatory compliance specialist with experience identifying and addressing environmental compliance issues. With his partner, Jay Prather, he founded ELOS Environmental, LLC, an environmental consulting firm specializing in wetlands and other natural resource analysis and regulatory compliance. Mr. Watkins is a member of the Society of Wetlands Scientists, Society of American Foresters, and the International Society of Arboriculture. Besides being trained in NEPA and wetlands, he also is a licensed LDAF Arborist, a certified NPDES Erosion Inspector, a Nuisance Wildlife Control Operator, and a Certified Prescribed Burn Manager. Other training includes ASTM Phase I and Phase II Environmental Site Assessments, Wetland Rapid Assessment Procedures, Stormwater Management, and FERC Regulatory Overview and Guidance.

RELEVANT AND RELATED EXPERIENCE:
Plaquemines Parish Coastal Consulting Team, Plaquemines Parish, LA. Principal – 2013-2014. ELOS Environmental, LLC. Mr. Watkins provided technical expertise for assessing, permitting, and mitigating wetlands for a series of projects in Plaquemines Parish including the Hero Canal, the NOV-NFL levee improvements and drainage relocation, and several ridge restoration and marsh creation projects such

Flynn Daigle, Senior Project Manager

Anticipated Level of Involvement: Full-time.
On-Site Availability: Available for on-site commitment.

EDUCATION:
BS, 2005, Environmental Management Systems, Louisiana State University, Baton Rouge, LA

TECHNICAL EXPERIENCE
Section 10/404 Clean Water Act Permitting, Wetland Jurisdictional Delineations, National Environmental Policy Act (NEPA) Compliance, Safety Compliance,

FUNCTIONAL EXPERIENCE:
Marsh and Ridge Restoration, Mitigation Bank Creation and Monitoring, Regulatory Agency Consultation, Project Management, Environmental Permitting and Compliance

PROFESSIONAL PROFILE:
Mr. Daigle is ELOS's Lead Project Manager and an Environmental Scientist with experience in many phases of Environmental compliance, including National Environmental Policy Act (NEPA), Section 10 and 404 permitting, wetland delineations, Phase I and II subsurface investigation, and Floodplain Management. He is a Certified Floodplain Manager (CFM) accredited through the Association of State Floodplain Managers (ASFPM). He is responsible for the management of ELOS employees to maximize the effectiveness and timeliness of ELOS's work product through the appropriate allocation of resources while also acting as a project manager on critical initiatives. He is well-versed in regulations governing Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

RELEVANT AND RELATED EXPERIENCE:
Plaquemines Parish Coastal Consulting Team, Plaquemines Parish, LA. Project Manager – 2013-2014. ELOS Environmental, LLC. Mr. Daigle provided technical expertise for assessing, permitting, and mitigating wetlands for a series of projects in Plaquemines Parish including the Hero Canal, the NOV-NFL levee improvements and drainage relocation, and several ridge restoration and marsh creation projects such as Bayou Long, B-1 Ridge, Grand Bayou, Bayou Eau Noir, and Spanish Pass. As a member of the team, ELOS provided delineation and permitting services, monitored mitigation impacts and recommended compensatory measures including purchase of mitigation banking credits, in-lieu fees, and permittee responsible mitigation.

Client Reference: Vincent Frelich, Director of Coastal Restoration, Plaquemines Parish Government, 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chase, LA, (504) 297-5629, vfrelich@ppgov.net

New Orleans to Venice (NOV)–Non-Federal Levees (NFL) Drainage Improvements SEA #537 and Permitting, Plaquemines Parish, LA. Project Manager – 2014-2016. ELOS Environmental, LLC. Mr. Daigle managed ELOS's staff to complete the CEMVN environmental impact assessment for Supplemental EA #537 and the associated section 404 Department of the Army permit for the New Orleans to Venice (NOV) Hurricane Risk Reduction Project: Changes to the Non-Federal Levees (NFL), Plaquemines Parish, LA. ELOS was responsible for environmental analysis of modifications to the drainage system between La Reussitte and St. Jude including wetlands and other waters, cultural resources, and hazardous waste.

