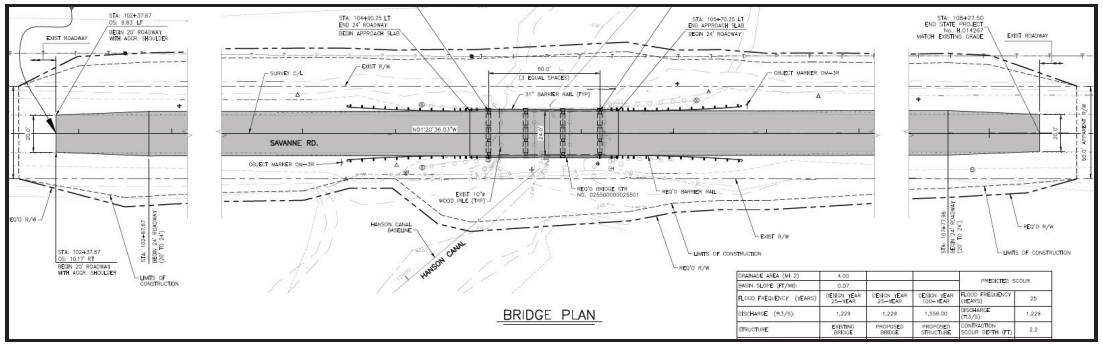
Contract for Off System Highway Bridge Program
Contract No. 4400025050

Infinity Engineering Consultants
Civil ∞ Structural ∞ Mechanical ∞ Electrical



Contract for Off System
Highway Bridge Program
Stateline Road Over Creek

Contract No. 4400025050

Statement of Qualifications

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

P: 504.304.0548
F: 504.355.0265

Raoul V. Chauvin, III, P.E.
Principal-in-Charge
rchauvin@infinityec.com

December 20, 2022

Infinity Engineering Consultants

Letter of Interest

Louisiana Registered Engineering Firm Number

Infinity Engineering Consultants, LLC.
EF. 0001309

Office Location

4001 Division Street
Metairie, LA 70002
p. (504) 304-0548

Contact Persons

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

William J. Thomassie, P.E.
Principal Partner
wthomassie@infinityec.com

December 20, 2022

Department of Transportation & Development
Consultant Contracts Services
1201 Capitol Access Road, Room 405-E
Baton Rouge, LA 70802
DOTDConsultantAds80@la.gov

Re: Off System Highway Bridge Program Stateline Road Over Creek Contract No. 4400025050

With reference to the above stated project, Infinity Engineering Consultants, LLC is pleased to present our statement of qualifications. Upon thoroughly reading the request for qualifications, we believe Infinity's team of engineers and designers meet and exceed the necessary qualifications to develop the preliminary engineering plans to replace an off-system bridge along Stateline Road in Kentwood, Louisiana.

Firm Qualifications and Understanding of Scope

Infinity Engineering Consultants is a Metairie, Louisiana based firm, located only an hour and half from the proposed bridge site, that provides multi-disciplinary engineering services to both the public and private sectors. As a multi-discipline firm, comprising of civil, structural, mechanical, and electrical engineering, our firm is equipped to provided complete engineering design, from conception to commissioning, on transportation related projects.

Infinity's staff currently includes: (4) Structural Engineers, (6) Civil Engineers, (4) Electrical Engineers, (4) Mechanical Engineers, and (4) Resident Inspectors, all supported by (9) designers and drafters. Despite the recent periods of economic uncertainty, Infinity has been able to steadily expanded the company's staff and resources to better meet our clients' engineering consulting needs.

Across Infinity's 18-year company history, we hold extensive experience working with public agencies in the project manager role of prime consultant. Currently, we are enjoying a collaborative working relationship with the Louisiana Department of Transportation & Development as we are working to complete structural engineering designs for two off-system bridge replacement projects. Infinity has recently entered the construction bidding phase on two vehicular bridge projects, one for the City of Slidell on Magnolia Street and the other for vehicular access to a wharf at the Plaquemines Port. Additionally, we are approaching the end of the construction phase for one new vehicular bridge at Alvin Calendar Airfield in Belle Chasse, LA, as well as a water intake structure with vehicular bridge access in Plaquemine, LA. These project experiences make our team uniquely qualified for this project, as we not only hold the experience of designing DOTD off-system bridges, but also designing for the soil conditions found across Louisiana.

Infinity is proud of our reputation as being honest, reliable, and capable. As such, we have provided within our approach and methodology section snippets of reference letters that attest our work ethic. Pertinent resumes and project examples for the entire team are contained in the following DOTD 24-102 form.

We steadfastly confirm the following:

- Infinity Engineering Consultants, LLC. is within good standing
- The proposed team meets all of the minimum personnel requirements
  - Raoul V. Chauvin, P.E. and William Thomassie, P.E. are Infinity's principal partners who are registered professional engineers in the State of Louisiana in civil engineering
  - Louis Jackson, P.E. and Rachel Kenney, P.E. are responsible members of the Infinity team who are currently registered in the State of Louisiana as a professional engineer in civil engineering.
  - Ricardo Contreras, P.E. will serve as the project manager and holds over five years of experience in responsible charge of bridge design as a registered professional engineer in the State of Louisiana
  - Jeff Diamond, PLS is Quality Engineering & Surveying professional land surveyor registered in Louisiana with over five years of experience
  - Cory Ricks is ELOS Environmental's environmental professional with at least five years of experience in wetlands delineation
- The firm holds all licenses necessary to legally provide the related services in the State of Louisiana
- The lead professional for each category is a licensed professional in that area with a minimum of 10 years of experience in the category in which they will be the person in responsible charge.
- Infinity Engineering has not had a record of substandard work
- Infinity Engineering has never engaged in any unethical behavior
- Infinity is a state-certified DBE and Hudson Initiative certificate holder.

Documents Enclosed

- Letter of Interest
- Infinity DOTD 24-102 form
- DBE Certificates

Closing

Infinity takes pride in the skill-sets we have provided to public agencies throughout the State of Louisiana, especially when it comes to rebuilding vital infrastructures within our communities. We are confident that we have assembled a team of engineers and support personnel that can effectively and efficiently prepare topographic surveys, wetland delineation, and engineering designs for this off-system bridge project. We respectfully request that the LADOTD select Infinity Engineering Consultants for this bridge design project so we can continue to work to improve our neighboring communities. If you have any questions or require additional information, please call me at (504) 304-0548.

By signing this letter, the Respondent certifies that the signatory is authorized to bind the Respondent and certifies the content of this letter.

Sincerely,

Raoul V. Chauvin, III, P.E.
Infinity Engineering Consultants, LLC

DOTD FORM: 24-102

(Revised March 1, 2022)

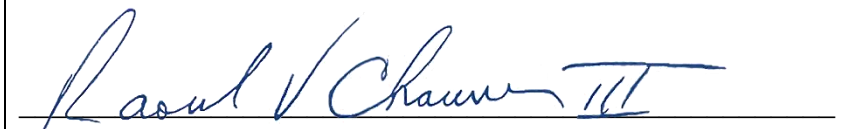
PROPOSAL TO PROVIDE CONSULTANT SERVICES

Prime consultant shall complete the DOTD Form 24-102 without altering the Form's text; however, the instruction and/or guidance for Sections 12 through 23 can be removed but do not remove Section title and number.

ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE.

Prime consultant should enter the firm name in the footer at the bottom of this page. (It will carry over to subsequent pages.)

1. Contract title as shown in the advertisement	**Contract for Off System Highway Bridge Program Stateline Road Over Creek**
2. Contract number(s) as shown in the advertisement	4400025050
3. State Project Number(s), if shown in the advertisement	H.015014.5 F.A.P No. H015014
4. Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	**Infinity Engineering Consultants, LLC.**
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF.0003109
6. Prime consultant mailing address	4001 Division Street Metairie, LA 70002
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	Not Applicable
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Raoul V. Chauvin, III, P.E. Principal rchauvin@infinityec.com 504-304-0548
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Raoul V. Chauvin, III, P.E.

	Principal rchauvin@infinityec.com 504-304-0548
10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.	Signature (shall be the same person as #9):  Date: 12/20/2022
11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.	Firm(s): Infinity Engineering Consultant, LLC Firm(s)' %: 65%

12. **Past Performance Evaluation Discipline Table:**

As indicated in the advertisement, insert the completed table here. The percentages for the prime and sub-consultants must total 100% for **each past performance evaluation discipline**, as well as the overall total percent of the contract.

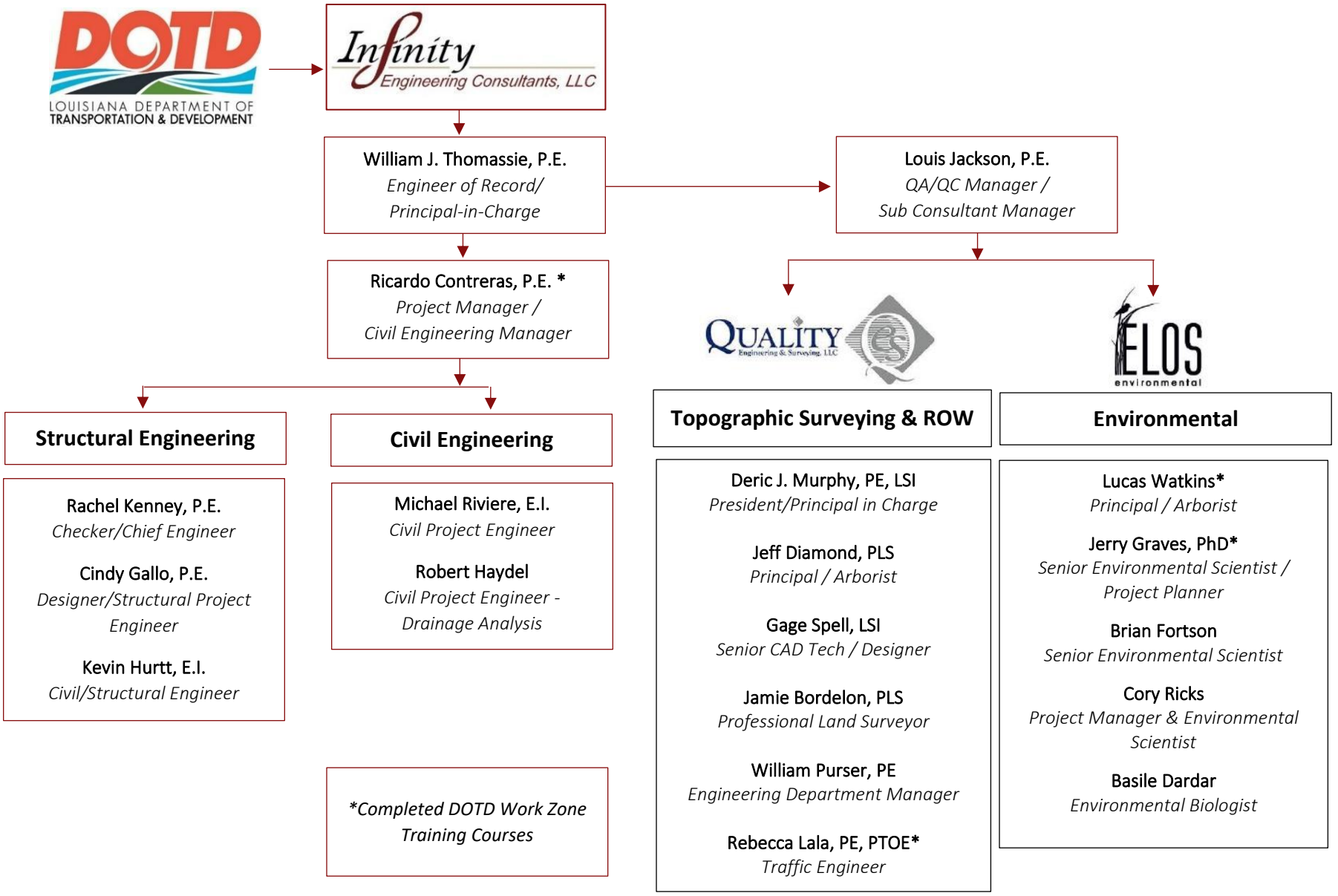
The only past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other. The crosswalk from the old categories to the new categories can be found at the link below:
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/General%20Information/CPPR%20Crosswalk%20to%20New%20Evaluation%20Disciplines.pdf. (same link as in the advertisement)

Evaluation Disciplines	% of Overall Contract	Infinity Engineering Consultants, LLC.	Quality Engineering & Surveying, LLC.	ELOS Environmental	Firm D	Firm E	Firm F
Bridge	65%	100%	-	-			
Environmental	15%	-	-	100%			
Survey	10%	-	100%	-			
Right-of-Way	5%	-	100%	-			
	5%	-	100%	-			
Identify the percentage of work for the **overall contract** to be performed by the prime consultant and each sub-consultant.							
Percent of Contract	100%	65%	20%	15%			

13. **Firm Size:**

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
Infinity Engineering Consultants, LLC.	Principal	1	2
	Engineer	4	12
	Engineer Intern	1	5
	Drafter	1	3
	Designer	1	6
	Inspector - Bridge	1	3
	Project Office Manager	1	1
	Administrative	1	6
ELOS Environmental, LLC.	Biologist/Wetlands	2	10
	Environmental Pro	3	11
	Environmental Manager	1	2
	GIS Analyst	2	6
	Archaeologist	1	2
Quality Engineering & Surveying, LLC.	Principal	1	3
	Surveyor	2	3
	Supervisor – Eng.	1	4
	Engineer	1	10
	CADD Technician	1	11

14. **Organizational Chart**:



 Prime consultant name: **Infinity Engineering Consultants, LLC.**

15. **Minimum Personnel Requirements:**

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license / certification & number	State of license	License / certification expiration date
1	William J. Thomassie, P.E.	Infinity Engineering Consultants	Professional Engineer: No. 27421	LA	09/30/2023
2	Louis Jackson, P.E.	Infinity Engineering Consultants	Professional Engineer: No. 29314	LA	03/31/2023
2	Cindy Gallo, P.E.	Infinity Engineering Consultants	Professional Engineer: No. 43357	LA	09/30/2023
3	Rachel Kenney, P.E.	Infinity Engineering Consultants	Professional Engineer: No. 37666	LA	09/30/2023
3	Ricardo Contreras, P.E.	Infinity Engineering Consultants	Professional Engineer: No. 28533	LA	09/30/2023
4	Jeff Diamond, PLS	Quality Engineering & Surveying	Professional Land Surveyor No: 0005186	LA	09/30/2024
4	Jamie Bordelon, PLS	Quality Engineering & Surveying	Professional Land Surveyor No: 0004977	LA	03/31/2024
5	Lucas Watkins	ELOS Environmental, LLC	FHWA - NHI course No. 142005, "National Environmental Policy and Transportation Decision Making"	N/A	N/A
5	Jerry Graves	ELOS Environmental, LLC	FHWA - NHI course No. 142005, "National Environmental Policy and Transportation Decision Making"	N/A	N/A
5	Cory Ricks	ELOS Environmental, LLC	U.S. Army Corps of Engineers Wetland Delineation	N/A	N/A
5	Brian Fortson	ELOS Environmental, LLC	U.S. Army Corps of Engineers Wetland Delineation	N/A	N/A

16. **Staff Experience:**

Résumés shall be provided for all prime and sub-consultant personnel listed in Sections 14 and/or 15 of the proposal. Résumés of personnel not identified in Section 14 or Section 15 of the proposal should not be included and will not be evaluated. Résumés should be limited to 2 pages per person. Any certificates required by the advertisement are to be placed in Section 20.

Firm employed by	**Infinity Engineering Consultants, LLC.**			Meets MPR No. 1
Name	**William J. Thomassie, P.E.**		Years of relevant experience with this employer	18
Title	Principal		Years of relevant experience with other employer(s)	12
Degree(s) / Years / Specialization			Bachelor of Science / 1992 / Civil Engineering	
Active registration number / state / expiration date			No. 27421 / LA / 9/30/2023	
Year registered	1997	Discipline	Civil/Structural Engineering	
Contract role(s) / brief description of responsibilities			Engineer of Record/Principal-in-Charge 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. With many of Infinity's projects requiring up to $45,000,000 for installation or modifications, Mr. Thomassie's guidance and shaping of designs, along with construction support, has enabled project completion on schedule and with minimal adverse impact on commerce in the area. Additionally, Mr. Thomassie hold active professional engineering registration in fifteen states.	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
10/2010 – 9/2012	**Entergy Evergreen Bridges –** Principal engineer for the design of two (2) vehicular bridges to replace aging timber bridges on the approach to Entergy's Evergreen Substation. Provided new bridge designs for steel reinforced piles, decking and reinforced retaining wall/abutment. Designs also included a load rating.
4/2020 – 3/2022	**Cornerstone Dock Damage Evaluation and Design -** Principal for the evaluation of damage caused by a ship collision with a dock and bridge on Cornerstone's site. Oversaw the collection of advanced measurements, including drone imagery, to assess the damages. Upon the completion of the surveying, a comprehensive analysis report was provided to Cornerstone, including cost estimation for repairs. Additionally, overseeing the completion of designs to repair dock and bridge.
4/2014 – 9/2017	**City of New Orleans Joe Brown Park Bridge Replacement –** Principal engineer for the design of the complete replacement of the Joe Brown Park Bridge. Infinity's condition inspection and bridge rating previously deemed the bridge needed replacement. The new bridge design also included a load rating.
3/2019 – Under Construction	**Regional Transit Authority Canal Street Ferry Terminal CMAR -** Principal for the engineering design of the demolition and redevelopment of the Canal Street Ferry Terminal on the Mississippi River in New Orleans for the RTA. The project includes the

	construction of a new terminal building, new bridge spanning (2) railroad tracks, reconfiguration of streetcar tracks, realignment of underground utilities, construction of a new wharf structure, and refurbishment and reconfiguration of a captive barge platform.
7/2006 – 7/2011	**Ollie Drainage Pumping Station Expansion and Bridge Design** - Principal for the Ollie Drainage District capacity evaluation and design project. 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.
4/2014 – 2/2015	**City of New Orleans Bridge Load Ratings –** Principal engineer for the structural analyses and load ratings for fourteen (14) off-system bridges around the City of New Orleans. The analyses determined that the majority of the bridges met the AASHTO load rating requirements, and proscribed remedial repairs or replacement for those that did not pass inspection.
3/2012 – 3/2012	**Scarsdale Bridge Rating –** Principal engineer for the engineering analysis and load rating of two bridges at the Plaquemines Parish Scarsdale Pumping Station. The inspection and analysis of the two (2) 25' wide x 150' timber pile foundation bridges with precast pre-stressed concrete decks were necessitated by a load rating for dump trucks using the site.
7/2016 – 9/2017	**City of New Orleans Bridge Inspections and Ratings –** Principal engineer for the field inspections and bridge load rating calculations of five (5) bridges throughout the City of New Orleans as a subconsultant to DEII.
6/2004 – 12/2004	**City of New Orleans Wisner Bridge Inspection –** Principal in charge for inspecting, evaluating, and reporting deficiencies in the 3/8-mile-long Wisner Bridge over I-610. The inspection was completed in accordance with LaDOTD requirements and a plan for rehabilitation was prepared.
11/2012 – 3/2021	**Mid-City Street Repairs and Repaving –** Principal Engineer for the identification and quantification of roadways, driveway aprons, sidewalks, curbs, and drainage structures repairs. Infinity developed a scoping report including the locations and justification of additional repairs for DPW to obtain funding from FEMA.
6/2011 – 5/2013	**City of Slidell Kostmayer Avenue Resurfacing and Drainage Improvements –** Lead Project Manager in the drainage design, material quantities, and cost estimating for the roadway repair and replacement design and all utility improvements. 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.
12/2009 – 9/2011	**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.
3/2009 – 6/2011	**Louis Armstrong International Airport North Perimeter Road** – Project Manager for N. Perimeter Road at MSY Airport. The project includes the design of the new airport utility road extending approximately one mile around the facility.
8/2010 – 1/2013	**Regional Transit Authority Canal Street to UPT Streetcar Expansion** – Project Manager for the RTA expansion of the streetcar line, specifically involving the Loyola Avenue line that will connect Canal Street and the Union Passenger Terminal. Supervised construction drawings, record specifications, and identification of utility conflict and design.

Firm employed by	**Infinity Engineering Consultants, LLC.**		Meets MPR No. 2
Name	**Louis Jackson, P.E.**	Years of relevant experience with this employer	4
Title	Operations & Quality Control Manager	Years of relevant experience with other employer(s)	23

Degree(s) / Years / Specialization			Bachelor of Science / 2001 / Civil Engineering
Active registration number / state / expiration date			No. 29314 / Louisiana / 03/31/2023
Year registered	2001	Discipline	Civil/Structural Engineering
Contract role(s) / brief description of responsibilities			Quality Control Manager - Mr. Jackson has more than 25 years of engineering design, project management, and quality control experience. His project experience has led to expertise in the following areas: Subsurface Infrastructure; Stormwater Management; Grant and Program Management; Contract Negotiations; Multi-Disciplinary Project Team Leadership. As the Operations & QA/QC Manager, Mr. Jackson ensures all designs and deliverables achieve Infinity's high expectations of effective and efficient engineering.

MEETS MINIMUM LADOTD PERSONNEL REQ.

7/19 – Ongoing Bidding Phase	**Magnolia Street Bridge –** Operations and Quality Control Manager for the replacement of Magnolia Street Bridge. Provided technical support and project coordination for the replacement of the existing bridge with a 2-4-ft x 6-ft reinforced aluminum box culvert and will replace approximately 60-LF of existing roadway and guardrails on each side of the roadway. Acted as liaison between Infinity and City of Slidell to ensure deliverables were received in a timely manner and were effective in their design.
4/19 – 3/21	**Ridgelake Drive Drainage Improvements -** Operations and Quality Control Manager for the engineering and design services for drainage improvements on Ridgelake Drive, including subsurface drainage, new 54-inch outfall, and lateral drainage connections. Provided design oversight as well as acted as liaison between Infinity and Jefferson Parish to ensure designs effectively met the goals of the scope of design.
8/19 - Present	**Canal Street Ferry Terminal CMAR -** Operations and Quality Control Manager for the development of the design most cost-effective design to build a new pedestrian ferry terminal. Ensured designs satisfy project and grant requirements. The project includes designs for a new steel pile supported wharf, steel framed terminal building, and two steel framed towers connected by a prefabricated two steel truss bridges spanning over railroad tracks.
11/19 - Present	**St. Roch North Roadway Repairs -** Operations and Quality Control Manager for the of designing of the complete street replacement in the St. Roch neighborhood. The project required replacement of roadways, sidewalks, and driveways with the addition of ADA compliant ramps. Oversaw detailed budget and contract negotiations with the City of New of New Orleans. Additionally, ensured timely delivery and effectiveness of engineering of designs.
3/12 – 5/13	**City of New Orleans Drainage Master Plan -** Project Manager for the $2M City of New Orleans Drainage Master Plan Project. Responsibilities included development of a detailed budget and creation of a detailed project work plan which addressed a multitude of project aspects, including communications and coordination of efforts and quality management.

Firm employed by	**Infinity Engineering Consultants, LLC.**			Meets MPR No. 3
Name	**Rachel Kenney, P.E.**		Years of relevant experience with this employer	13
Title	Chief Engineer		Years of relevant experience with other employer(s)	7
Degree(s) / Years / Specialization			Bachelor of Science / 2001 / Civil Engineering	
Active registration number / state / expiration date			No. 37666 / Louisiana / 09/30/2023	
Year registered	2013	Discipline	Civil/Structural Engineering	
Contract role(s) / brief description of responsibilities			Senior Bridge Designer & Checker - As Infinity's Chief Engineer Ms. Kenney is responsible for overseeing all engineering projects for the firm. Ms. Kenney brings over twenty years of structural design and civil design engineering experience to the role. Throughout her career, Ms. Kenny has used her expertise to inspect and design a wide variety of structural projects, including bridges, municipality buildings, pumping stations, oil and gas facilities, and wastewater treatment plants.	

1/2016 –1/2018	**Omega Refining Barge Dock and Vehicular Bridge -** Project Engineer for the design engineering for a new barge loading dock on the Mississippi. Project included the structural design of the steel dock framing and decking, the 225' pile supported, steel vehicular bridge, a hydraulic crane, 500' of piperack, and product piping from the facility to the dock, and electrical switchgear and lighting.
3/2018 – Present Under Construction	**Port Ship Service New Dock Design -** Managed project team to design relocated dock facility. The new dock design included a USACE levee crossing leading to an elevated platform as well as a 30' vehicular bridge with slope stabilization to the bank. Capture piles were provided for the relocated barge dock. Oversaw all pre-construction analysis and provided cost estimates.
3/2019 – Present Under Construction	**RTA Canal Street Ferry Terminal CMAR -** Managed a multidisciplined team of designers working with the Owner's Contractor to determine the most cost-effective design that would satisfy project and grant requirements. The project included: a steel pile supported wharf with concrete beams and hollow core concrete panels; a timber pile supported, steel framed terminal building; two steel framed stair/elevator towers connected by a prefabricated steel truss bridge spanning (2) railroad tracks; prefabricated 100' gangways; design of a half grand union with catenary system; captive barge dock; and temporary berth with steel platform, and temporary captive barge dock.
2/16 – 3/2021	**IMTT Geismar Dock 4 -** Managed a team of Structural, Mechanical and Electrical engineers to complete the design of a new ship and barge dock, including a new bridge connecting the new and existing dock. Performed structural design, of 60"-72" diameter ship and barge breasting monopiles, a 40'x80' steel platform supporting a 40'x20'x100' tall steel framed hose tower, 760' of piperack, and associated walkways, stairs, and auxiliary structures.
6/2012 – 8/2012	**I-10 Overpass Inspection -** Performed the traffic control and the pre and post inspection of Interstate 10 overpass and ramps in the vicinity of the Pallas Hotel Implosion. Reviewed LADOTD reports, established bent numbering in the field, performed pre and post inspections of deck surfaces and structures.
6/2004 –12/2004	**City of New Orleans Wisner Bridge Inspection -** Responsible for inspecting, evaluating, and reporting deficiencies in the 3/8-mile-long Wisner Bridge over I-610. The inspection was completed in accordance with LaDOTD requirements and a plan for rehabilitation was prepared.

Firm employed by **Infinity Engineering Consultants, LLC.**			Meets MPR No. 3
Name	**Ricardo Contreras, P.E.**	Years of relevant experience with this employer	5
Title	Civil/Structural Engineering Manager	Years of relevant experience with other employer(s)	21

Degree(s) / Years / Specialization			Bachelor of Science / 1994 / Civil Engineering
Active registration number / state / expiration date			No. 28533 / LA / 9/30/2023
Year registered	1999	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities			**Project Manager and Roadway Design –** With over 26 years of civil engineering and project management experience, Ricardo Contreras, P.E. brings the following relevant specialties to this project: roadway design, infrastructure assessment, multi-model complete street design, and roadway drainage design.

3/2020 – Under Construction	**Alvin Calender Airfield Vehicular Bridge** - Provided technical assistance for the establishment of a new vehicular bridge that will span across a drainage canal that parallels Barrier Road. Upon completion, this bridge will be approximately 50 feet wide by 160 feet in length and will include approach spans at both ends. Designs call for the bridge to uniformly elevated to span the canal and align with target grades, which is slightly higher than existing ground surfaces.
7/2019 – Present	**Magnolia Street Bridge Replacement –** Civil Engineer responsible for site civil design and overall project development for the drainage improvements and replacement of the existing bridge on South Magnolia Street. The design tasks included the specification of an aluminum box culvert, the design of asphalt roadway replacement, and civil site design
2/2021 – 2/2023 (Est)	**Shintech Water Intake Platform and Vehicular Bridge** - Provided technical assistance for the design of a new water intake platform at plant. The platform consists of a multi-disciplinary design with coordination between Infinity's civil, structural, mechanical, and electrical teams. Responsible for the design of a heavy equipment concrete bridge to connect from the levee to the new platform. Additionally, project called for designs of the roadway for vehicular levee crossing.
5/2021 - Present	**Savanne Road DOTD Off-System Bridge Replacement** - Provided technical assistance for the replacement of an off-system bridge along Savanne Road crossing over Hanson Canal. Oversaw all structural/civil engineering designs for the bridge replacement as well as coordinated with land surveying and environmental service sub consultants.
12/2015 – 9/2017	**Joe Brown Park Bridge Rehabilitation** – Responsible for construction management of project. Duties included overseeing and managing construction progress and schedules, submittal reviews, review and approval of invoices, and project closeout.
8/2001 – 10/2005	**LaDOTD Peters Road On and Off Ramps For the Westbank Expressway** – Responsible for stage "0" feasibility study, prepared preliminary plans for new on and off ramps for Peters Road and the Harvey tunnel traffic, including relocation of existing on and off ramps to the Westbank Expressway and incidental roadway realignment.
11/2016 – Under Construction	**West Metairie Avenue Rehabilitation and Canal Stabilization -** Roadway and drainage improvements work included the removal and replacement of concrete paving panels and the repair and adjustment of select drainage outfalls, 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.

Firm employed by	**Infinity Engineering Consultants, LLC.**		Meets MPR No. 2
Name	**Cindy Gallo, P.E.**	Years of relevant experience with this employer	8
Title	Project Delivery Manager/Structural Engineer	Years of relevant experience with other employer(s)	0

Degree(s) / Years / Specialization			Bachelor of Science / 2015 / Civil Engineering
Active registration number / state / expiration date			No. 43357 / LA / 09/30/2023
Year registered	2019	Discipline	**Civil/Structural Engineering**
Contract role(s) / brief description of responsibilities			Project Delivery Manager/Structural Engineer - As Project Delivery Manager, Ms. Gallo leads Infinity's project management discipline, focusing on effective project completion and exceptional client satisfaction. Ms. Gallo brings over eight years of experience in project management and civil/structural and marine engineering design to this client-focused role., Ms. Gallo's structural engineering expertise has been lent to a diverse set of project types including maritime, bridge, and facility designs.

2/2021 – 2/2023 (Est)	Shintech Water Intake Platform and Vehicular Bridge - Project Manager of the engineering team responsible for the civil, structural, mechanical, electrical and instrumentation designs of a new river water intake platform. Project components included performing topographic and hydrographic surveys, as well as the design of the concrete intake platform and vehicular access bridge supported by steel pilings/substructures, levee crossing and modifications, piping layouts, pipe support design, hydraulic analyses, and power and instrumentation as required for the platform.
7/2019 – Present	Magnolia Street Bridge Replacement – Project Manager and Engineer of Record for the detailed design for drainage improvements and the replacement of the existing bridge on South Magnolia Street. The design tasks included the specification of an aluminum box culvert, the design of asphalt roadway replacement, and civil site design. Led Infinity's efforts in the preparation of construction documents, coordinated with design team and manufacturer representative.
2/2018 – 10/2018	City of New Orleans Joe Brown Park Bridge Rehabilitation – 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.
2/2015 – 10/2017	City of New Orleans Bridge Inspections and Load Ratings - Project manager of a team responsible for performing field inspections and load rating calculations on a total of twelve bridges. Performed superstructure and substructure calculations using the AASHTOWARE Bridge Rating Software (BrR, V6.8), MOVLOADS, and RAM Elements in combination with hand calculations. Assembled the final load rating reports to include the inspection forms, photos, and calculations for submittal.
3/2019 – Under Construction	Regional Transit Authority Canal Street Ferry Terminal CMAR – Part of the team responsible for the preparation of construction drawing and specification package related to the installation of new terminal building, wharf structures, and new bridge. Coordinated with the project lead, the Owner, and the architect to ensure the client's needs were addressed.

Firm employed by	**Infinity Engineering Consultants, LLC.**		
Name	**Robert Haydel**	Years of relevant experience with this employer	2
Title	Project Civil Engineer	Years of relevant experience with other employer(s)	13

Degree(s) / Years / Specialization			Bachelor of Science / 2005 / Physics Master of Science /2007 / Civil Engineering
Active registration number / state / expiration date			N/A
Year registered	N/A	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities			**Hydraulics & Hydrology/Civil Engineering Roadway Design** - Civil Project Engineer Roadway and Drainage Design - With over 15 years of civil engineering experience, Robert Haydel brings the following relevant specialties to this project: roadway design, infrastructure assessment, storm water system design, and urban hydraulics and hydrology modeling.

5/2021 - Present	Savanne Road Off-System Bridge Replacement – Task leader of the drainage evaluation, calculations, and design for a 3 Span 60-foot-long reinforced concrete bridge. Responsibilities included developing a HEC RAS model to complete a hydraulics & hydrology analysis of the project site. Developed the hydraulic report to fulfill LADOTD requirements for bridge replacement.
7/2021 - Present	North River Road Off-System Bridge Replacement – Task leader of the drainage evaluation, calculations, and design for a 3 Span 60-foot-long reinforced concrete bridge. Responsibilities included developing a HEC RAS model to complete a hydraulics & hydrology analysis of the project site. Developed the hydraulic report to fulfill LADOTD requirements for bridge replacement.
Jan. 2017 - April 2019	Dupre and S. Gayoso Street Improvements – Utilizing green infrastructure systems, responsible for developing new drainage conveyance and retention technologies to retain a ten-year storm event. Designed the pavement structures (asphalt roadway, porous concrete, sidewalks, driveways, ADA ramps) and managed the design of the sewer and water systems. This project is being used as a model for green infrastructure standards for improvements throughout the City of New Orleans.
Feb. 2015 - Dec. 2016	DPS 01 Watershed Drainage Upgrades and Green Infrastructure - Designed drainage conveyance and retention improvements, coordinated permitting design requirements, and designed bi-directional bike lanes. Completed multiple full roadway reconstruction designs (pavement, drainage, water, sewer) while introducing new stormwater management practices and enhanced pedestrian and cycle traffic.
10/2019 - Present	St. Roch North Roadway Repairs – Project Manager responsible for leading a team in designing the complete street replacement in the St. Roch neighborhood. The project required replacement of roadways, sidewalks, and driveways with the addition of ADA compliant ramps. Designs included roadway gradients to create positive cross-sectional and longitudinal drainage. Hydraulic design/analysis was also required for drainage system design.
Sept 2008 - July 2010	New Orleans Drainage Master Plan – As part of the City of New Orleans' effort to create a drainage master plan, develop a SWMM model of the drainage system. This model identified areas susceptible to a 10-year storm event and identified adjustments to improve the conveyance of stormwater at specific locations.