Client Reference: Vincent Frelich, Director of Coastal Restoration, Plaquemines Parish Government, 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chase, LA, (504) 297-5629, vfrelich@ppgov.net

Lac des Allemands Shoreline Protection, St. John the Baptist Parish, LA. Project Manager – 2015-2016. ELOS Environmental, LLC. Mr. Daigle managed the permitting for the placement of rip rap armoring along the shores of Lac des Allemands, a tidally influenced freshwater lake in St. John the Baptist Parish. Mr. Daigle oversaw the Joint Permit Application to the Louisiana Department of Natural resources – Office of Coastal Management (LDNR). He secured authorizations from the United States Army Corps of Engineers for impacts to Section 10 waters, coordinated with the Louisiana Office of State Lands to obtain the required right-of-way for the placement of rock dykes in state owned water bottoms, and collaborated with the Louisiana Department of Wildlife and Fisheries and LDNR to minimize impacts to species of concern.

Client Reference: Natalie Robottom, Parish President, St. John the Baptist Parish Government, 102 East Airline Highway, LaPlace, LA, (985) 652-9569 ex. 1149, parishpres@sbjparish.com

Alligator Bayou Water Control Structure Improvements Environmental Review, EA Checklist, Section 10 and Scenic Stream Permits, Iberville Parish, LA. – 2015-2016. ELOS Environmental, LLC. Mr. Daigle leads ELOS's staff in the Section 404/10 permitting process for the improvements to the water control structure at Alligator Bayou and Bayou Manchac in Iberville Parish. Iberville Parish Government is currently proposing to replace the existing culverts, automate the floodgate, install communications and auxiliary power equipment, and construct a boat ramp and parking pad for access to the bayou for maintenance in order to reduce backwater flooding in the Spanish Lake Basin.

Client Reference: Honorable J. Mitchell Ourso, Jr., President, Iberville Parish, P. O. Box 389, Plaquemine, LA 70403

Nexus Systems Fiber Optics and Wireless Telecommunications Tower EA, Natchitoches, DeSoto, and Caddo Parishes, LA. – 2015. ELOS Environmental, LLC. Review of the Environmental Assessment for a 70-mile fiber optics network and telecommunications tower project. Coordination of project scope and development with client and supervision of field work. Technical review of the environmental review and associated documentation. Ensured project deliverables provided within timeline and project budget and scope were maintained.

Client Reference: Mark Stevenson, President, Nexus Systems, Inc. 363 Venable Lane, Monroe, LA, 71203

Emergency Response Communication Tower Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), Livingston Parish, LA. – 2016. ELOS Environmental, LLC. Responsibilities: Oversight of Phase I and Phase II ESAs for the construction of a 750-ft tower for the Livingston Parish Homeland Security and Emergency Preparedness Department. Coordination with regulatory agencies regarding migratory birds, scenic streams, deforestation, and eagle nests. Collaboration with engineers for project site modifications to minimize wetlands impacts eliminating any requirements for a Section 404 permit from the US Army Corps of Engineers.

Client Reference: Mark Harrell, Director, Livingston Parish Office of Homeland Security and Emergency Preparedness, P.O. Box 1060 Livingston, LA 70754, Phone: 225.686.3066, Email: lohsep1@lpgov.com

as Bayou Long, B-1 Ridge, Grand Bayou, Bayou Eau Noir, and Spanish Pass. ELOS provided delineation and permitting services, monitored mitigation impacts, and recommended compensatory measures including purchase of mitigation banking credits, in-lieu fees, and permittee responsible mitigation.

Client Reference: Vincent Frelich, Director of Coastal Restoration, Plaquemines Parish Government, 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chase, LA, (504) 297-5629, vfrelich@ppgov.net

East Bank Levee Lift, Plaquemines Parish, LA. Principal – 2014-2016. ELOS Environmental, LLC. Mr. Watkins manages the work of obtaining the necessary state and federal authorizations for raising approximately 18 miles of levee between Braithwaite and White Ditch to a +12.5 ft. elevation. Work includes performing all field work and mapping to produce a wetlands delineation, compiling a wetlands findings report, facilitating the issuance of a formal jurisdictional determination, submitting and coordinating project applications through regulatory agencies such as the U.S. Army Corps of Engineers (USACE), Louisiana Department of Natural Resources (LDNR), Louisiana Department of Environmental Quality, obtaining necessary permits, conducting avian roost surveys, and providing an estimate of mitigation requirements and coordinating and planning and permitting a permittee responsible mitigation project to offset wetland impacts from the levee lift. Mitigation project permitting includes conceptual project design, site selection, site assessment, coordination with all affected landowners for property security, coordination with all relevant resource and regulatory agencies, coordination with the USACE offices conducting projects in the vicinity, survey coordination, title searches and certifications, and contact with dredge and project management firms to help with cost projections.