Firm employed by	**Infinity Engineering Consultants, LLC.**		
Name	**Michael Riviere, E.I.**	Years of relevant experience with this employer	11
Title	Project Civil Engineer	Years of relevant experience with other employer(s)	16

Degree(s) / Years / Specialization			Bachelor of Science / 1988 / Physics
Active registration number / state / expiration date			E.I. 0013329 / LA / 9/30/2023
Year registered	1989	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities			**Construction Engineer**- As Infinity's Civil/Structural Construction Engineer, Mr. Riviere has experience in inspection, design, construction and repair of roads, bridges, and port facilities. Relevant Expertise Includes: bridge design, traffic flow access management, multi-model complete street design, green infrastructure, adding roadway capacity.

10/2021 – 10/2022	**Hurricane Ida Damage Bridge Assessments -** Performed storm damage assessments of 12 off-system bridges and 18 culvert locations suspected of storm damage. Each structure was inspected and documented with respect to storm related damage. Individual reports with photographs were completed and submitted to the Parish Officials.
6/2012-8/2012	**I-10 Overpass Inspection** – Project Engineer responsible for performing the pre and post inspection of Interstate 10 overpass and ramps in the vicinity of the Pallas Hotel Implosion. Reviewed LADOTD reports, established bent numbering in the field, performed pre and post inspections of deck surfaces and structures, and documented a written and digital report.
8/2016 -6/2017	**City of New Orleans Bridge Inspection and Ratings** – Project Engineer for local bridge inspection and load rating project. 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.
3/2005-3/2009	**Phases 1, 2 & 3 Screening of Scour Susceptible Bridges for LADOTD - Phase 1** – performed preliminary analysis on 589 bridges using the state's criteria to prioritize the structures requiring additional study in Phase 2. In Phase 2, performed site inspections on each bridge to gather data necessary for hydrologic and hydraulic analysis. Hydraulic modeling program WSPRO and HEC-18 were used to determine the anticipated scour depths and to compare with the existing bridge foundations to determine if the bridge is scour critical. Additionally, prepared reports on the findings. In Phase 3, performed structural load calculations on the critical piers to determine required pile capacity.
2/2003-10/2003	**Army Corps of Engineers Vicksburg District Bridge Replacement** – As QC/QA System Manager and Project Engineer, supervised all work on the replacement of a 360' swing span with a 306' vertical lift bridge for the Union Pacific R.R. as part of the Red River Waterway Improvement Program in Alexandria, LA.
2/2009-12/2009	**U.S. HWY 67 Relocation, Craighead and Lawrence County, Arkansas for AHTD** – Responsible for design of bridge decks, concrete approach slabs and type special approach gutters and elastomeric bearings in accordance with AASHTO specifications. Also performed structural quantity takeoffs.
2/2010-9/2011	**I-69 Connector, Lincoln, Jefferson and Cleveland Counties, Arkansas for AHTD** – Performed bridge layout, sub-structural and structural design using Merlin-Dash and RC Pier programs.

Firm employed by **Infinity Engineering Consultants, LLC.**			
Name **Kevin Hurtt, E.I.**		Years of relevant experience with this employer	2
Title Project Civil Engineer		Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization		Bachelor of Science / 2001 / Civil Engineering	
Active registration number / state / expiration date		E.I. 0034403 / LA / 9/30/2024	
Year registered	2020	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities			

5/2021 - Present	**Savanne Road Off-System Bridge Replacement** – Project engineer for the replacement of the Savanne Road off-system bridge crossing over Hanson Canal. Provided structural/civil engineering designs for the bridge replacement as well as project management responsibilities during final design phase.
2/2021 – 2/2023 (Est)	**Shintech Water Intake Platform and Vehicular Bridge** - Designed a vehicular bridge with attached pipe rack to access a proposed water intake platform in the Mississippi river. The bridge was designed to accommodate a 41,000 lb. crane with a 30,000 lb. load or HL-93 loading. The pipe rack was designed to support a thirty-inch water line, miscellaneous smaller pipes, and three cable trays. The design was completed using RISA-3D software.
4/2020 – 3/2022	**Cornerstone Ship Berth and Vehicular Bridge Design Repairs -** Assisted in repair of Cornerstone's berth on the Mississippi after an alision that destroyed a caisson supporting a hose tower and damaged a vehicle access bridge. Responsibilities included designing a control room support structure cantilevered off an existing structure and a vehicle bridge to replace the damaged portion. The project required close coordination with mechanical and electrical engineering disciplines. Design was completed using Bentley's RAM Elements software, Tension Technology International's Optimoor software, and traditional hand calculations.
7/2020 - Present	**Lakeshore Group C Street Reconstruction** – Assessed existing drainage conditions and designed new pipe layout to improve drainage and meet current Orleans parish requirements. Assessed existing street and sidewalk conditions and made recommendations for repair or replacement.
12/2018 – 6/2022	**Whitney Avenue Bike Lane –** Assisted in the design of a two-way bike lane including the repurposing of existing vehicle lanes, conversion of existing sidewalks, and construction of a median path. Prepared cost estimates and designed lane striping.
11/2020 - 9/2021	**VAA Marine Dock Peer Review –** Assisted in reviewing and assessing construction drawings for a marine dock designed by VAA to be constructed on the Mississippi river. The proposed dock included barge and ship berthing and unloading equipment. Tasks included reviewing drawings for accuracy and consistency and checking barge berthing assumptions and calculations. The proposed barge beathing structure was also analyzed using Bentley's RAM Elements software.
7/2019 - Under Construction	**Plaquemines Parish Harbor of Refuge -** Assisted in design of improvement to an existing harbor facility. Tasks included design of column base plates and a structure to house oil disposal containers. The structure included a reinforced concrete slab, a spill control and secondary containment wall, and a roof. Design was completed using Bentley's RAM Elements software and traditional hand calculations.

Firm employed by	Quality Engineering & Surveying, LLC.		
Name	Deric J. Murphy, PE, LSI	Years of relevant experience with this employer	13 years
Title	President | Principal in Charge	Years of relevant experience with other employer(s)	14 years

Degree(s) / Years / Specialization			BS / 1996 / Civil Engineering
Active registration number / state / expiration date			29602 / LA / 9-30-2023 427 / LA / 9-30-2023
Year registered	PE-2001 LSI-1998	Discipline	Civil Engineering and Land Survey Intern
Contract role(s) / brief description of responsibilities			Principal

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
09/20-Ongoing	Bayou Conway Pumping Station Upgrade QES's team was selected to provide engineering services for the design upgrades to the existing Conway Bayou Pump Station, which is being funded by FEMA HMGP funds. The watershed area is being relieved by pumping water from the basin into Bayou Conway, and QES, under Mr. Murphy's direction and management, will be providing the delivery of all Phase 1 activities such as design plans, topographic survey, BCA, H&H, and more.
2014-Ongoing	Livingston Parish Gravity Drainage District No. 1 Watershed Program Management Mr. Murphy oversaw all construction and development for the Livingston Parish Gravity Drainage District No. 1. QES also served as the professional of record reviewing all development within the district. Mr. Murphy additionally bridged the gap between the mission of the Livingston Parish Gravity Drainage District No. 1 and the Community Rating System to benefit the City of Denham Springs.
06/2019- 05/2020	Breaux Bridge Manor Drainage Improvements Instrumental in developing an approach to close a major traffic route for one week instead of projected two months expected to complete construction of the project. The project removed an existing box culvert that was set at the wrong elevation on Doyle Melancon Road in Breaux Bridge, LA. A large metal span bridge replaced the existing culvert and was set at the appropriate elevation to ensure proper conveyance of water in the drainage area.
05/2019-05/2021	Pine Bluff Drainage Improvements Principal Engineer leading the engineering and survey team to complete an H&H study and analysis before beginning the road elevation and cross drain culvert installation during this project to reduce roadway inundation occurrences.
06/2012-07/2017	Ethel Street Drainage Project 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.
05/2014-05-2016	Gray's Creek Drainage Improvements

	Mr. Murphy oversaw the survey and engineering services to improve drainage for Gray's Creek in Livingston Parish. He oversaw 5 full time survey teams which collected field data on the creek crossing and tributary intersections for the purpose of developing HECRAS model.
05/22	Livingston Parish Gravity Drainage District No. 1 Watershed Initiative Mr. Murphy directed the necessary survey and engineering services that would improve the drainage infrastructure through the Livingston Parish Gravity Drainage District No. 1. These services included watershed studies, drainage analysis and improvements, channel expansion, detention/retention ponds, bridge upgrades and replacements, and underground drainage.
2023	Region IV-Watershed Coordinator, LWI Mr. Murphy helped develop a regional approach that identified problems, developed solutions and trained for future mitigation. This was vital to provide a long-term solution for the Region 4 watershed. Mr. Murphy led QES in facilitation decisions regarding best land use, policy, mitigation activities, and ensure a coordinated and inclusive planning process will be implemented.
2023	Walker Sewer Inundation Improvement Program The proposed phased project will analyze the existing system and yield detailed design plans for upgrades and improvements as needed to increase the capacity and efficiency of the sewer system for the City of Walker. In addition, Walker will upgrade undersized sewer lines, wyes, and cleanouts. This will prevent the manholes and lift stations from being inundated with rainwater during heavy rain events. Each location for manholes and lift stations will be a part of the detailed study which will provide a defined scope of construction and implementation services necessary to achieve a successful project.

Firm employed by	Quality Engineering & Surveying, LLC.			Meets MPR No. 4
Name	Jeff Diamond, PLS		Years of relevant experience with this employer	2
Title	Survey Manager		Years of relevant experience with other employer(s)	17
Degree(s) / Years / Specialization			BS / 1996 / Interdisciplinary Studies	
Active registration number / state / expiration date			29592 / LA / 9-30-2024	
Year registered	2017	Discipline	Professional Land Surveyor	
Contract role(s) / brief description of responsibilities			Professional Land Surveyor	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/2022-Ongoing	Chappepeela Creek Stormwater Retention Planning Project Mr. Diamond serves as Survey Manager for the Chapapeela Drainage Improvement Project. Quality Engineering was selected by the Tangipahoa Parish Government to survey the area, complete detailed hydrologic and hydraulic studies of Chappepeela Creek watershed, including Little Chappepeela Creek and other upstream branches, and evaluate possible drainage improvements including detention and retention ponds.
05/2020-05/2021	Skinner Drive Drainage Improvement Project Mr. Diamond serves as Survey Manager for the Project. The survey department conducted a H&H study. QES was selected to complete the studies and design of the Skinner Drive Drainage Improvement project. The purpose of the project was to survey the current elevation of Skinner Drive, and develop an engineering design to eliminate the drainage issues affecting Skinner Drive.
05/2020-Ongoing	Bellacosa Subdivision Mr. Diamond has overseen both the survey team as Survey Manager and the land development engineering team as Land Development Manager. Bellacosa is located in East Baton Rouge Parish along Jones Creek Road, and contains 425 lots. QES designed the grading and infrastructure, which includes drainage systems, sewer systems, and roads.
(05/2020-08/2021)	Scivicque Road Bridge Mitigation and Drainage Improvements Quality Engineering conducted a topographic survey, which Mr. Diamond oversaw, of the area to be used in the H&H study. The proposed project is to demolish, construct, and elevate a new concrete bridge on concrete pilings. QES proposed a design that will lengthen the new bridge to 120 feet long and 27 feet wide with a deck elevation at 18 feet. Additionally, the project proposes to widen the channel from 60 feet to 110 feet. This will increase the capacity of the channel.
(05/2020-10/2021)	River Road Drainage Improvement Project Quality Engineering and Surveying, LLC was selected to provide survey, environmental engineering, feasibility study, geotechnical investigation, an H&H study, and preliminary design recommendations for the River Road Drainage Project. Mr. Diamond lead the survey team in completing topographic surveys of River Road.

Firm employed by	Quality Engineering & Surveying, LLC.				
Name	Gage Spell, LSI			Years of relevant experience with this employer	9
Title	Senior CAD Tech / Designer			Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization			BS / 2017 / Physical Geography		
Active registration number / state / expiration date			686 / LA / 03-31-2021		
Year registered	2018	Discipline	Land Survey Intern		
Contract role(s) / brief description of responsibilities			CADD Technician		

Mr. Spell graduated from Louisiana State University in 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 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 in addition to 5 years of experience in surveying and civil engineering. Mr. Spell has experience with hazard mitigation work in Louisiana for the 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.

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
03/2017-03/2020	Bayou Portage Guidry Mr. Spell served as a survey technician on the Bayou Portage Guidry Project. A much larger study has been completed and the resulting design plans are being finalized to provide drainage improvement along a 5 mile stretch of Bayou Portage Guidry beginning at the termination of the mitigation project for Breaux Bridge Manor. With the channelization improvements and capacity and conveyance efficiencies achieved, St. Martin Parish will improve the conveyance and capacity capability along with improving drainage for a 25 square mile area of the Parish.
05/2018- 05/2021	Highway 1033 Drainage Improvement Mr. Spell served as a survey technician on the Highway 1033 Drainage Improvement Project. The project calls for the demolition, construction and elevate a new concrete bridge on concrete pilings on Highway 1033 in Livingston Parish, Louisiana. The new bridge will be 130 feet long and 26 feet wide with a deck elevation at 22.75 feet. In addition, the Parish proposes to armor 600 linear feet upstream of the LA Hwy 1033 bridge.
04/2012 - 05/2017	Breaux Bridge Manor Mr. Spell served as a survey technician for the Breaux Bridge Manor project, which removed an existing box culvert which was set at the incorrect elevation along Doyle Melancon Road in Breaux Bridge, LA. The study called for the design and installation of a larger culvert to replace the existing culvert which-set at the appropriate elevation.

Firm employed by	Quality Engineering & Surveying, LLC.			Meets MPR No. 4
Name	Jamie Bordelon, PLS		Years of relevant experience with this employer	8
Title	Professional Land Surveyor		Years of relevant experience with other employer(s)	12
Degree(s) / Years / Specialization			LSU / 2007 / Geomatics	
Active registration number / state / expiration date			4977 / LA / 3-31-24	
Year registered	2007	Discipline	Professional Land Surveyor	
Contract role(s) / brief description of responsibilities			Professional Land Surveyor	

Jamie serves as supervising professional for Quality Engineering & Surveying, LLC, specializing in turn-key design-build residential, commercial land development, and major roadway projects in South Louisiana. His duties and responsibilities include survey personnel management, project management, product QA/QC, and project planning and coordination. In addition to managing large-scale land development projects, he also helps manage a workflow of smaller, shorter-term municipal and commercial site projects for architects, contractors and engineers.

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
07/2010 – 03/2012	Plank Road Kleinpeter Road Capacity Improvement Project Mr. Bordelon was the Project Manager and Surveyor providing overall project coordination and surveying. He completed route survey to produce right of way maps for land acquisition through approximately 25,000 linear feet of sewer capacity improvement corridor in East Baton Rouge Parish.
07/2013 – 07/2014	Ascension Parish Neighborhood Development Project Mr. Bordelon led the team as Principal Land Surveyor managing surveying and permitting operations including boundary, topographic, subdivision, and construction layout for 160+ acres residential PUD type development in Ascension Parish.
08/2011 – 05/2012	Sherwood-Goodwood Blvd. Pipeline Capacity Improvement Project Mr. Bordelon managed the topographic and design surveying for approximately 28,000 linear feet of sewer capacity improvement in East Baton Rouge Parish. His duties included managing field crews, QA/QC of survey control, and utility coordination.
N/A	As the lead surveyor, Mr. Bordelon oversaw the field survey work on the River Road Drainage Project. Tasks included field crew management, process and review utility as-builts, LOMA/LOMR, road and utility layout supervision, preliminary boundary surveys, and final plat review.
N/A	Mr. Bordelon managed the topographic and design surveying for The Boudreaux Street to Gilmore Drive Drainage Improvements project. This project converted a 1,117 lineal feet earthen ditch into a subsurface drainage system.