Client Reference: Vincent Frelich, Director of Coastal Restoration, Plaquemines Parish Government, 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chase, LA, (504) 297-5629, vfrelich@ppgov.net

Strategic Petroleum Reserve Valve Site Access Improvements EA 2040, Calcasieu and Cameron Parishes, LA. Principal – 2016-2017. ELOS Environmental, LLC. Mr. Watkins performed the field surveys for the wetlands delineation and biological surveys including essential fish habitat and submerged aquatic vegetation identifications for the West Hackberry site.

Client Reference: Jason McCrossen, Vice President, Vali Cooper International, LLC, 880 West Commerce Rd., Suite 402, Harahan, LA, (504) 684-4408, jason@valiint.com

West Bank Resloping of Levee, Plaquemines Parish, LA Principal – 2013 ELOS Environmental, LLC. Mr. Watkins acquired all regulatory permits and authorizations required to re-slope a section of Plaquemines Parish's west bank flood protection levees. Mr. Watkins was the primary consultant performing a wetland assessment, data collections and analyses, project planning, and regulatory coordination through the LDNR Office of Conservation, Louisiana Coastal Protection and Restoration Authority and the USACE.

Client Reference: Plaquemines Parish Government, 333 F Edward Hebert Blvd Ste F, Belle Chasse, LA 70037, Phone: 504.934.6000

Brian Fortson, Senior Environmental Scientist

Anticipated Level of Involvement: Full-time.
On-Site Availability: Available for on-site commitment.

EDUCATION:
Juris Doctorate, 2006, Civil Law cum laude, Loyola University School of Law, New Orleans, LA
BS, 1995, Wetland Ecology, Southeastern Louisiana University, Hammond, LA
Wetland Delineation, 1996, Louisiana State University Wetland Biogeochemistry Institute, Baton Rouge, LA

TECHNICAL EXPERIENCE
Wetland Jurisdictional Delineations and Section 10/404 Clean Water Act Permitting

FUNCTIONAL EXPERIENCE:
Coastal Zone Management, Wetland Value Assessments, Wetland Impact Mitigation, Marsh and Ridge Restoration, Mitigation Bank Creation and Monitoring, Regulatory Agency Consultation, Project Management, Environmental Permitting and Compliance

PROFESSIONAL PROFILE:
Mr. Fortson served as a Planner, Environmental Specialist and Coastal Wetland and Environmental Resources Manager for St. Tammany Parish Government from 1990 to 2012. He was responsible for the administration of the St. Tammany Parish Local Coastal Program under the Coastal Zone Management Act and was responsible for managing the natural resource permitting efforts for Parish Government. Mr. Fortson was the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) representative for St. Tammany Parish beginning with Project Priority List 1 and has proposed and presented multiple coastal restoration projects and facilitated the approval of projects through that process. With ELOS, Mr. Fortson has led permitting efforts for multiple projects for local development and infrastructure improvement efforts. Mr. Fortson provides technical expertise on many other projects for which he is not the lead scientist.

RELEVANT AND RELATED EXPERIENCE:
Plaquemines Parish Coastal Consulting Team, Plaquemines Parish, LA. Senior Wetland Scientist – 2013-2014. ELOS Environmental, LLC. Mr. Fortson prepared the Wetlands Value Assessments (WVA) for seven ridge restoration projects evaluating the ecological functions and values. He coordinated with natural resource agencies and assisted each engineering firm with design revisions for inclusion of sufficient marsh creation to make the projects self-mitigation with a yield of about a 2:1 ratio to compensate for

impacts to marsh from construction of the ridge. He also provided a comparative cost analysis of other mitigation measures to show the offset of the additional construction costs.