Firm employed by	Quality Engineering & Surveying, LLC.			
Name	William Purser, PE		Years of relevant experience with this employer	8
Title	Engineering Department Manager		Years of relevant experience with other employer(s)	20
Degree(s) / Years / Specialization			BS/ 1994/ Civil Engineering	
Active registration number / state / expiration date			29357 / LA / 9-30-2024	
Year registered	2001	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Supervisor-Eng	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/2019- 05/2020	Breaux Bridge Manor Drainage Improvements 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 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.
05/2019-05/2021	Pine Bluff Drainage Improvements Mr. Purser led the engineering team at QES in the drainage improvement project at Pine Bluff Road in Livingston Parish. He oversaw the environmental engineering, design and construction administration, feasibility study, geotechnical investigation, and the H&H study aspects of the project.
07/2019 – 12/2020	West David Drive Drainage Improvement Mr. Purser supervised engineering department design activities for proposed flood mitigation of a residential subdivision community.
01/2019-07/2020	Skinner Drive Drainage Improvements Mr. Purser supervised engineering department design activities for proposed flood mitigation of a residential subdivision community.
04/2010 – 10/2013	I-10 Widening from Highland Road Interchange to LA 73 Interchange Project consists of providing pre-construction services, including 30% Preliminary Roadway and Bridge design plans to allow for the potential of a Design-Build Project to widen I-10 from 2 lanes in each direction to 3-lanes in each direction (6 lanes total). Project work includes roadway design, and assist in supervision of sub-consultants, including geotechnical, surveying, and subsurface utility engineering (SUE). Also responsible for schedule and flow of all design fees to the sub-consultants, consistent with accomplishment of the price centers.
04/2010 – 10/2012	I-12 Design-Build Widening from O'Neal Lane to Pete's Highway Mr. Purser was responsible for updating design plans in order to meet changes in field conditions and coordination with the contractor. This included drainage updates and roadway grade adjustments. Project completed in 2012. Estimated project cost: $70 million.

05/2019-10/2020	River Road Drainage Improvements Mr. Purser supervised engineering department design activities for proposed flood mitigation of a residential community.
07/2020-Ongoing	Gray's Creek North and South Detention Ponds Mr. Purser supervised engineering department design activities for proposed flood mitigation utilizing engineered detention ponds to detain riverine flooding surcharge during peak flood events.
07/2019-Ongoing	Drainage Improvements- Town of Lutcher Mr. Purser supervised engineering department design activities for proposed flood mitigation of a residential subdivision community.
05/2018- 05/2021	Highway 1033 Drainage Improvement Project Mr. Purser supervised the engineering team through the bridge replacement and elevation change for the LA Hwy 1033 bridge.

Firm employed by	Quality Engineering & Surveying, LLC.		
Name	Rebecca B. Lala, PE, PTOE	Years of relevant experience with this employer	2
Title	Traffic Engineer	Years of relevant experience with other employer(s)	17

Degree(s) / Years / Specialization			BS / 1999 / Chemical Engineering
Active registration number / state / expiration date			31781 / LA / 9-30-2023 PTOE: 2282 / LA / 05-2023
Year registered	2005	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities			Traffic Engineering; Traffic Control Design; Traffic Signal Analysis and Design. Rebecca has 19 years of traffic engineering experience performing traffic studies using traffic modeling software such as HCS, Sidra, VISSIM, Synchro and Vistro. Becky has performed countless traffic studies throughout her career including, but not limited to, subdivisions, shopping centers, gas stations, convenience stores, fast-food restaurants, banks, car washes and multi-use developments. Planning level traffic study experience includes safety studies, feasibility studies, Stage 0 studies, Roadway Safety Assessments (RSA) and corridor studies, meeting LaDOTD and FHWA requirements where applicable. Becky has extensive experience with signal warrant analyses as well as signal design, optimization, and synchronization for existing and proposed signalized intersections. She has led the traffic analysis of intersection and interchange projects to demonstrate how proposed changes would improve traffic flow and safety, including a concept model in VISSIM of a new Interchange along I-12, which was ultimately built in 2009. She has previous experience as a Parish Traffic Engineer, where she had the opportunity to apply Access Management principles and techniques in several projects throughout her career, including projects implemented as part of the American Recovery and Reinvestment Act of 2009 (ARRA) in partnership with LaDOTD.

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/2020 – present; 10/2014 – 09/2018	Various Traffic Studies, Louisiana: Work as a Traffic Engineer performing several traffic impact analyses (TIA's) for commercial and residential developments throughout the State. Each TIA is performed using HCS, Vistro, and/or Sidra as applicable. Analysis includes turn lane warrants, signal warrants, safety assessments and capacity analysis for stop controlled, signal controlled and roundabout intersections. Analyze and design traffic signals for proposed access to developments as well as existing intersections where signal upgrades are required. Perform traffic signal timing optimization and synchronization for existing and proposed signalized intersections. Traffic Engineering requirements and guidelines per LaDOTD are followed.
07/2019 – 04/2020	Regional Traffic Signal Operations, Regions 2 and 3, Georgia: Senior Traffic Signal Operations Engineer (TSOE). Review the field work diagrams and data collection for 269 intersections within the State of Georgia for completeness and accuracy. Intersection Diagrams, Clearance Calculation Spreadsheet, Traffic Signal Operations Report (TSOR) and TEAMS database are checked and updated as necessary. Tasks performed include Clearance Interval Calculation updates, signal system database updates, recommendations for design and operational improvements at each intersection, and remote implementation of the new traffic signal timing parameters and coordinated timing plans at intersections and corridors across the state. Client: Georgia Department of Transportation (sub to Jacobs).
03/2019 – 04/2020	Wake Transit Plan, New Bern Avenue Corridor Bus Rapid Transit (BRT) Project, City of Raleigh, North Carolina: Task manager and project engineer. Traffic analysis of 31 signalized intersections and 23 unsignalized intersections before and after the implementation of transit-only lanes, with Synchro and SimTraffic. Alternatives include reducing the current number of lanes for through traffic along the corridor as well as restricting left turns at several intersections. Tasks include balancing of traffic counts, rerouting of traffic, crash analysis and

	performing traffic signal analysis at each of the intersections. Perform traffic signal warrant analysis at existing stop-controlled intersections. Use traffic signal analysis results to design recommended changes to traffic signals, signal hardware, and applied traffic operations. Develop appropriate traffic signal timing, synchronization, and 30% design for all scenarios per NCDOT Standards and Congestion Management Guidelines. Client: City of Raleigh, North Carolina
02/2016 – 09/2018	LA 22 from Rou Mar Nei Drive to First Street, Ponchatoula, Louisiana (H.011618): Project manager and project engineer for the corridor study. Evaluated alternatives to improve safety and mobility along the corridor. Louisiana Department of Transportation and Development (LaDOTD) policies and guidelines were followed, including Access Management and Complete Streets requirements. Tasks included balancing of traffic counts, rerouting of traffic, traffic analysis, crash analysis and performing traffic signal warrants, timing optimization and traffic control design for all intersections as applicable for all scenarios. Synchro, Sidra and Vissim traffic analysis results were used to recommend operational changes to intersections, as well as evaluate capacity and safety of the corridor. Safety Analysis was performed per Highway Safety Manual (HSM) methodology. Client: LaDOTD
05/2015 – 09/2018	LA 22 from Dalwill Drive to Rodger Storme Road, Mandeville, Louisiana (H.011454): Project manager and project engineer. Evaluated alternatives to improve safety and mobility along the corridor. LaDOTD policies and guidelines were followed, including Access Management and Complete Streets requirements. Tasks included balancing of traffic counts, rerouting of traffic, performing Level of Service (LOS) analysis, and performing traffic signal warrants, optimization and traffic control design for all intersections as applicable. Synchro, Sidra and Vissim traffic analysis results were used to recommend operational changes to intersections, as well as evaluate capacity and safety of the corridor. Safety Analysis was performed per HSM methodology. Client: LaDOTD
02/2015 – 09/2018	US 51 Business from I-12 to Coleman Avenue, Hammond, Louisiana (H.011402): Project manager and project engineer. Traffic analysis results from Synchro, Sidra and Vissim were used to evaluate alternatives to improve safety and mobility along the corridor. Capacity and safety analyses were performed to recommend operational changes to signalized and non-signalized intersections. LaDOTD policies and guidelines were followed, including Access Management and Complete Streets requirements. Tasks included balancing of traffic counts, rerouting of traffic, crash analysis, and performing traffic analysis of all intersections, both signalized and stop-controlled. Performed traffic signal warrants for all intersections and conducted signal timing optimization for recommended operational changes. Safety Analysis was performed per HSM methodology. Client: LaDOTD
02/2015 – 09/2018	US 51 from West University Avenue to I-55, Hammond, Louisiana (H.011401): Project manager and project engineer. Performed traffic analysis with Synchro and Vissim to evaluate alternatives to improve safety and mobility along the corridor. Tasks included balancing of traffic counts, rerouting of traffic, performing traffic signal warrants and performing traffic analysis. Traffic analysis results were used to recommend operational changes to intersections, including traffic signal upgrades and optimization as necessary. Sidra was used to evaluate roundabout alternatives. Safety Analysis was performed per HSM methodology. LaDOTD policies and guidelines were followed, including Access Management and Complete Streets requirements. Client: LaDOTD
04/2003 – 10/2014	Traffic Engineer and Project Manager for St. Tammany Parish, Louisiana: Coordinated with outside consultants on all Parish Road Projects that were ongoing to ensure timely implementation and sufficient design. This included coordination with LaDOTD, New Orleans Regional Planning Commission (NORPC) and local municipalities. Projects included roadway capacity, intersection improvements, traffic signal design and installation of roundabouts. Reviewed Traffic Impact Analyses (TIA's) submitted by consultants. Ensured proper traffic engineering practices, access management principles, proper analysis procedures, valid traffic counts, proper trip generations and trip distributions were utilized. In charge of all traffic control design at intersections throughout the Parish.

Firm employed by	ELOS Environmental, LLC			Meets MPR No. 5
Name	Lucas Watkins		Years of relevant experience with this employer	16
Title	Principal / Environmental Scientist		Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization			BS/ 2000 / Forest Management MS / 2005 / Biological Sciences	
Active registration number / state / expiration date			LDAF Certified Arborist, No. 19-1827	
Year registered	2010	Discipline	Arborist	
Contract role(s) / brief description of responsibilities			Mr. Watkins will serve as the principal (MPR #1), providing leadership, direction, senior-level oversight, and quality control for all aspects of the project.	

Experience dates	Experience and qualifications relevant to the proposed contract
	Lucas Watkins is the President and founding Principal of ELOS. His experience includes environmental regulatory compliance and project management. This includes the management of large-scale, multi-faceted projects, such as disaster recovery debris removal efforts, wetland restoration implementation, government grant management, and complex construction projects. His key strengths include wetland delineations, wetland permitting, wetland restoration, NEPA compliance, ASTM Phase I ESAs, stormwater management, FERC regulatory overview and guidance, endangered species surveys, and timber and forest management. He has substantial experience in permitting municipal infrastructure, levees, borrow pits, oil and gas exploration, productions, and transmission activities as well as working on other public and private sector environmental-related issues. Mr. Watkins works to ensure that ELOS acquires the best tools and techniques to guarantee efficient and cost-effective delivery of services to clients.
09/20 – Ongoing	**S.P. H.008915.2, LA 3234 EXTENSION TO HAMMOND AIRPORT EA (LADOTD, N-Y ASSOCIATES)** Principal. Provided senior-level oversight and quality control for final reports. This project included a wetland delineation, section 404 and 401 permit applications, cultural resources site visit and report, and a threatened and endangered species survey.
08/20 – Ongoing	**S.P. H.013958, RURAL BRIDGE INITIATIVE – CARPENTERS BR RD OVER WHISKEY CHITTO CR (LADOTD, BURK-KLEINPETER, INC.)** Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 03/22	**S.P. H.013959, RURAL BRIDGE INITIATIVE – REEDS BRIDGE ROAD OVER CALCASIEU RIVER RELIEF (LADOTD, BURK-KLEINPETER, INC.)** Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 01/22	**S.P. H.013963, RURAL BRIDGE INITIATIVE – UNNAMED WATERWAY ROUTE (LADOTD, BURK-KLEINPETER, INC.)** Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.

08/20 – 09/21	S.P. H.013968, RURAL BRIDGE INITIATIVE – LA 404: BAYOU AND CANAL BRIDGES (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation and permit applications.
08/20 – 02/22	S.P. H.013970, RURAL BRIDGE INITIATIVE – LA 717: KLONDIKE CANAL AND BAYOU BRIDGES (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – Ongoing	S.P. H.013976, RURAL BRIDGE INITIATIVE – LA 376: BAYOU BRIDGES (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 01/22	S.P. H.013982, RURAL BRIDGE INITIATIVE – LA 10 SPUR, LA 1042: BRIDGES NEAR GREENSBURG (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation and permit applications.
08/20 – Ongoing	S.P. H.013984, RURAL BRIDGE INITIATIVE – LA-0016/WRIGHT'S CREEK, HOLDEN'S CREEK, UNNAMED DRAIN, TALLEY'S CREEK, BERRY'S CREEK (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 01/22	S.P. H.013996, RURAL BRIDGE INITIATIVE – LA 1074, LA 1075: BRIDGES NEAR RIO (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 09/21	S.P. H.013989, RURAL BRIDGE INITIATIVE – GRAYBOW ROAD/PALMETTO CREEK (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/17 – 07/18	I-10 HIGHLAND LA 73 DESIGN-BUILD - EAST BATON ROUGE PARISH, LA TO ASCENSION PARISH, LA (LADOTD, SIGMA CONSULTING GROUP, INC.) Project Manager. Environmental compliance manager responsible for permitting and construction monitoring for the fast-track interstate widening project from Highland Road in Baton Rouge to LA 73 in Prairieville.
03/14 – 06/17	LOUISIANA-3234 EXTENSION - TANGIPAHOA PARISH, LOUISIANA (LADOTD, N-Y ASSOCIATES INC.) Project Manager. Provided environmental services for LA-3234 Extension from LA-1065 to Hammond Airport. These services included preparing estimates of environmental mitigation costs, and any unavoidable environmental impacts, such as wetland mitigation, hazardous waste mitigation, or cultural resource mitigation.

Firm employed by	ELOS Environmental, LLC			Meets MPR No. 5
Name	Jerry V. Graves, Ph.D.		Years of relevant experience with this employer	<1
Title	Vice President of Coastal Resilience		Years of relevant experience with other employer(s)	19
Degree(s) / Years / Specialization		PhD. / 2012 / Urban Studies MPA / 2007 / Hazard Policy BA / 2003 / Political Science		
Active registration number / state / expiration date		N/A		
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities		Mr. Graves will serve as a senior environmental scientist and project management planner.		

Experience dates	Experience and qualifications relevant to the proposed contract
Jerry V. Graves specializes in project management, urban and environmental planning, and emergency management. Dr. Graves is an experienced hazard mitigation, resilience, and coastal restoration planner. He is also an experienced administrator who previously worked in the public sector for over a decade. Dr. Graves currently serves as the Vice President of Coastal Resilience at ELOS, where he provides a wide range of project management and consulting services to clients throughout the region.	
09/22 – Ongoing	LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES CONSULTING SERVICES – BATON ROUGE, LA. Serves as project manager for an agency-wide project funding strategy effort and writes grants for a variety of federal programs.
01/16 – Ongoing	ST. BERNARD PARISH COASTAL PROGRAM CONSULTING – ST. BERNARD PARISH, LA. Serves as project manager for Graves Public Services (2016-2020), Arcadis (2020-2022), and ELOS (2022-currently), while supporting all coastal restoration planning, funding, and implementation efforts in St. Bernard Parish.
08/22 – Ongoing	JEFFERSON PARISH COASTAL PROGRAM CONSULTING – JEFFERSON PARISH, LA. Serves as project manager in support of the parish's effort to develop a management and mitigation strategy for the sustainable redevelopment of Grand Isle, LA.
01/20 – 07/22	CPRA ENVIRONMENTAL CONSULTING SERVICES – BATON ROUGE, LA. Served as project manager for Arcadis during the CPRA 2023 State Master Plan process and oversaw the development and implementation of the agency's construction cost estimation tool and project database.
01/20 – 07/22	LOUISIANA WATERSHED INITIATIVE (LWI) PROGRAM CONSULTING – BATON ROUGE, LA. Served as project manager for Arcadis (sub-consultant to CSRS) during the development of the LWI Regional Planning Framework and Nonstructural Mitigation Program Alignment Guidance for State Agencies.
01/21 – 07/22	FLORIDA DEPARTMENT OF ECONOMIC OPPORTUNITY (DEO) CDBG-MIT PROGRAM CONSULTING – TALLAHASSEE, FL. Served as project manager for Arcadis (sub-consultant to CRI) during the development and implementation of DEO's CDBG-MIT program.

Firm employed by	ELOS Environmental, LLC			Meets MPR No. 5
Name	Brian Fortson		Years of relevant experience with this employer	7
Title	Senior Ecologist		Years of relevant experience with other employer(s)	30
Degree(s) / Years / Specialization			Juris Doctorate/2006/Civil Cum Laude BS/1995/Wetland Ecology	
Active registration number / state / expiration date			N/A	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Mr. Fortson will serve as the Senior Environmental Scientist and provide regulatory agency guidance. Brian's extensive knowledge of state and federal environmental regulations enables him to navigate the permitting process.	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Fortson has 30+ years of environmental experience with permitting various complex developmental infrastructure projects. Mr. Fortson serves as a Senior Environmental Scientist at ELOS, working with regulatory agencies such as USDA, NRCS, FEMA, USACE, DNR, and LDEQ. Brian's knowledge of state and federal environmental regulations and years of experience enables him to navigate the permitting process. Mr. Fortson also provides senior guidance to the environmental scientists at ELOS on vegetation identification and threatened and endangered species surveys.
01/15 – 01/16	STATE PROJECT NO. STP-445-1(002), US 51 BUSINESS (LA 22 TO I-12) (LADOTD, N-Y ASSOCIATES) Senior Environmental Scientist. Mr. Fortson supervised and participated in field investigations to support wetland delineations and findings reports, biological surveys, and threatened and endangered species reports. He also provided coordination among natural resource agencies, consultation with landowners, and outreach to public groups.
08/17 – 07/18	S.P. H.972275, LAND USE AND TRANSPORTATION STUDY HARRISON AVE EXT (LADOTD, PROFESSIONAL ENGINEERING CONSULTANTS CORP.) Senior Environmental Scientist. Assisted in the preparation of a DOTD Stage 0 Environmental Checklist for the extension of Harrison Avenue in Abita Springs from LA 59 to LA 36, a distance of 1.7 miles. Desktop and field data were collected to identify relevant resources in the project area. He assisted in the identification of land use, wetlands, community facilities, recreational assets, historic and cultural sites, and hazardous waste sites.
09/17 – 02/21	S.P. H.008915.2, LA 3234 EXTENSION TO HAMMOND AIRPORT ENVIRONMENTAL ASSESSMENT (LADOTD, N-Y ASSOCIATES) Senior Environmental Scientist. Responsible for the supervision of fieldwork, wetland delineations, biological surveys, wetland value assessments, and Section 404 application for three alternative alignments being studied for the extension of E. University Avenue from LA 1065 to the Hammond Airport.
05/21 – 03/22	ST. TAMMANY TRACE BRIDGE REPLACEMENT Senior Environmental Scientist. Served as a Project Manager overseeing the permitting process, coordinating with regulatory agencies, and providing senior-level insight for the replacement of the Trace Bridge over Little Bayou Castine on Tammany Trace.

Firm	ELOS Environmental, LLC		
Name	Cory Ricks	Years of relevant experience with this employer	6
Title	Project Manager / Environmental Scientist	Years of relevant experience with other employer(s)	2

Degree(s) / Years / Specialization			BS / 2015 / Biology
Active registration number / state / expiration date			R-I-99273-17-01464
Year registered	2017	Discipline	proActive Safety Services Renovator Initial
Contract role(s) / brief description of responsibilities			Cory will serve as the Project Manager, providing his expertise for wetland delineations and jurisdictional determinations, as well as managing the collection of field data and the development of reports.

Experience dates	Experience and qualifications relevant to the proposed contract
Mr. Ricks serves as ELOS's wetland delineation specialist. Mr. Ricks has led wetland delineation efforts for multiple projects for local entities, mitigation banks, and infrastructure developments. He has provided assistance with NEPA documentation, permitting, GIS mapping, and cultural resources for a variety of projects. He currently manages a team of environmental scientists, field biologists, and data processors who all assist on a variety of environmental and disaster recovery projects.	
08/20 – Ongoing	S.P. H.013958, RURAL BRIDGE INITIATIVE – CARPENTERS BR RD OVER WHISKEY CHITTO CR (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 03/22	S.P. H.013959, RURAL BRIDGE INITIATIVE – REEDS BRIDGE ROAD OVER CALCASIEU RIVER RELIEF (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 01/22	S.P. H.013963, RURAL BRIDGE INITIATIVE – UNNAMED WATERWAY ROUTE (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 09/21	S.P. H.013966, RURAL BRIDGE INITIATIVE – LA 321: CREEK BRIDGES (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 09/21	S.P. H.013968, RURAL BRIDGE INITIATIVE – LA 404: BAYOU AND CANAL BRIDGES (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation and permit applications.
08/20 – 02/22	S.P. H.013970, RURAL BRIDGE INITIATIVE – LA 717: KLONDIKE CANAL AND BAYOU BRIDGES (LADOTD, BURK-KLEINPETER, INC.)

	Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – Ongoing	S.P. H.013976, RURAL BRIDGE INITIATIVE – LA 376: BAYOU BRIDGES (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 01/22	S.P. H.013982, RURAL BRIDGE INITIATIVE – LA 10 SPUR, LA 1042: BRIDGES NEAR GREENSBURG (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation and permit applications.
08/20 – Ongoing	S.P. H.013984, RURAL BRIDGE INITIATIVE – LA-0016/WRIGHT'S CREEK, HOLDEN'S CREEK, UNNAMED DRAIN, TALLEY'S CREEK, BERRY'S CREEK (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 01/22	S.P. H.013996, RURAL BRIDGE INITIATIVE – LA 1074, LA 1075: BRIDGES NEAR RIO (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 09/21	S.P. H.013989, RURAL BRIDGE INITIATIVE – GRAYBOW ROAD/PALMETTO CREEK (LADOTD, BURK-KLEINPETER, INC.) Project Manager. This bridge replacement project included a wetland delineation, permit applications, and a threatened and endangered species survey.
07/16 – Ongoing	S.P. H.008915.2, LA 3234 EXTENSION TO HAMMOND AIRPORT EA (LADOTD, N-Y ASSOCIATES) Environmental Scientist. Performed the wetland delineation for all three routes and provided a report of the findings. Provided assistance for GIS mapping of the Wetlands Findings Report, Phase 1 Environmental Assessment Survey, and the Biological Assessment Survey. Provided a report of the threatened and endangered species known in the project area. Lead efforts on providing stream and waterbody data for each report. This project included a wetland delineation, section 404 and 401 permit applications, cultural resources site visit and report, and a threatened and endangered species survey.
10/17 – Ongoing	MOVE ASCENSION TRANSPORTATION MASTER PLAN DEVELOPMENT AND IMPLEMENTATION Environmental Scientist. Conducted wetland delineations and managed field crews conducting delineations.

Firm employed by	ELOS Environmental, LLC			
Name	Basile Dardar		Years of relevant experience with this employer	1
Title	Biologist		Years of relevant experience with other employer(s)	7
Degree(s) / Years / Specialization			BS/2014/Biological Sciences	
Active registration number / state / expiration date			NA	
Year registered	NA	Discipline	NA	
Contract role(s) / brief description of responsibilities			Mr. Dardar will serve as the Environmental Biologist, providing his expertise for inspections, permitting, environmental surveying, developing reports, research, sampling, testing, and coordinating with agencies and clients.	

Experience dates	Experience and qualifications relevant to the proposed contract
Mr. Dardar provides environmental expertise, accurate reporting, and a high degree of professionalism to every project. Mr. Dardar is also a certified oyster biologist, as well as a certified diver.	
08/20-08/22	S.P. H.013958, Rural Bridge Initiative – Carpenters Br Rd Over Whiskey Chitto CR (LADOTD, Burk-Kleinpeter, Inc.) Mr. Dardar provided environmental biology consulting for the bridge replacement project, which included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 03/22	S.P. H.013959, Rural Bridge Initiative – Reeds Bridge Road Over Calcasieu River Relief (LADOTD, Burk-Kleinpeter, Inc.) Mr. Dardar served as an environmental biologist for the bridge replacement project, which included a wetland delineation, permit applications, and a threatened and endangered species survey.
08/20 – 02/22	S.P. H.013970, Rural Bridge Initiative – LA 717: Klondike Canal and Bayou Bridges (LADOTD, Burk-Kleinpeter, Inc.) Mr. Dardar served as an Environmental Biologist for the bridge replacement project, which included a wetland delineation, permit applications, and a threatened and endangered species survey.
07/22-Ongoing	St. Tammany Parish Lake Road Mr. Dardar serves as an environmental biologist for the bridge replacement project, which includes collecting data and documentation, impact analysis, solicitation of views (SOV), preparing a document DOTD and federal highway administration (FHWA) compliant categorical exclusion (CE), conducting a wetland delineation, and obtaining USCG and scenic rivers permits. He assists with all field work and assisting for report preparation.
04/22- Ongoing	S.P. H.01362 Yellow Water Road Bridge Mr. Dardar serves as an environmental biologist for the bridge replacement project, which includes floodplain, recreational, cultural/historic, wildlife impacts desktop analysis, USACE permits, wetland delineation and jurisdictional determination, threatened and endangered species, solicitation of views, and categorical exclusion checklist. He assists with all field work and report preparation.

17. **Firm Experience:**

Identify the team's project experience **most relevant** to the scope in the advertisement. **The projects should be limited to a total of 20, with no more than 5 projects being represented by the prime consultant and with no more than 3 projects represented by each sub-consultant on the team. If more than 5 projects are identified for the prime consultant, all projects identified after the first 5 will not be evaluated. If more than 3 projects are identified for a single sub-consultant, all projects identified after the first 3 from that sub-consultant will not be evaluated.** Include no more than one page per project. Projects identified shall only include work performed by firms on the team. The projects identified do not necessarily need to have been DOTD projects.

Firm name	**Infinity Engineering Consultants, LLC.**		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	Joe Brown Park Bridge Replacement		Firm responsibility (prime or sub?)	Prime	
Project number	IEC-15-009	Owner's name	City of New Orleans		
Project location	New Orleans, LA		Owner's Project Manager	James Kapesis	
Owner's address, phone, email	1300 Perdido St., RM 6W03, NOLA 70112; jrkapesis@nola.gov; 504-658-8041				
Services commenced by this firm (mm/yy)	2/2015	Total consultant contract cost ($1,000's)		$73	
Services completed by this firm (mm/yy)	10/2017	Cost of consultant services provided by this firm ($1,000's)		$73	

Infinity performed the above and below deck condition inspection and evaluation of fourteen (14) bridges around the City of New Orleans. The fourteen bridges located throughout New Orleans consisted of a variety of materials, including concrete, timber, and steel.

The City of New Orleans required that these bridges be inspected and that structural analyses be performed in order to assign load ratings as per AASHTO requirements. Infinity determined that the majority of the bridges met the AASHTO load rating requirements, and proscribed remedial repairs or replacement for those that did not. Among these bridges were three in Joe Brown Park in New Orleans East. One bridge was found to be in poor condition such that it was Infinity's official recommendation for the bridge to be removed from service.

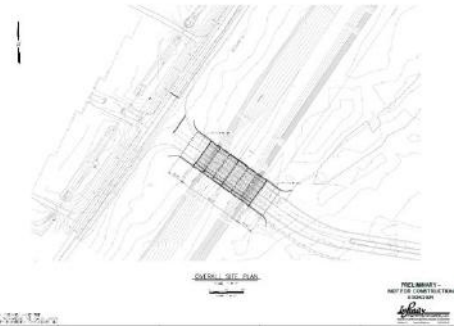
After careful analysis of the bridge inspection, Infinity recommended to the City of New Orleans for a bridge to be replaced in Joe Brown Park. Infinity provided the engineering designs for a complete replacement of the bridge. The project included the demolition of the old bridge, its support piers, abutments, and approach paving; installation of new pilings and caps; installation of new deck panels, new abutments, and new approach slabs; and the establishment of new traffic markings and striping within the limits of construction.

Infinity engineers involved with project: William Thomassie, P.E; Rachel Kenney, P.E.; Ricardo Contreras, P.E.

17. **Firm Experience:**

Firm name	**Infinity Engineering Consultants, LLC.**		Past Performance Evaluation Category(ies)*	Bridge	
Project name	Alvin Calendar Airfield Vehicular Bridge		Firm responsibility (prime or sub?)	Sub	
Project number	IEC-20-019	Owner's name	STOA Architects		
Project location	Belle Chase, LA		Owner's Project Manager	Robert McClendon	
Owner's address, phone, email	121 E. Government St, Pensacola, FL 32502; 850-432-1912; mcclendon@stoaarchitects.com				
Services commenced by this firm (mm/yy)	9/20	Total consultant contract cost ($1,000's)		N/A	
Services completed by this firm (mm/yy)	2/2023 (E)	Cost of consultant services provided by this firm ($1,000's)		$86	

Infinity is providing structural designs for this naval air station project. The structural designs include the establishment of a new vehicular bridge that will span across a drainage canal that parallels Barrier Road. Upon completion, this bridge will be approximately 50 feet wide by 160 feet in length and will include approach spans at both ends.



While the bridge is essentially level, the designs call for the bridge to uniformly elevated to span the canal and align with target grades, which is slightly higher than existing ground surfaces. Initial designs called for the bridge to be two lanes; however, it has been revised to be a four-lane bridge with concrete spans. Infinity has created structural designs for the reinforced abutment, pile support, lateral retaining walls, wing walls, and bridge deck. All bridge designs were developed in accordance with ASHTO guidelines.

The detailed designs for the bridge include the following:

- Pile Selection and Specification
- Pile Cap Design
- Abutment Design Including Lateral Retaining Walls
- Bridge Deck Design

Infinity engineers involved with project: William Thomassie, P.E; Rachel Kenney, P.E.; Ricardo Contreras, P.E.; Louis Jackson, P.E.

17. **Firm Experience:**

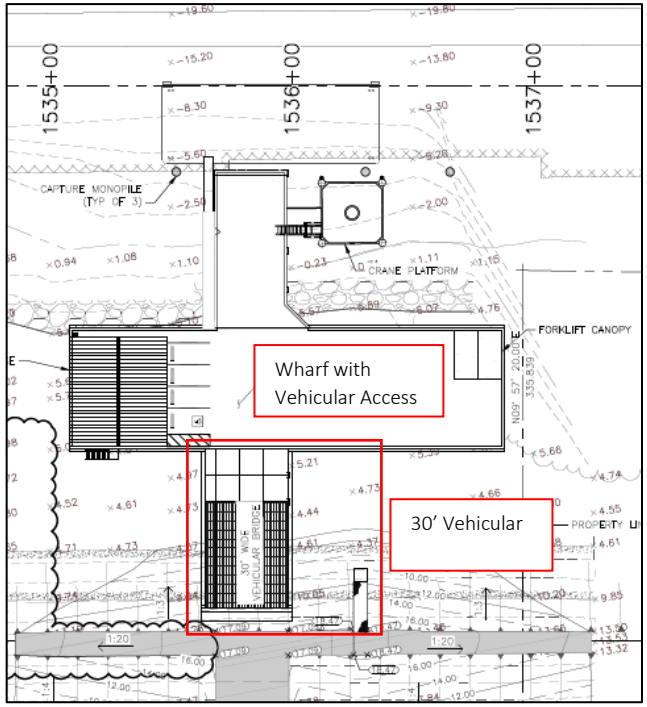
Firm name	**Infinity Engineering Consultants, LLC.**		Past Performance Evaluation Category(ies)*	Bridge	
Project name	Port Ship Service Bridge Design		Firm responsibility (prime or sub?)	Prime	
Project number	IEC 18-022	Owner's name	Plaquemines Parish Port & Terminal		
Project location	Myrtle Grove, LA		Owner's Project Manager	Paul Matthews	
Owner's address, phone, email	8056 Highway 23, 3rd Floor, Belle Chasse, LA 70037; 504-682-7920 ; pmattews@pphtd.com				
Services commenced by this firm (mm/yy)	05/19	Total consultant contract cost ($1,000's)		$203	
Services completed by this firm (mm/yy)	Bidding Phase	Cost of consultant services provided by this firm ($1,000's)		$203	

Infinity is the prime consultant for the design and construction a new facility for the Port Ship Service Myrtle Grove within the Plaquemines Parish Port & Terminal. The current facility site is being allocated for new development, which necessitated the building of a new wharf structure and office building with vehicular and machine access. Infinity is providing civil, structural, mechanical, and electrical design services.

The civil/structural design components include the following:

- Relocation of the floating barge dock, including capture piles and yokes
- 30' vehicular bridge with slope stabilization to the bank
- Concrete wharf structure with vehicular access
- Road extension access to Highway 23 with lane stripping
- 25' x 50' steel framed loading platform with concrete abutment
- 25' x 25' steel framed crane platform
- All designs were developed in accordance with ASHTO guidelines

Infinity engineers involved with project: William Thomassie, P.E; Rachel Kenney, P.E.; Louis Jackson, P.E.