Client Reference: Vincent Frelich, Director of Coastal Restoration, Plaquemines Parish Government, 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chase, LA, (504) 297-5629, vfrelich@ppgov.net

Wilkinson Canal Pump Station Outfall Modification, Plaquemines Parish, LA. Senior Wetland Scientist– 2016-2018. Mr. Fortson is the lead permitting manager for the modification of the newly constructed Wilkinson Pump Station in Myrtle Grove, LA. The Project involved Coastal Use and DOA Section 404 permitting, Section 14 (408) permitting and engineering review, and landowner coordination. Mr. Fortson worked closely with the project engineer to define the project elements, its synchronicity with the newly constructed pump station, and the local government officials to ensure the project was designed with no net wetland impact and resulted in a proposal that provided overall benefits to water quality and coastal wetland habitats.

Client Reference: Vincent Frelich, Director of Coastal Restoration, Plaquemines Parish Government, 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chase, LA, (504) 297-5629, vfrelich@ppgov.net

Baptiste Collette and Spanish Pass Ridge Restoration and Marsh Creation Project, Plaquemines Parish, LA. Senior Wetland Scientist – 2015-2016. ELOS Environmental, LLC. Mr. Fortson's role was Ecological Resource Valuations and Technical Review. ELOS prepared a draft white paper to support a proposal to dredge Baptiste Collette and beneficially use the material for the Spanish Pass Ridge. The paper summarized various types of ecological value assessments including the WVA model that could be used to assign a monetary value to ecological functions and values for purposes of calculating a benefit/cost ratio as required by the USACE for federal projects. Mr. Fortson described methodologies including the WVA, commercial mitigation banking, and beneficial use of dredge projects to support the concept in the paper.

Client Reference: Vincent Frelich, Director of Coastal Restoration, Plaquemines Parish Government, 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chase, LA, (504) 297-5629, vfrelich@ppgov.net

East Bank Levee Lift, Plaquemines Parish, LA – 2014-2016. ELOS Environmental, LLC. Mr. Fortson is responsible for oversight of all field work and mapping, determining mitigation estimates/requirements, and coordinating, planning, and permitting a PRMP to offset wetland impacts for 18 miles of levee lifts on the east bank. Mitigation project permitting includes conceptual project design, site selection, site assessment, coordination with all affected landowners for property security, coordination with all relevant resource and regulatory agencies, coordination with the USACE offices conducting projects in the vicinity, survey coordination, title searches and certifications, and contact with dredge and project management firms to help with cost projections

Client Reference: Vincent Frelich, Director of Coastal Restoration, Plaquemines Parish Government, 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chase, LA, (504) 297-5629, vfrelich@ppgov.net

New Orleans to Venice (NOV)–Non-Federal Levees (NFL) Drainage Improvements SEA #537 and Permitting, Plaquemines Parish, LA – 2014-2016. ELOS Environmental, LLC. Mr. Fortson supervised field work for Supplemental EA #537, New Orleans to Venice (NOV) Hurricane Risk Reduction Project: Changes to the Non-Federal Levees (NFL), Plaquemines Parish, LA. He is responsible for Coastal Zone coordination, delivery of wetlands delineations, jurisdictional determinations, assembly of the Section 404 permit application, and providing WVA modeling for mitigation evaluations and recommendations

Client Reference: Vincent Frelich, Director of Coastal Restoration, Plaquemines Parish Government, 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chase, LA, (504) 297-5629, vfrelich@ppgov.net

LA 3234 Extension to Hammond Airport Environmental Assessment, Tangipahoa Parish, LA – 2017. ELOS Environmental, LLC. Mr. Fortson is responsible for supervision of field work, wetlands delineation, biological surveys, and Section 404 application for three alternative alignments being studied for the extension of E University Avenue from LA 1065 to the Hammond Airport. He will provide the wetlands value assessment (WVA) to estimate mitigation costs for unavoidable impacts to wetlands.

Client Reference: Bruce Richards, N-Y Associates, 2750 Lake Villa Drive, Metairie, LA 70002, Phone: 504.885.0500, Email: brichards@n-yassociates.com

Alligator Bayou Water Control Structure Improvements Environmental Review, EA Checklist, Section 10 and Scenic Stream Permits, Iberville Parish, LA – 2015-2016. ELOS Environmental, LLC. Mr. Fortson provided technical review of the Section 404/10 permit applications and Scenic Stream permit for replacement of a water control structure on Bayou Manchac.

Client Reference: J. Mitchell Ourso, Parish President, Iberville Parish Government, 58050 Meriam St., Plaquemine, LA, (318) 473-2100

Nexus Systems Fiber Optics and Wireless Telecommunications Tower EA, Natchitoches, DeSoto, and Caddo Parishes, LA – 2015. ELOS Environmental, LLC. Supervised field work for an Environmental Report. Coordinated with US Army Corps of Engineers Vicksburg District, US Fish and Wildlife Service, Natural Resource Conservation Service, and the Red River National Wildlife Manager. Responsible for oversight of wetlands delineations, threatened and endangered species consultations, migratory bird, and eagle nest surveys.

Client Reference: Mark Stevenson, President, Nexus Systems, Inc. 363 Venable Lane, Monroe, LA, 71203

Emergency Response Communication Tower Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), Livingston Parish, LA – 2015-2016. ELOS Environmental, LLC. Mr. Fortson coordinated with natural resource agencies regarding project impacts to migratory birds, scenic streams, deforestation, and eagle nests. Responsible for coordination with US Army Corps of Engineers-New Orleans District, providing a plan to hand-clear wetlands so that no Section 404 permit would be required for the construction of the 750-ft tower. Technical oversight of eagle nest survey requested by LA Department of Wildlife and Fisheries.

Client Reference: Mark Harrell, Director, Livingston Parish Office of Homeland Security and Emergency Preparedness, P.O. Box 1060 Livingston, LA 70754, Phone: 225.686.3066, Email: lohsep1@lpgov.com

US 51 (LA 22 to Club Deluxe Road) Draft EA, Phase I ESA, and Biological Survey Report, Tangipahoa Parish, LA. – 2015-2016. ELOS Environmental, LLC. Mr. Fortson supervised and participated in field investigations to support wetlands delineations and findings reports, biological survey, and threatened and endangered species report. Coordination among natural resource agencies, consultation with landowners, and outreach to public groups.

Client Reference: Bruce J. Richards, AICP Vice President/Director of Planning, N-Y Associates, Inc., 2750 Lake Villa Drive Metarie, LA 70002, (504) 885-0500, brichards@n-yassociates.com

Westbank and Vicinity (WBV) – EA for Levee Lifts Prior to Armoring WBV-09.A, WBV-12, WBV-14B.2, WBV-14C.2, WBV-14E.2, WBV-15A.2, WBV- 18.2, Jefferson and Plaquemines Parishes, LA. – 2017. ELOS Environmental, LLC. Mr. Fortson supervised wetland delineation and coordination with regulatory agencies including the Department of Natural Resources, Coastal Protection and Restoration Authority, and the US Army Corps of Engineers.

Client Reference: Nicole Dane, PE, Project Manager, HNTB Corporation, 2021 Lakeshore Dr. Suite 230, New Orleans, LA 70122, Phone: 504.872.3000, Email: ndane@hntb.com

Maria Bernard Reid, NEPA Specialist

Anticipated Level of Involvement: Full-time.
On-Site Availability: Available for on-site commitment.

EDUCATION:
MS, 2000, Agribusiness and Economics – Natural Resource Policy and Environmental Management and Planning, Louisiana State University, Baton Rouge, LA
BS, 1998, Forest Management and Wildlife, Louisiana State University, Baton Rouge, LA

TRAINING:
2015, National Highway Institute (NHI): Applying Section 4(f)
2014, NHI: NEPA and the Transportation Decision making Process
2014, ASTM International Environmental Site Assessments for Commercial Real Estate Course
2013, National Preservation Institute, Section 106: Introduction
2011, U.S. Fish and Wildlife Service National Conservation Training Center, Land Environmental Site Assessment
2006, U.S. Fish and Wildlife Service National Conservation Training Center, Endangered Species Act Section 7 Interagency Consultation Training
2005, LSU Fire and Emergency Training Institute, 40-hour Hazardous Materials Technician Training
2003, IWEER, Regulatory IV, Wetland Identification and Delineation Course

TECHNICAL EXPERIENCE
NEPA compliance, Endangered Species Act Impact Assessment and Agency Consultation, Habitat Assessment, Phase I Environmental Site Assessment, Wetlands Delineation, Migratory Bird Surveys

FUNCTIONAL EXPERIENCE:
Environmental Impact Statements, Environmental Assessments, Categorical Exclusions
ESA consultations for Louisiana pearlshell mussel, red-cockaded woodpecker, Alabama heelsplitter mussel, gopher tortoise, Sonoran pronghorn, and lesser long-nosed bat.