17. **Firm Experience:**

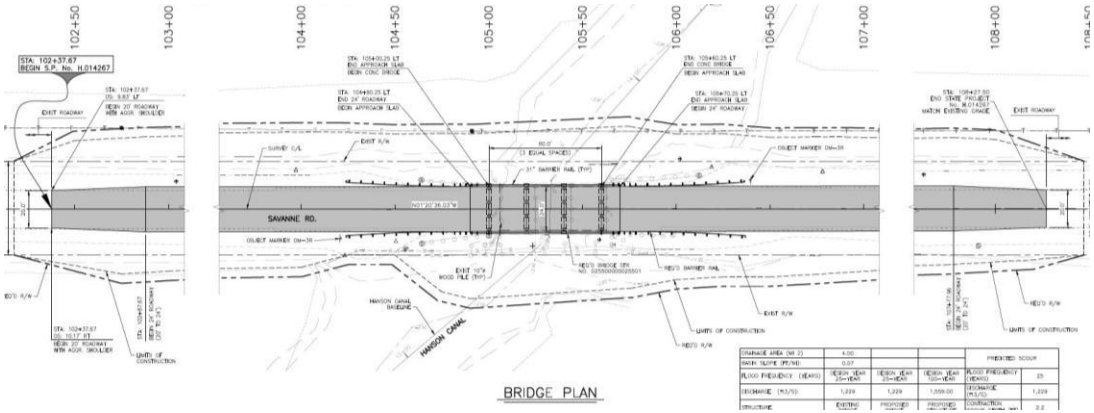
Firm name	**Infinity Engineering Consultants, LLC.**		Past Performance Evaluation Category(ies)*	Bridge	
Project name	Off-System Highway Bridge Program Savanne Road Over Hanson Canal		Firm responsibility (prime or sub?)	Prime	
Project number	Contract No. 4400019314	Owner's name	Louisiana Department of Transportation & Development		
Project location	Houma, LA		Owner's Project Manager	Barbara Ostuno, P.E.	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802; 225-379-1047; Barbara.ostuno.la.gov				
Services commenced by this firm (mm/yy)	5/21	Total consultant contract cost ($1,000's)		$55	
Services completed by this firm (mm/yy)	Est. 5/23	Cost of consultant services provided by this firm ($1,000's)		$32	

As part of the Louisiana DOTD Off-System Highway Bridge program, Infinity Engineering has commenced engineering design work on the replacement of the bridge along Savanne Road crossing over Hanson Canal in Houma, Louisiana. As the prime, Infinity will provide all structural/civil engineering designs for the bridge replacement as well as coordinate all land surveying and environmental services. Infinity has ensured all proper safety measures for flagging and traffic control are followed during site visits, surveying, and measurements.

For the preliminary plans of the project, a hydraulic design was performed to the specified DOTD Hydraulics manual to ascertain all viable drainage design options for the bridge. Additionally, Infinity coordinated with ELOS Environmental to identify and properly delineated all impacted wetlands to the Corps of Engineers guidelines.

If called upon Infinity's engineers have the capabilities to see this project through final design and construction administration.

Infinity engineers involved with project: Ricardo Contreras, P.E.; Louis Jackson, P.E.; Kevin Hurtt, E.I.



17. **Firm Experience:**

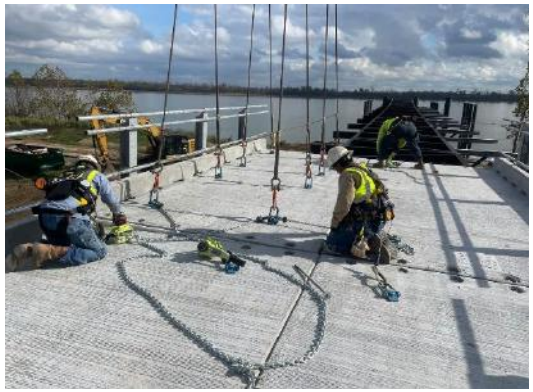
Firm name	**Infinity Engineering Consultants, LLC.**		Past Performance Evaluation Category(ies)*	Bridge	
Project name	Shintec Water Intake Vehicular Bridge and Platform		Firm responsibility (prime or sub?)	Prime	
Project number	IEC-21-009	Owner's name	Shintech Louisiana		
Project location	Plaquemine, LA		Owner's Project Manager	Nathan Ferrington	
Owner's address, phone, email	LA-1, Plaquemine, LA 70764 225-684-2105; nferrington@shin-tech.com				
Services commenced by this firm (mm/yy)	04/21	Total consultant contract cost ($1,000's)		$249	
Services completed by this firm (mm/yy)	3/2023 (E)	Cost of consultant services provided by this firm ($1,000's)		$249	

Infinity has been tasked with providing engineering services related to the design of a new water intake platform for Shintech's SPP3 plant in Plaquemine, LA. This is a multi-disciplinary design consisting of field services, civil, structural, mechanical, electrical and instrumentation.

The civil and structural scope consists of the design of the following:

- Heavy equipment concrete bridge to the new platform
- Vehicular levee crossing
- Piling and concrete foundations
- Steel platform and drift deflector

Additionally, Infinity is tasked with specifying a jib crane and designing the platform to accommodate the crane loads. Finally, Infinity is to update the calculations for the existing structure to include a load analysis of proposed piping. The mechanical tasks include the design of the above ground piping from the pump station to the piperack bridge at the levee. This includes preparing ortho drawings, a comprehensive 3D model, isometric drawings, pipe support details, and general arrangements of the equipment. Infinity is to perform a pipe stress calculation, a hydraulic analysis, and participate in HAZOP. The electrical and instrumentation scope primarily included the design of the power distribution and grounding components of the electrical system and the instrumentation components of the project.



The field services scope contained performing hydrographic and topographic surveys of the existing site conditions as well as capturing the conditions with drone photography and videography.

Infinity engineers involved with project: Cindy Gallo, P.E.; Louis Jackson, P.E.; Ricardo Contreras, P.E

17. **Firm Experience:**

Firm name	Quality Engineering & Surveying, LLC.		Past Performance Evaluation Discipline(s)*	Survey	
Project name	Louisiana Department of Transportation and Development (DOTD) NFIP-CTP IDIQ		Firm responsibility (prime or sub?)	Prime	
Project number	Contract No. 4400020960 & No. 4400020961	Owner's name	Louisiana Department of Transportation & Development		
Project location	Louisiana		Owner's Project Manager	Susan Veillon, CFM	
Owner's address, phone, email	1201 Capital Access Road, Baton Rouge, LA 70802 225.379.3017 Susan.Veillon@la.gov -				
Services commenced by this firm (mm/yy)	06 /21	Total consultant contract cost ($1,000's)	$5,000		
Services completed by this firm (mm/yy)		Cost of consultant services provided by this firm ($1,000's)	$82		

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Quality Engineering and Surveying, LLC will provide professional services to the Louisiana Department of Transportation and Development (DOTD) to accomplish the goals of the FEMA National Flood Insurance Program (NFIP) and the Cooperating Technical Partnership (CTP) Programs. All processes and deliverables shall be completed in accordance with the Federal Emergency Management Agency (FEMA)'s Standards for Flood Risk Analysis and Mapping. The program is intended to ensure that communities participating in the NFIP are achieving flood loss reduction objectives and to provide program assessment and assistance services to aid in the implementation of comprehensive flood loss reduction programs.

Quality Engineering will work within FEMA and DOTD guidelines to accomplish the initial tasks of communicating flood risk and engaging local communities, stakeholders, and residents of the state. Upon issuing of a task order the primary basis for the determination of flood risk shall be through hydrologic and hydraulic modeling, supported by field survey and remote sensing.

Relevant Personnel: Deric J Murphy, PE, William Purser, PE, & Jeff Diamond, PLS

17. **Firm Experience:**

Firm name	Quality Engineering & Surveying, LLC.		Past Performance Evaluation Discipline(s)*	Survey, Road	
Project name	Chevelle Drive & Sarasota Drive Bridge Replacements		Firm responsibility (prime or sub?)	Sub	
Project number	H.013542	Owner's name	GEC, Inc.		
Project location	Baton Rouge, East Baton Rouge Parish, LA		Owner's Project Manager	Jerome Lohman, PE GEC, Inc.	
Owner's address, phone, email	8282 Goodwood Boulevard Baton Rouge, LA 70806 225.612.4282 jlohman@gecinc.com				
Services commenced by this firm (mm/yy)	02/2019	Total consultant contract cost ($1,000's)		--	
Services completed by this firm (mm/yy)	05/2019	Cost of consultant services provided by this firm ($1,000's)		$21,000	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

As part of the Federal Off-System Bridge Program, QES provided the prime consultant with topographic surveys of proposed bridge replacements to be used for design of project routes and bridge crossings, including existing road surfaces, existing bridges(super and substructures), subsurface draining, open ditches, all utilities both above and underground, etc. This established existing property lines and right of ways for possible parcel/servitude acquisition. The topography surveys met LaDOTD requirements and Federal Off-System Bridge requirements.

Firm members involved in this project: Deric J Murphy, PE, LSI & Jamie Bordelon, PLS

17. **Firm Experience:**

Firm name	**Quality Engineering & Surveying, LLC**		Past Performance Evaluation Category(ies)*	**Survey**	
Project name	**Breaux Bridge Manor**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**N/A**	Owner's name	**St. Martin Parish Government**		
Project location	**Breaux Bridge, St. Martin Parish**		Owner's Project Manager	**Heath Babineaux**	
Owner's address, phone, email	**PO Box 9** **St. Martinville, LA 70582** **337.394.4798** **hbabineaux@stmartinparish.net**				
Services commenced by this firm (mm/yy)	**04/2012**	Total consultant contract cost ($1,000's)	**$91,150**		
Services completed by this firm (mm/yy)	**05/2017**	Cost of consultant services provided by this firm ($1,000's)	**$91,150**		

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)
* If there is more than one past performance evaluation category included in the advertisement, then indicate which past performance evaluation category(ies) this project is being used to represent.

Breaux Bridge Manor Apartments 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. The proposed mitigation for this project is to replace the existing 4x4 box culvert with a larger culvert; allowing positive outfall under Doyle Melancon Road. Upon completion of the preliminary assessment and the H&H Study, we provided the parish with a preliminary drainage design complete with plans, specifications, and an engineer's cost estimate.

QES provided program completion, schematic design, environmental study, H&H survey, design survey, design development, geotechnical survey, H&H study, and construction documentation.

Firm members involved in this project: Deric Murphy, PE,

17. **Firm Experience:**

Firm name	ELOS Environmental, LLC	Past Performance Evaluation Discipline(s)*		Environmental	
Project name	Four Bridge Replacement over Choctaw Creek	Firm responsibility (prime or sub?)		Sub	
Project number	H.013982	Owner's name		LADOTD	
Project location	St. Helena Parish, LA		Owner's Project Manager	Amanda Ranck	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA, (225) 379-1232, amanda.ranck@la.gov				
Services commenced by this firm (mm/yy)	08/20	Total consultant contract cost ($1,000's)		$16	
Services completed by this firm (mm/yy)	01/22	Cost of consultant services provided by this firm ($1,000's)		$16	

Services Provided: wetland delineations, preliminary jurisdictional determination, United States Army Corps of Engineers (USACE) nationwide permit applications, threatened and endangered species research, Categorical Exclusions checklist (CE), and solicitation of views (SOV).

ELOS was contracted by Burke-Kleinpeter to provide environmental services for H.013982. The Louisiana Department of Transportation and Development (LADOTD) proposed the replacement of four existing bridges including one site at LA 1042 over Choctaw Creek, one site at LA 1042 over an unnamed creek, one site at LA 10 Spur over Raby Branch, and one site at LA 10 Spur over St. Joseph Branch in St. Helena Parish. **This project is one of many bridges part of the DOTD Rural Bridges Phase I projects, for which ELOS was the environmental consultant conducting the environmental reviews and documentation.** This project primarily involved wetland delineations and a wetlands finding report. Evidence observed and documented indicates that approximately 0.22 acre of the site location meets the established criteria to be considered "Section 404 wetlands." In addition, approximately 2.19 acre of this site meet the established criteria to be considered "other waters of the U.S." The DOTD will mitigate the wetlands impacted by construction activities for this project by minimizing impacts as listed in the Louisiana Standard Specifications for Roads and Bridges, 2016 edition, and mitigate for lost wetland habitats by reseeding with appropriate plants and seedlings. No threatened and endangered species surveys were required for this project.

Site 1. LA 1042/ Choctaw Creek: Recall No. 058492)
Site 2. LA 1042/ unnamed creek: Recall No. 058494
Site 3. LA 10 Spur/ Raby Branch: Recall No. 620045
Site 4. LA 10 Spur/ St. Joseph Branch: Recall No. 620046

Firm Personnel Involved: Cory Ricks, Hunter Perrilloux, Mike Hill, and Basile Darda

17. **Firm Experience:**

Firm name	ELOS Environmental, LLC		Past Performance Evaluation Discipline(s)*	Environmental	
Project name	LA-4 Rural Bridge Initiative		Firm responsibility (prime or sub?)	Sub	
Project number	H.014268	Owner's name	LADOTD		
Project location	Jackson and Caldwell Parishes		Owner's Project Manager	Amanda Ranck	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA, (225) 379-1232, amanda.ranck@la.gov				
Services commenced by this firm (mm/yy)	08/20	Total consultant contract cost ($1,000's)		$16	
Services completed by this firm (mm/yy)	01/22	Cost of consultant services provided by this firm ($1,000's)		$16	

Services Provided: wetland delineations, preliminary jurisdictional determination, United State Army Corps of Engineers (USACE) nationwide and Department of Natural Resources CUP/Consistency Determination permit applications, threatened and endangered species research, Categorical Exclusion checklist (CE) and solicitation of views (SOV).

ELOS was contracted by Burke-Kleinpeter to provide environmental services for H.014268. The Louisiana Department of Transportation and Development (LADOTD) proposed the replacement of 8 separate bridges located on LA-4 in Jackson and Caldwell Parishes. **This project is one of many bridges part of the DOTD Rural Bridges Phase II projects, for which ELOS was the environmental consultant conducting the environmental reviews and documentation.** This project involved surveys for threatened and endangered species, including investigations for the Northern Long-eared Bat, Louisiana Pine Snake, and the Red Cockheaded Woodpecker. Evidence observed and documented indicates that approximately 17.40 acres of these sites meet the established criteria to be considered "wetlands" and approximately 6.05-acres of these sites meet the established criteria to be considered "other waters of the U.S.".

Site 1. Unnamed Creek: Recall No. 021100
Site 2. Unnamed Creek: Recall No. 021120
Site 3. Bear Creek: Recall No. 021130
Site 4. Squirrel Creek: Recall No. 046750
Site 5. Sugar Creek: Recall No. 046760
Site 6. Bill's Creek: Recall No. 046782
Site 7. Lost Creek Relief: Recall No. 046786

Firm Personnel Involved: Cory Ricks, Hunter Perrilloux, Mike Hill, and Basile Dardar

17. **Firm Experience:**

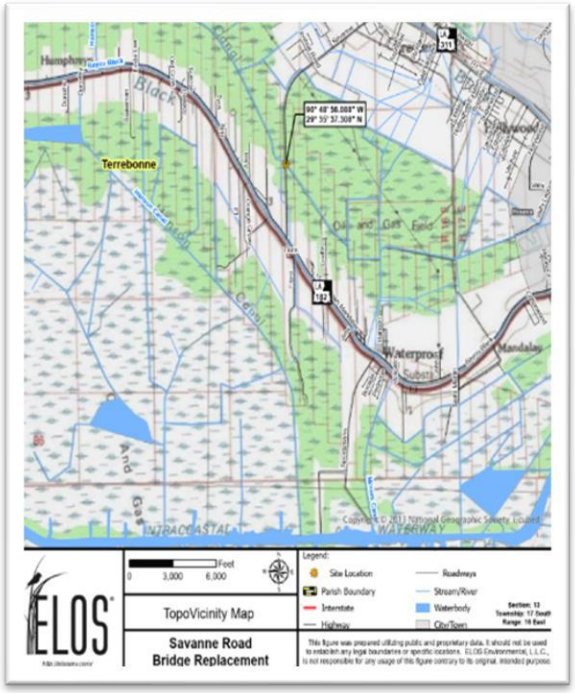
Firm name	ELOS Environmental, LLC		Past Performance Evaluation Discipline(s)*	Environmental	
Project name	Savanne Road Bridge Over Hanson Canal		Firm responsibility (prime or sub?)	Sub	
Project number	H.014267	Owner's name	LADOTD		
Project location	Terrebonne Parish, LA		Owner's Project Manager	Amanda Ranck	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA, (225) 379-1232, amanda.ranck@la.gov				
Services commenced by this firm (mm/yy)	08/20	Total consultant contract cost ($1,000's)		$16	
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm ($1,000's)		$16	

Services Provided: Scenic Rivers and Streams Permits, USACE Permits, Wetland Delineation and Jurisdictional Determination, Threatened and Endangered Species, Solicitation of Views, and Categorical Exclusion Checklist.

ELOS was contracted by Infinity to provide environmental services for the improvement of DOTD Bridge Replacement projects. LADOTD proposed the replacement of the existing Savanne Road Bridge over Hanson Canal (Recall No. 020165) with a new concrete reinforced bridge at approximately 90° 48' 56.088" West and 29° 35' 37.308" North.

The existing bridge, located approximately 0.82 miles north of LA 182 in Terrebonne Parish, was recommended for replacement by the Louisiana Department of Transportation and Development (LA DOTD). The existing structure was a 4-span, 57-foot-long, and 24-foot-wide concrete bridge. The proposed action was to replace the existing bridge with three 20-foot spans, totaling 60 feet, with 3:1 riprap abutments and a proposed finished grade at branch crossing at 5.51 in accordance with current LADOTD and AASHTO guidelines.