PROFESSIONAL PROFILE:
Ms. Reid has experience in National Environmental Policy Act (NEPA) compliance in both the public and private sectors. She managed, planned, and participated in projects requiring protected species surveys, general wildlife inventories, forest inventories, biological assessments (BA), wetland delineations and permitting, Categorical Exclusions (CE), Environmental Assessments (EA), and Environmental Impact Statements (EIS) in Louisiana, Mississippi, Alabama, Michigan, New York, Georgia, Tennessee, Florida, Arkansas, Texas, California, New Mexico, and Arizona. She worked with Federal and state government clients including U.S. Department of the Army, Department of the Navy, Department of Homeland Security, Customs and Border Protection, U.S. Army Corps of Engineers, U.S. Forest Service, and

Louisiana DOTD. Her specialized areas of expertise include: protected species surveys and Section 7 consultation, natural resources management, public outreach, and bike/pedestrian transportation projects.

RELEVANT AND RELATED EXPERIENCE:

Kenner Fire Station #38 (Phase I Environmental Site Assessment), Kenner, LA. Environmental Project Manager – Summer 2019 to present. Ms. Reid planned and coordinated the field survey and database research required for the Phase I Environmental Site Assessment for a new firehouse. Ms. Reid also prepared the draft Environmental Site Assessment report. The subject property is an approximately 2-acre parcel between Duke and Clemson Streets off of Loyola Drive in Kenner. A new fire station (#38) is proposed on the site to serve the neighborhood, the Loyola Drive commercial corridor and the new Loyola Drive access to the Louis Armstrong International Airport. No recognized environmental conditions were identified on or adjacent to the Subject Property.

Client Reference: Frank Liang, Vice President, Digital Engineering & Imaging, Inc.,527 West Esplanade Ave, Suite 200, Kenner, LA 70065, 504-468-6129, fliang@deii.net

I-12 Industrial Site (Phase I Environmental Site Assessment), Robert, LA. Environmental Project Manager – Summer 2018 to December2018. Ms. Reid planned and coordinated the field survey and database research required for the Phase I Environmental Site Assessment in support of the Subject Property's application for certification in the Louisiana Economic Development's Certified Industrial Site/Mega Site program. Ms. Reid also prepared the draft Environmental Site Assessment report. The subject property is an approximately 261-acre parcel along U.S. Highway 190 east of Robert, Louisiana in Tangipahoa Parish. No recognized environmental conditions were identified on or adjacent to the Subject Property.

Client Reference: Jeanine Connelly, General Manager, Reimers Company, LLC., 23107 Zemurry Gardens Drive, Loranger, LA 70446, 985-878-8022, jeanineconnelley@charter.net

Jefferson Parish Pump Stations, Veterans Boulevard (Environmental Assessment), Metairie, LA. Environmental Project Manager – Fall 2018-Present. Ms. Reid updated the existing permit applications and prepared an environmental assessment for the Section 408 permit review. The project was proposed by Jefferson Parish Government to improve street drainage at the Veterans Boulevard crossing of the 17th Street Canal. Jefferson Parish proposes to install two pump stations along the west side of the canal, one north and one south of Veterans Boulevard. The pump station outfall pipes are designed to cut through the existing floodwalls and empty into the 17th Street Canal.

Client Reference: Kazem Alikhani, Chief Executive Officer, ECM Consultants, Inc., 4409 Utica Street, Suite 200, Metairie, LA 70802, 504-885-4080, kazem@ecmconsultants.com

Interstate 10 Widening: I-49 eastward to Atchafalaya Floodway Bridge (Categorical Exclusions) Atchafalaya Basin, LA. Environmental Coordinator – Fall 2016-Spring 2018. LA Department of Transportation and Development (LDOTD). Ms. Reid served as the Environmental Coordinator

overseeing and preparing each Categorical Exclusion on an accelerated schedule. Ms. Reid also coordinated public outreach and public meetings required for each of the Categorical Exclusions.