This project included a wetland delineation and jurisdictional determination from the USACE, a Section 404 permit from the USACE, a scenic rivers and streams permit from the LDWF, and a threatened and endangered species survey for West Indian Manatees (*Trichechus manatus*). ELOS was also tasked with preparing and mailing the solicitation of views letters to the relevant agencies and responding to comments. This project qualified for a categorical exclusion (CATEX), meaning a detailed environmental analysis was not required. ELOS prepared and submitted the CATEX documentation.



Firm Personnel Involved: Cory Ricks, Hunter Perrilloux, Mike Hill, and Claire LaBarbera

18. **Approach and Methodology:**

It is our understanding that the LADOTD seeks to develop preliminary engineering plans for the replacement of a bridge along an undivided roadway near Kentwood, Louisiana. Infinity Engineering Consultants is a Metairie, Louisiana-based firm, located just an hour and a half from the project site. Distance from the project site will not hinder Infinity's effort to conduct field investigations and advanced measurements, as the Infinity team has provided engineering design work along the Gulf Coast. With Infinity's unique multi-disciplinary skill sets and structural engineering experience, the firm is well positioned to project manage the preliminary design phase of the proposed off-system bridge replacement.

We have reviewed the background information provided in the RFQ documents and took time to study the geography of the bridge. Due to its rural setting and connection between Louisiana Highway 1053 and Interstate 55, the bridge designs will have to be mindful of the impacts to the roadway closure, as well as environmental considerations. Both LA Highway 1053 and Interstate 55 traverse the Louisiana/Mississippi border. With limited roadways connecting the Highway 1053 and Interstate 55, a closure along Stateline Road could create 10-15 minute detours for residential motorists and individuals attending the two churches along Stateline Road. During the design phase, special consideration will be given to reduce the duration of any road closure during the bridge replacement construction.

Stateline Road Off-System Bridge

As outlined in the scope of services, beyond engineering design, this contract requires topographic survey, right of way sketches, and wetland delineation to be performed. To perform this project, Infinity has assembled a talented team of professionals, all familiar with the local site conditions and experience in preparing supporting information for the design of a new bridge. The responsibilities of each team member are as follows:

INFINITY ENGINEERING CONSULTANTS, LLC:

- Project Management, Civil Engineering, Structural Engineering, Cost Estimating

Quality Engineering & Surveying, LLC..:

- Topographic, Right-of-Way Sketches

ELOS ENVIRONMENTAL:

- Wetland Identification and Delineation, Wetlands Finding Report, Environmental Clearance

Infinity Engineering has been integrally involved with the engineering design and reconstruction of several public and private bridge projects. Among those similar to this RFQ were the design packages for the LADOTD off-system bridge replacement of bridges along Savanne Road in Houma, LA and North River Road in Tangipahoa Parish. The design packages Infinity prepared included engineering and environmental regulatory permitting for the preliminary designs for the replacement of these off-system bridges. Therefore, Infinity Engineering is familiar with the standards and practices required when designing an off-system bridge for LADOTD, including flagger safety and cybersecurity training protocols. As a company, we commit to continuing to follow those standards of providing quality design solutions.

PRELIMINARY PHASE

For the Stateline Road bridge replacement project, Infinity's method of execution will include several deliberate steps. We envision that during the preliminary phase we will explore several proven concepts to address the unique design conditions that ultimately led to the poor rating of the previous bridge structures. These will potentially include designing for conditions that may result from scouring, including armoring and reverting the waterway bottom and providing positive groundwater drainage. These are design concepts that will be fully vetted out.

Some may prove feasible and beneficial, and other concepts may be added as the process evolves. Upon conclusion of the preliminary phase, Infinity will present our findings and recommendations in a report that we will review with DOTD. We intend for the design process to be a collaborative effort between our team and the Owner. With a mutually agreeable concept, we will move forward to the next phase.

The Preliminary Phase will be critical as it will serve to firmly identify and quantify the special design conditions that the replacement bridge project must entail. To determine the most logical and feasible solution, during this phase we intend to:

1. Meet with the Owner's representatives to collect record information for the sites; such as:
    a. Typical bridge traffic type, frequency, and magnitude
    b. Previous construction plans, surveys, and geotechnical studies
2. Obtain data regarding the drainage, and historical flow data as it pertains to the site.
3. Review previous geotechnical reports that are on file.
    a. Review the geologic history of the region and site.
    b. Devise conceptual solutions for a replacement bridge structure as it pertains to soil matters.
    c. Develop a field exploration plan and obtaining new soil borings for the site.
4. Coordinate with the surveyor (SJB Group) and the design team to:
    a. Perform a topographic survey of the existing waterway, embankment, and roadway near the bridge to identify and study the surface profiles of the site.
    b. Perform a topographic survey to locate existing features
    c. Prepare a Right of Way sketch.
5. Perform a hydraulic design to determine drainage alternatives.
6. Prepare documentation for solicitation of views and categorical exclusion.
7. Prepare permit drawings for use in obtaining COE Environmental Clearance permits (ELOS), as required.
8. Prepare a Wetland Study (ELOS)
    a. Conduct ground level investigation to verify the right of way.
    b. Locate wetlands on a quadrangle sheet and layout map.
    c. Document soil samples.
    d. Prepare Wetland Determination Data Form with GPS sample point locations.
9. Develop a preliminary design for the replacement bridges based on the data collected and research performed in the preceding steps.
10. Prepare an estimated construction cost estimate for the proposed design.

11. Prepare a preliminary report summarizing the above documentation and preliminary plan.

SCHEDULE

The overall time for the completion of the scope of services listed in the RFQ is (4) years. Upon notice to proceed and executed contract, we anticipate the final submittal of deliverables to occur within 4 years, or sooner. This is also contingent upon timely receipt of comments and information from DOTD and barring any unforeseen conditions outside of our control.

ADDITIONAL PROJECT REQUIERMENTS

Cyber Security: As a company, Infinity understands the importance of keeping public/private clients' information confidential and safe. Maintaining sound practices and education in cyber security is the best way to keep digital documents safe from potential cyber threats. Infinity has a program in place to deliver monthly employee information seminars that cover a wide range of best practices to ensure workplace safety. These seminars have touched on the subjects of cyber security. If called upon for this contract, Infinity will ensure additional cyber security training will be provided to the Infinity employees who have access to DOTD systems and information.

Work Zone Training: Infinity is committed to maintaining safe working conditions. Currently, Project Manager, Ricardo Contreras, P.E., is certified in Traffic Control Technician and Traffic Control Supervisor courses. Mr. Contreras will be present onsite when fieldwork is conducted by Infinity engineers. If called upon, Infinity will ensure additional members of the field engineering team to become certified in traffic control processes

State Funding: Infinity recognizes that the project will be subject to State and federal funding guidelines. To date, Infinity has completed multitudes of projects that were state and/or federally funded through DOTD, LED, FTA, FEMA, Community Development Block Grants, etc. Our staff is familiar with providing the documentation and communication necessary to meet the requirements of these agencies.

Public Agencies: Infinity Engineering has extensive experience working with Public agencies, in the role of prime consultant, successfully completing projects exclusively with our own forces, managing teams of several consultants, or as a subconsultant. We are familiar with typical procedures for design and contractual policies. We carry professional and general liability insurance that often exceeds that required by public agencies.

Capacity: Because we do not currently have a significant backlog of work beyond 2023's 1st quarter, if selected for this contract, Infinity is well positioned to focus on the needs of LADOTD. With (10) Civil/Structural engineers on staff, we will have roughly 12,000 of potential engineering man-hours available going into 2023. This does not include the added depth of our subconsultants and our drafting staff.

Reputation and References: Infinity has been in business for 18 years. We pride ourselves on customer satisfaction and this is typically accomplished by producing good work for projects we are contracted to complete. As consultants, the most important element of our existence is our reputation. A good reputation takes years to develop, but when established, allows for promoting the company to be that much easier. Often, 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 evidence of that, it is best to point to the kind words 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.

Mark Harrell, COO-Livingston Parish "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."

Tim Mathison, Former CAO, City of Slidell "Both of these roadway projects were completed on time and within budget. Infinity's employees were professional, knowledgeable, and a pleasure to work with. They were responsible with the budget and cognizant of the needs of the City throughout both projects. I would recommend Infinity for their design capabilities, as well as their professional approach to project management."

Minimum Personnel Requirements: Infinity has ensured our team outlined in the proceeding 24-102 form meets and exceeds the minimum personnel requirements as outlined in LADOTD's project advertisement. The individuals who satisfy those minimum personnel requirements include:

- Raoul V. Chauvin, P.E. and William Thomassie, P.E. are Infinity's principal partners who are registered professional engineers in the State of Louisiana in civil engineering
- Louis Jackson, P.E. and Rachel Kenney, P.E. are responsible members of the Infinity team who are currently registered in the State of Louisiana as a professional engineer in civil engineering.
- Ricardo Contreras, P.E. will serve as the project manager and holds over five years of experience in responsible charge of bridge design as a registered professional engineer in the State of Louisiana
- Jeff Diamond, PLS is Quality Engineering & Surveying professional land surveyor registered in Louisiana with over five years of experience
- Cory Ricks is ELOS Environmental's environmental professional with at least five years of experience in wetlands delineation

DBE Certification: Infinity is a registered Disadvantaged Business Enterprise (DBE) certified with the City of New Orleans, Sewerage and Water Board, and the Louisiana Certification Program (LAUCP). Infinity Engineering has also been certified by the Louisiana Department of Economic Development as a Small and Emerging Business Enterprise (SEBD).

Infinity takes pride in the skill-sets we have provided to public agencies throughout the State of Louisiana, especially when it comes to rebuilding vital infrastructures within our communities. We are confident that we have a team of engineering that can effectively and efficiently prepare topographic surveys, wetland delineation, and engineering designs for this off-system bridge project. We respectfully request that the LADOTD select Infinity Engineering Consultants for this bridge replacement design project so we can continue to work to improve our neighboring communities. If you have any questions or require additional information, please feel free to call the Infinity office at (504) 304-0548.

19. **Workload:**

For all contracts where a firm on the team is a prime consultant or sub-consultant and where a) the consultant selection was made by DOTD, and b) a contract was executed by the consultant and the contracting entity by the date the advertisement for this proposal was posted, list all work meeting the following criteria:

1) one of the team's firms is responsible for the performance of the work;
2) authorization to perform the work has been provided, as provided in the contract between the consultant and the contracting entity;
3) the work has not yet been performed and invoiced; and
4) the work is not currently suspended for an indefinite period of time.

For indefinite delivery/indefinite quantity (IDIQ) contracts, list open Task Orders individually.
List only the portion of the fees attributable to firms on the team.

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining Unpaid Balance**
Infinity Engineering Consultants, LLC.	Bridge	H.014267.5	Off-System Highway Bridge Program Savanne Road Over Hanson Canal	$45,096
Infinity Engineering Consultants, LLC.	Bridge	H.014265.5	Off-System Highway Bridge Program North River Road Over Irving Branch	$45,096
Quality Engineering & Surveying, LLC.	Roads	4400020961	IDIQ Contract for Nation Flood Insurance Program and the Cooperating Technical Partership Program - TO No. 1 -FEMA Grant EMT-2021-CA-00014, Phase 1, Discovery, Lower Sabine Watershed	$46,104
ELOS Environmental, LLC	Environmental	H.014242	LA-124 Big Branch, Sandy etc.	$5,085
ELOS Environmental, LLC	Environmental	H.014243	LA-472 Indian and Big Bear	$57
ELOS Environmental, LLC	Environmental	H.014245	LA-119 Creeks & Bayou Pierre	$111
ELOS Environmental, LLC	Environmental	H.014247	LA-399 Creeks, Little 6 Mile Creek	$6,200
ELOS Environmental, LLC	Environmental	H.014248	LA-124 Creeks, Broke Leg Bayou	$57
ELOS Environmental, LLC	Environmental	H.014249	LA-126 Creek	$3,690
ELOS Environmental, LLC	Environmental	H.014250	LA-577 Creek & Bull Bayou	$3,496
ELOS Environmental, LLC	Environmental	H.014268	LA-4 Creeks, Bear, Squirrel	$134
ELOS Environmental, LLC	Environmental	H.013958	Carpenters	$3,783
ELOS Environmental, LLC	Environmental	H.013970	LA 717	$5,476
ELOS Environmental, LLC	Environmental	H.013984	LA 16 Bridge	$2,054
ELOS Environmental, LLC	Environmental	H.014265	N. River Road Bridge Over Irving Branch	$6,655
ELOS Environmental, LLC	Environmental	H.014267	Savanne Road Bridge Over Hanson Canal	$6,640

(Add rows as needed) DO NOT SUM

* The only past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other. If a firm has more than one past performance evaluation discipline for any single project, the firm can use multiple rows to express the remaining unpaid balance per evaluation discipline.

** Round to the nearest dollar. **Do not** round to the nearest thousands. If there are no active contracts with a remaining unpaid balance, place N/A in the Remaining Unpaid Balance column. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.

20. **Certifications/Licenses:**

If the advertisement requires submission of licenses and/or certificates, include them here. Otherwise, leave this section blank.

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Ricardo Contreras
has attended
Traffic Control Technician-LA State Specific
Training Course

4/28/2020 to 4/28/2020
Date

Baton Rouge, LA
Location

Vice President of Member Services

President, CEO

ATSSA American Traffic Safety Services Association ATSSA.com

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Ricardo Contreras
has attended
Traffic Control Supervisor-LA State Specific
Training Course

4/29/2020 to 4/30/2020
Date

Location

Vice President of Member Services

President, CEO

ATSSA American Traffic Safety Services Association ATSSA.com

LED 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 7/22/2022 to 7/22/2023

Certification No. 8402

Stephanie Hartman,
Director, Small Business Services

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name:	Public Address:
Infinity Engineering Consultants, LLC	Mr. William Thomassie4001 Division Street Metairie, Louisiana 70002

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0003109	Active	03/09/2004	09/30/2024	Mr. William John Thomassie # PE.0027421 ; Mr. Raoul Vincent Chauvin III # PE.0028272

Quality Engineering & Surveying, LLC.

The American Traffic Safety Services Association

Hereby recognizes that

Rebecca Lala

has attended

Traffic Control Technician-LA State Specific

Training Course

10/29/2019 to 10/29/2019
Date

New Orleans, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Rebecca Lala

has attended

Traffic Control Supervisor-LA State Specific

Training Course

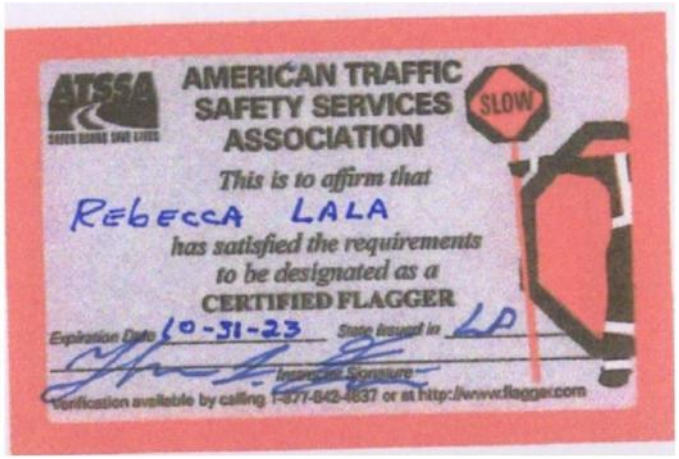
10/30/2019 to 10/31/2019
Date

New Orleans, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO



ATSSA
SAFER ROADS SAVE LIVES

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

SLOW

This is to affirm that

Rebecca LALA

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 10-31-23 State Issued in LA

Inspector Signature

Verification available by calling 1-877-842-1837 or at http://www.flagger.com

Certificate of Completion

presented to

Rebecca Lala

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 18, 2018
Location: Baton Rouge, Louisiana

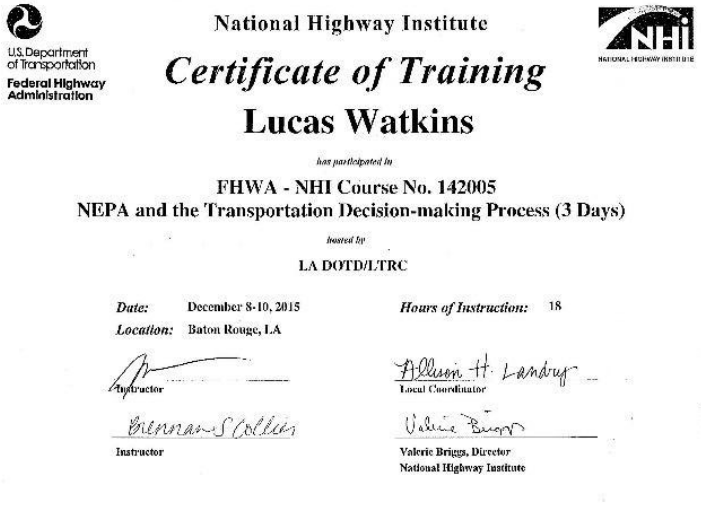
Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor

Authorized Instructor

Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Lucas Watkins

has participated in

FHWA - NHI Course No. 142005
NEPA and the Transportation Decision-making Process (3 Days)

hosted by

LA DOTD/LTRC

Date: December 8-10, 2015 *Hours of Instruction:* 18
Location: Baton Rouge, LA

Instructor — Allison H. Landry, Local Coordinator

Instructor — Valerie Briggs, Director, National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

JERRY GRAVES

has participated in

FHWA-NHI-142005 NEPA and the Transportation Decisionmaking Process

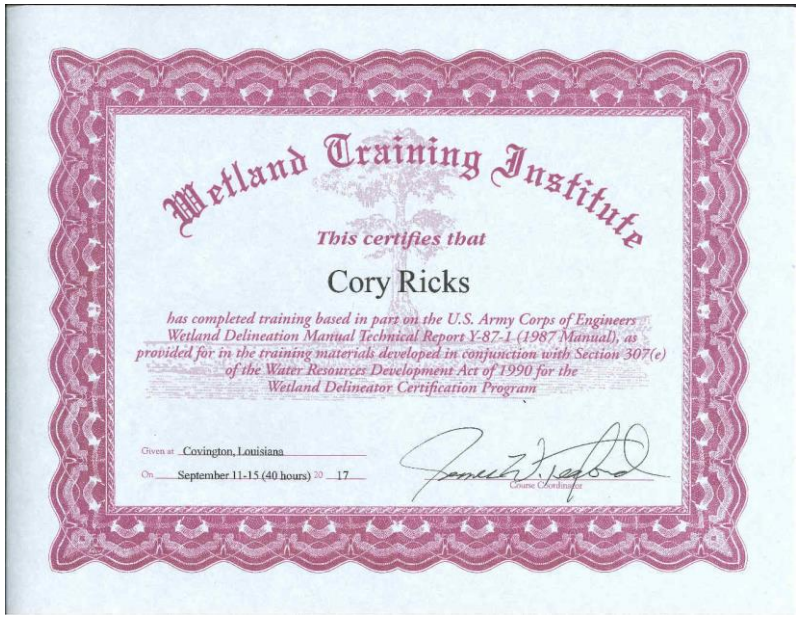
hosted by

LA DOTD/LTRC

Date: August 10-12, 2022 *Hours of Instruction:* 18
Location: Baton Rouge, LA

Instructor — Allison H. Landry, Local Coordinator

Instructor — Thomas Harman, Director, National Highway Institute



Wetland Training Institute

This certifies that

Cory Ricks

has completed training based in part on the U.S. Army Corps of Engineers Wetland Delineation Manual Technical Report Y-87-1 (1987 Manual), as provided for in the training materials developed in conjunction with Section 307(e) of the Water Resources Development Act of 1990 for the Wetland Delineator Certification Program

Given at Covington, Louisiana
On September 11-15 (40 hours) 20 17

Course Coordinator

21. QA/QC Plan and/or Work Plan:

If the advertisement requires submission of a QA/QC plan or Work plan, include them here. Otherwise, leave this section blank.

Section 1 - Introduction

1.1 Defining Plan Quality

The dictionary defines Quality Control as the inspection, analysis and action required to ensure quality of output; the operational techniques and the activities used to fulfill and verify requirements of quality; a procedure for keeping quality of inputs or outputs to specifications.

In accordance with LaDOTD expectations, the quality plan shall strive to shape and guide the product, and be measured against the following characteristics:

Complete:

1) The plans will be an accurate and thorough representation of the existing project site and terrain features.
2) The plans will be an accurate and thorough representation of the proposed project features and details to be constructed.
3) The plans will be supported by a thorough and detailed documented development process.
4) The plans will be developed with the active involvement of all affected parties and developmental stage owners throughout all stages of development.

- **Consistent**: The plans will be consistent with other plans developed for LADOTD and will comply with all standards and guidelines set by the LADOTD design manuals, AASHTO design guidelines and electronic standards.
- **Clear:** Instructions provided in the plans and specifications will leave little room for subjectivity.
- **Correct:** Preparation of the plans such that the delay, postponement, or cancellation of the project letting is avoided.
- **Constructible:** The plans will present a project that can be constructed and will not require change orders attributable to the designer.

It is Infinity's responsibility to maintain and enforce the quality plan as described in this document.

1.2 Definition of Terms and Abbreviations

The use of some key terms used in this document will be understood to have the following meanings:

Quality Control (QC)

Quality Control is defined as the operational techniques and the activities used to keep the quality of inputs or outputs to specifications; to fulfill and verify requirements of quality.

Quality Assurance (QA)

Quality Assurance refers to those actions, procedures, and methods employed at the management and senior technical levels to observe and ensure that prudent quality procedures are in place and are being carried out and that the desired result of a quality product is achieved.

Designer

The designer is the engineer directly responsible for the development of design calculations, drawings, special provisions including Non-Standard items, and cost estimate. The designer will be licensed by the State of Louisiana as a professional engineer or certified as an engineer intern. The detailer is the individual directly responsible for the creation of CAD drawings. During the design process, the designer must follow the design criteria established for the project. Bridge type, size, and location (T, S &L) must be developed first and approved by the supervisor or team leader prior to proceeding with the design of structural components.

The design calculations shall be organized and maintained in a standard calculation book format. The calculation book checklist is included in Appendix B of ***LADOTD Bridge Design and Evaluation Manual (BDEM)***. The designer must communicate with the detailer and supervise the detailing work to ensure that the drawings adequately and accurately present the design information. Both the designer and the detailer shall check their own work and minimize errors.

Checker

The design checker is the engineer responsible for performing a full technical review of the design calculations, drawings, special provisions including Non-Standard items, and cost estimate. The design checker must be licensed by the State of Louisiana a professional engineer or certified as an engineer intern; however, if the designer is an engineer intern, the design checker must be a professional engineer. The detail checker is the individual responsible for performing a full review of the CAD drawings.

The detail checker can be a designer or a detailer. The design checker and detail checker shall not be the ones who perform the original design and detailing. During the design check process, the design checker must verify the accuracy of the designer's calculations, pay items, quantities, special provisions including Non-Standard items, and cost estimate. The design checker may perform a redline check of the designer's calculations or produce an independent set of calculations and compare the results; the supervisor or team leader shall determine which method to use depending on the complexity of the project. Regardless of the checking method employed, the designer's calculations are the calculations of record and must be updated to correct any errors or omissions discovered by the design checker. The calculations of the design checker should also become a part of the calculation of record when independent checking calculations are produced. The design checker should also ensure that the drawings adequately and accurately present the design information.

Reviewer

The reviewer is the engineer responsible for ensuring that the QC process as described in Step 4 is complete and the design calculations, drawings, special provisions, and cost estimate are in accordance with LADOTD Bridge Design practices, policies, and procedures. The reviewer must be licensed by the State of Louisiana as a professional engineer and must have substantial experience in the design of similar structures. During the quality assurance process, the reviewer shall perform a cursory review of all documents in the QA information package submitted by the designer. This review should focus on the constructability of the plan details; areas of critical structural importance; areas where, based on the reviewer's experience, mistakes may be typically found; and areas that may be new to the design practice. The reviewer may, but need not, produce independent calculations to verify submitted information. The reviewer shall provide feedback to the designer and resolve all issues. Upon completion of the QA process, which shall be no later than the 98% final plans stage, the design calculations, plan details, special provisions, and cost estimate shall be considered as final. At this point, the QC/QA certification as included in Appendix D shall be signed by the designer, design checker, detailer, detail checker, and reviewer.

Engineer of Record (EOR)

The EOR is the engineer responsible for supervision and/or preparation of plans, sealing calculations, plans, and special provisions if required. The EOR must be licensed by the State of Louisiana as a professional engineer and must have commensurate experience in the design of similar structures. The EOR can be the designer, the design checker, the reviewer, or the supervisor/team leader who is directly involved in the project design activities. The responsibilities of the EOR are as follows:

1) Ensure the QC/QA certification is signed by all responsible parties. Ensure the geotechnical design information shown on bridge plans is co-stamped by a Geotechnical Engineer and the hydraulic information shown on bridge plans is co-stamped by a Hydraulic Engineer. If practical, the hydraulic information and geotechnical information should be presented on separate sheets to reduce the engineering stamps on a sheet. When more than one engineering stamp is required on a sheet, the responsibilities for each engineering stamp shall be clearly defined.
2) Assemble design calculations from all designers including the final geotechnical analysis report and the hydraulic report from the geotechnical engineer and the hydraulic engineer, finalize the calculation book, and seal the cover sheet of the calculation book.
3) Ensure the names of the designer, design checker, detailer, detail checker, and reviewer are correctly shown on the title block of each plan sheet. Stamp all plan sheets or designate a designer, design checker, or reviewer who shall be licensed by the State of Louisiana as a professional engineer to stamp the sheets developed under their supervision. The EOR must stamp the general notes sheets.
4) Ensure all special provisions are accurately shown on the construction proposal. The special provisions are typically stamped by the Specification Engineer as part of the construction proposal; however, if the Specification Engineer is not qualified or not willing to stamp the special provisions, the EOR must stamp these provisions.

Phase Review

Phase Review refers to the formal review by various disciplines at various stages of the plan development process.

Project Manager (PM)

The PM is the person responsible for the planning, coordination and controlling of a project from inception to completion, meeting the project's requirements and ensuring that each project is completed on time, within budget, within scope and to required quality standards.

Project Quality Control Plan

The methods and processes defined in this manual will serve as the Project Quality Control Plan (PQCP) for each project.

Quality Assurance Certification

Quality Assurance Certification refers to a signed statement by the Project Manager certifying that a written, pre-approved Project Quality Control Plan is in place and has been adhered to.

1.3 Purpose

This Quality Control / Quality Assurance Manual is intended to establish a benchmark for effective development of quality control and to assure that quality control has been effectively implemented. The manual provides for coordinated processes which will assist project development by providing mechanisms for:

1) Identifying design considerations which DOTD experience has shown repeatedly require specific attention.
2) Providing helpful checklists developed by each major discipline for each phase of project development.
3) Providing sufficiency checklists which enumerate the items and the documents required to be submitted with phase submittals. Completion and submittal of the checklists required with each phase review is the responsibility of the designer.

The ***LADOTD Bridge Design and Evaluation Manual (BDEM)*** has the objective of obtaining uniformity and establishing standard policies and procedures in the preparation of engineering and construction plans for bridge and highway structures in Louisiana. The BDEM will be followed for all LADOTD projects regardless of project delivery methods (Design-Bid-Built, Design-Built, or other methods). Any proposed deviations from the BDEM will require approval of the LADOTD Bridge Design Engineer Administrator before implementation. Detail justifications will be submitted along with the request. Approved deviations from BDEM shall be noted on the design criteria of the project and contract plans as appropriate.

1.4 Objective

The main objective of the Quality Control process for design projects is to provide a mechanism by which all construction plans can be subject to a systematic and consistent review. The outcome of the review should create a set of quality project plans, which should be substantially error free.

A secondary objective of the Quality Control process is to provide for a well-documented "trail" of the design process. A properly documented project file should be a by-product of the quality control process. Another secondary objective of the Quality Control process is to provide information feedback from reviews to the designers.

1.5 Quality Control Processes

The Quality Control process includes:

1) Quality planning, training
2) Providing clear decisions and directions
3) Constant supervision
4) Immediate review of completed activities for accuracy and completeness
5) Documenting all decisions, assumptions, and recommendations.

In the construction plan development process, it is the clear responsibility of the designer to ensure all project elements are economical, accurate, properly prepared, coordinated, checked, and completed.

All designers and reviewers must recognize that quality is the result of several processes. It requires many individuals performing many appropriate activities at the right time during the plan's development process. Quality Control does not solely consist of a review after a product is completed. Design personnel shall follow established design policies, procedures, standards and guidelines in the preparation and review of all design products.

Section 2 - Project Quality Control Requirements

The methods and processes defined in this manual will serve as the Project Quality Control Plan (PQCP) for each project. The Project Quality Control Plan details the proposed methods or processes of providing quality control for all work products. The plan shall include, but is not limited to, the

following areas:

1) Organization
2) Quality Control Reviews
3) Proposed method of documentation of comments, coordination responses and quality assurance records; and
4) Quality Assurance Certification

2.1 Plans Development Requirements for Review

Properly completed QA Checklists for all applicable disciplines, signed and dated by the checker, will be submitted with the review prints to demonstrate that all items were checked.

2.2 Conformance to CAD Standards

All plans must meet the CAD/Drafting standards as specified in the engineering contract.

2.3 Plans Reviews

In addition to plans checking, the designer will conduct a design review of all documents prior to submitting the documents to the LADOTD. This review shall include, as a minimum, the following activities:

1) Compliance with project requirements
2) Technical accuracy and adequacy
3) Compatibility with other associated project documents
4) Compliance with previous review comments

2.4 Design Documentation Requirements

To facilitate QC reviews of each project, the designer will prepare a written "Project Design Criteria Report" at the onset of the work.

Section 3 - Organization

3.1 Process

The team must be committed to the QC/QA process to ensure a quality product. The reviewing sections and individuals have specific responsibilities as part of the process.

3.2 Quality Control Responsibilities

The Project Manager is the person responsible for the planning, coordination and controlling of a project from inception to completion, meeting the project's requirements and ensuring that each project is completed on time, within budget and to required quality standards. The PM ensures that all phase reviews have occurred and have been completed, that all comments have been satisfactorily addressed and that all forms and checklists have been completed by the appropriate personnel. The PM is ultimately responsible for each project’s adherence to the quality control plan.

The Engineer of Record is responsible for accuracy and completeness of the plans and related designs prepared for the project. The designer is responsible for the quality of work of each person involved in the efforts to bring individual projects to production readiness.

Section 4 - Quality Control Reviews

4.1 Design Review Requirements

Design review checklists included in this guideline are intended to assist the designer in preparing an adequate submittal. The sufficiency checklists included in the guideline establishes the submittal requirements which must be met to satisfy the documentation requirements for each project.

4.2 General

The reviewer will be an experienced engineer who was not actively involved in the preparation of the product.

4.3 Phase reviews

4.3.1 Review process

At each submittal stage, the Project Manager will review the submittal for the degree of completeness required by that phase. Plans will be returned to the designer if they are incomplete, which could cause delays to the project's schedule.

4.3.2 Review Reports

Comments from phase reviews can be in the form of marked-up plans, meeting minutes (as in a plan-in-hand review meeting) or review memoranda. It is the responsibility of each reviewer to ensure that their comments are submitted to and recorded with the Project Manager. It is the Project Manager's responsibility to compile comments, document the comments and distribute the comments to the designer and others if necessary. It is then the designer's responsibility, in consultation with the Project Manager, to review the comments and to determine how each comment will be addressed. The designer will prepare a formal response to the PM stating how the comment will be addressed. The Project Manager will forward these responses to the appropriate reviewer and will ensure that all comments and responses have been documented in the project files. It is the designer's responsibility to ensure that comments are incorporated into the construction plans as appropriate.

4.3.3 Checking Drawings

Drawings are prepared under the direction of an assigned designer. They are developed progressively by an interactive process using sources of information such as survey data, reports, record data, preliminary sketches, samples, official maps, etc., in conformance with the requirements, design criteria, and standards and guidelines required by DOTD.

Section 5 - Method of Documentation of Comments, Coordination and Responses

5.1 Documentation of Comments and Responses

All comments made by phase reviewers shall be recorded either by copy of memos, e-mail, letters and/or marked plans received from the reviewers. In the event that comments are received through meetings with reviewers, there shall be minutes prepared that summarize the comments received. Copies of all comments and responses shall be kept in the project files.

5.2 Requests for Changes to the Scope

The PM and the designer shall evaluate comments or requests that are not covered in the "Final Project Scope."

Section 6 - Quality Assurance

6.1 General

QA does not include only periodic reviews to ensure compliance with the QC process, but also includes review of several other established processes. The Project Manager shall ensure that appropriate levels of review (and cooperativeness in the review process) have occurred for:

1) Constructability
2) Bidability
3) Value Engineering
4) Project Documentation

QA also incorporates a general review of personnel to ensure an acceptable level of expertise is maintained for quality design products. Communication is also a vital element in all processes. QA includes the review of the level and quality of communications and documentation accomplished during the various processes.

References

Louisiana Department of Transportation and Development *"Construction Plans Quality Control/Quality Assurance Manual"*

22. **Sub-consultant information:**

If one or more sub-consultants will be used, provide the name, address, point of contact and phone number for each. Otherwise, leave this section blank.

Firm Name (as registered with Louisiana's Secretary of State)	**Address**	**Point of Contact and email address**	**Phone Number**
Quality Engineering & Surveying, LLC.	343 3rd Street, Suite 306 Baton Rouge, LA 70801	Lance Laplace llplace@qesla.com	(225) 405-0643
ELOS Environmental	607 W. Morris Ave., Hammond, LA 70403	Lucas Watkins, lwatkins@elosenv.com	(985) 662-5501

(Add rows as needed)

23. **Location:**

If location is an evaluation criterion for this advertisement and the prime consultant intends to establish a local presence, describe the plan for doing so. Otherwise, leave this section blank.

Not Applicable.