Client Reference: Nicholas Olivier, Project Management Administrator, LDOTD, 1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1133, nicholas.olivier@la.gov

LA 73 (Government Street): Road Diet (Categorical Exclusions) Baton Rouge, LA. Environmental Coordinator – Spring 2015-Summer 2017. LA Department of Transportation and Development (LDOTD). Ms. Reid served as the Environmental Coordinator for the project. She prepared the environmental document and tracked it through its approval, planned and conducted public meetings and facilitated landowner/business outreach.

Client Reference: Anna Stockwell Hanks, Special Projects Engineer, LDOTD, 1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1726, anna.hanks@la.gov

Environmental Compliance for the SBInet Northern Border Project, US Border Patrol, Buffalo and Detroit Sectors, New York and Michigan. Environmental Project Manager - October 2007-October 2008. Gulf South Research Corporation (GSRC)**.** Ms. Reid was responsible for the coordination and preparation of an EA for the proposed communication and sensor towers. Ms. Reid conducted field surveys for the initial site selection process, vegetative mapping, and threatened and endangered species.

Client Reference: Glenn Bixler, U.S. Customs and Border Protection, Glenn.A.Bixler@cbp.dhs.gov

Threatened, Endangered, and Rare Species Survey, Stennis Western Maneuver Area, Navy Construction Battalion Center, Gulfport, Mississippi. Environmental Project Manager – Summer 2012-Fall 2013. Gulf South Research Corporation (GSRC). Ms. Reid planned and conducted surveys to identify the natural communities present at the site, assessed the quality of habitat, and detect any federal and state threatened, endangered, and rare species. Migratory bird species were also accounted for as well as mapping of invasive species populations.

Client Reference: Robby Smith, Navy Region Southeast Natural Resources Manager, Navy Facilities Engineering SE, Box 30, Naval Air Station, Jacksonville, FL 32212-0030, (904)-542-6313, Robby.Smith@navy.mil

Jesse McQuigg, Geographic Information Systems Manager

Anticipated Level of Involvement: Full-time.
On-Site Availability: Available for on-site commitment.

EDUCATION:
Drafting and Design, 2014, Northshore Technical College, Hammond, LA

TRAINING:
2016, FAA Licensed Remote Pilot, License No. 3984363, expires 3/31/2021

TECHNICAL EXPERIENCE
GIS/AutoCAD Drafting and Design, Certified Small Unmanned Aircraft Systems Remote Pilot

PROFESSIONAL PROFILE:
Almost all ELOS projects begin with data collection and mapping. As such, Mr. McQuigg and his team touch every project providing data collection and mapping services for clients. Mr. McQuigg has experience with ArcGIS Online, Collector of ArcGIS, Survey 123, Expert GPS, BaseCamp, and Google Earth. With the use of these software programs, he collects and interprets field data in support of environmental analyses and impact assessments. The figures and maps he and his staff generate are vital to the development of National Environmental Policy Act (NEPA) documentation, Threatened and Endangered (T&E) Species Surveys, Wetlands Delineations and Jurisdictional Determinations, Phase I Environmental Site Assessments, Section 404/10 and Coastal Use Permit applications, and wetlands assessment models. Mr. McQuigg has obtained his Certified Small Unmanned Aircraft Systems (SUAS) Remote Pilot license, allowing ELOS to survey remote extents and environmentally sensitive areas in a non-invasive and efficient manner.

RELEVANT AND RELATED EXPERIENCE:
Plaquemines Parish Coastal Consulting Team, Plaquemines Parish, LA. GIS/AutoCAD Manager – 2013-2014. ELOS Environmental, LLC. Mr. McQuigg provided GIS/AutoCAD support for assessing, permitting, and mitigating wetlands for a series of projects in Plaquemines Parish including the Hero Canal, the NOV-NFL levee improvements and drainage relocation, and several ridge restoration and marsh creation projects such as Bayou Long, B-1 Ridge, Grand Bayou, Bayou Eau Noir, and Spanish Pass. Mr. McQuigg and his team provided figures and drawings in support of delineation and permitting services and mitigation impact monitoring.

Client Reference: Vincent Frelich, Director of Coastal Restoration, Plaquemines Parish Government, 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chase, LA, (504) 297-5629, vfrelich@ppgov.net

New Orleans to Venice (NOV)–Non-Federal Levees (NFL) Drainage Improvements SEA #537 and Permitting, Plaquemines Parish, LA. GIS/AutoCAD Manager – 2014-2016. ELOS Environmental, LLC. Mr. McQuigg led the GIS team in the Plaquemines Parish Government search for coastal wetland mitigation locations to provide mitigation for the USACE-led NOV/NFL Project on the west bank of Plaquemines Parish. This consisted of a detailed review of aerial photography to identify brackish and fresh marsh areas experiencing land loss. Mr. McQuigg collected and compiled geospatial data and aerial imagery from available websites including SONRIS, USDA, LSU Atlas, and LDOTD for the NFL project area from La Reussite to St. Jude on the west bank. He received and converted AutoCAD site plan drawings into GIS shapefiles for purposes of calculating impacts to wetlands and other protected resources and prepared figures for the Supplement to the Final EIS, SEA #537, and the Section 404 permit application.

Client Reference: Vincent Frelich, Director of Coastal Restoration, Plaquemines Parish Government, 333 F. Edward Hebert Blvd., Building 100, Suite 212, Belle Chase, LA, (504) 297-5629, vfrelich@ppgov.net

LA 3234 Extension to Hammond Airport Environmental Assessment, Tangipahoa Parish, LA GIS/AutoCAD Manager- 2017-2018. ELOS Environmental, LLC. Mr. McQuigg managed and conducted data collection from multiple sources to establish field data collection points for the wetland's delineation and habitat identification through soil and terrain types. Mr. McQuigg post-processed GPS coordinates identifying the location of sample plots and sensitive areas that were provided to the client as GIS shapefiles for use in a comparative impact analysis.

Client Reference: Bruce Richards, AICP, Project Manager, N-Y Associates, 2750 Lake Villa Drive, Metairie, LA 70002, (504) 885-0500, brichards@n-yassociates.com

US 51 (LA 22 to Club Deluxe Road) Draft EA, Phase I ESA, and Biological Survey Report, Tangipahoa Parish, LA, GIS/AutoCAD Manager- Mr. McQuigg provided data analysis of figure designs constructed in AutoCad and ArcGIS. He developed maps using remote sensing aerial imagery and geographic information systems for the environmental assessment, wetlands delineations, Phase I ESA, and biological studies including gopher tortoise and red-cockaded woodpecker habitat analysis.

Client Reference: Bruce Richards, AICP, Project Manager, N-Y Associates, 2750 Lake Villa Drive, Metairie, LA 70002, (504) 885-0500, brichards@n-yassociates.com

Alligator Bayou Water Control Structure Improvements Environmental Review, EA and Statutory Compliance Checklists, Section 404/10 and Scenic Stream Permits, Iberville Parish, LA, Iberville Parish Government, GIS/AutoCAD Manager, ELOS Environmental, LLC 20XX-20XX- As the GIS Manager, Mr. McQuigg collected and compiled geospatial data for the project areas. He received and converted AutoCAD drawings of the culverts, floodgate, communication and auxiliary power equipment, and boat ramp and parking pad to create figures and maps for the Environmental Review Record, supervised preparation of figures for the documents including locating airports/runways, floodplains, water resources, state parks, aquifers, land use, noise receptors, and cultural resource investigations. Mr. McQuigg also rectified property and jurisdictional boundaries from legal descriptions in response to comments from adjacent landowners and provided GIS shapefiles to LDWF to quantify the effect of the project on Scenic Rivers

Client Reference: J. Mitchell Ourso, Jr., Parish President, Iberville Parish Government, 58050 Meriam Street, Plaquemine, LA 70764, (318) 473-2100

Emergency Response Communication Tower Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), Livingston Parish, LA

Client Reference: Mark Harrell, Director, Livingston Parish Office of Homeland Security & Emergency Preparedness, P.O. Box 1060, Livingston, LA 70754, (225) 686-3066, lohsep1@lpgov.com

C. Estimated Personnel

Firm Name	Personnel in LA	Personnel outside LA
Infinity Engineering Consultants, LLC	6	-
Quality Engineering and Surveying, LLC	7	-
ELOS Environmental	5	-