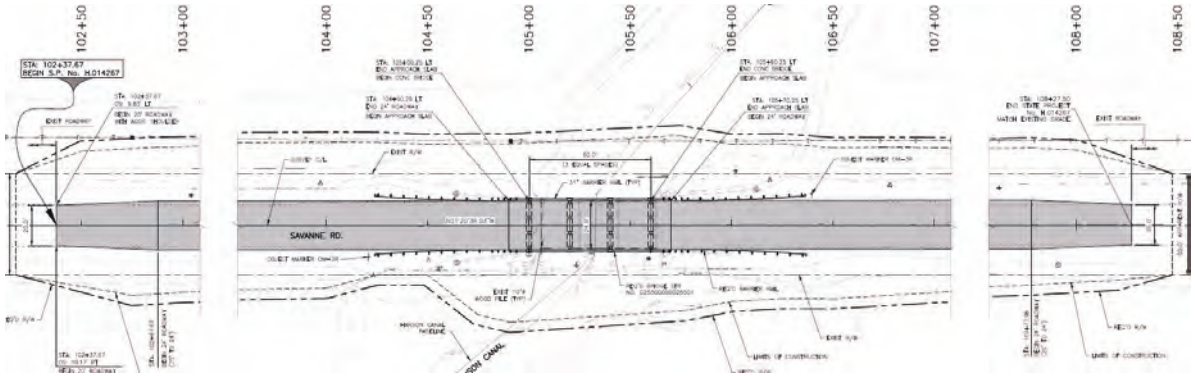
Contract for Off System Highway Bridge Program
Contract No. 4400025190

Infinity Engineering Consultants
Civil ∞ Structural ∞ Mechanical ∞ Electrical



Contract for Off System
Highway Bridge Program
Gravolet Road Over
Drainage Canal
Plaquemines Parish, LA

Contract No. 4400025190

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

January 17, 2022

Infinity Engineering Consultants, LLC.

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

January 17, 2023

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

Re: Contract No. 4400025190 Off System Highway Bridge Program Gravolet Road Over Drainage Canal

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 Gravolet Road in Davant, Louisiana.

Firm Qualifications and Understanding of Scope

Infinity Engineering Consultants is a Metairie, Louisiana based firm, located only one hour away 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.

Since the company's founding, Infinity has performed a multitude of engineering designs for Plaquemines Parish including the expansion of capacity to the Ollie Drainage Pumping Station. Beyond the drainage pump designs, the project featured the addition of two vehicular bridge. Upon the completion of the project, Plaquemines Parish's Chief Engineer, Kevin, Dugas, P.E. wrote the following about Infinity's performance:

"Infinity completed a very thorough drainage study to justify expanding Ollie Drainage Pump Station. The $16,500,000 station addition was constructed and has performed, as designed, through several heavy rain events and hurricanes. Infinity has designed several street and utility infrastructure improvements…They've proven to be good stewards of public funds. I would highly recommend Infinity."

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 have recently ended 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
  - Gary J. Lambert, Jr., PLS is BFM Corporation's professional land surveyor registered in Louisiana with over five years of experience
  - Jerry Graves, PhD 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 Gravolet Road Over Drainage Canal**
2. Contract number(s) as shown in the advertisement	4400025190
3. State Project Number(s), if shown in the advertisement	H.015051.5 F.A.P No. H015051
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)	4001 Division Street Metairie, LA 70002
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: 01/17/2023
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)' %: 70%

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

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)

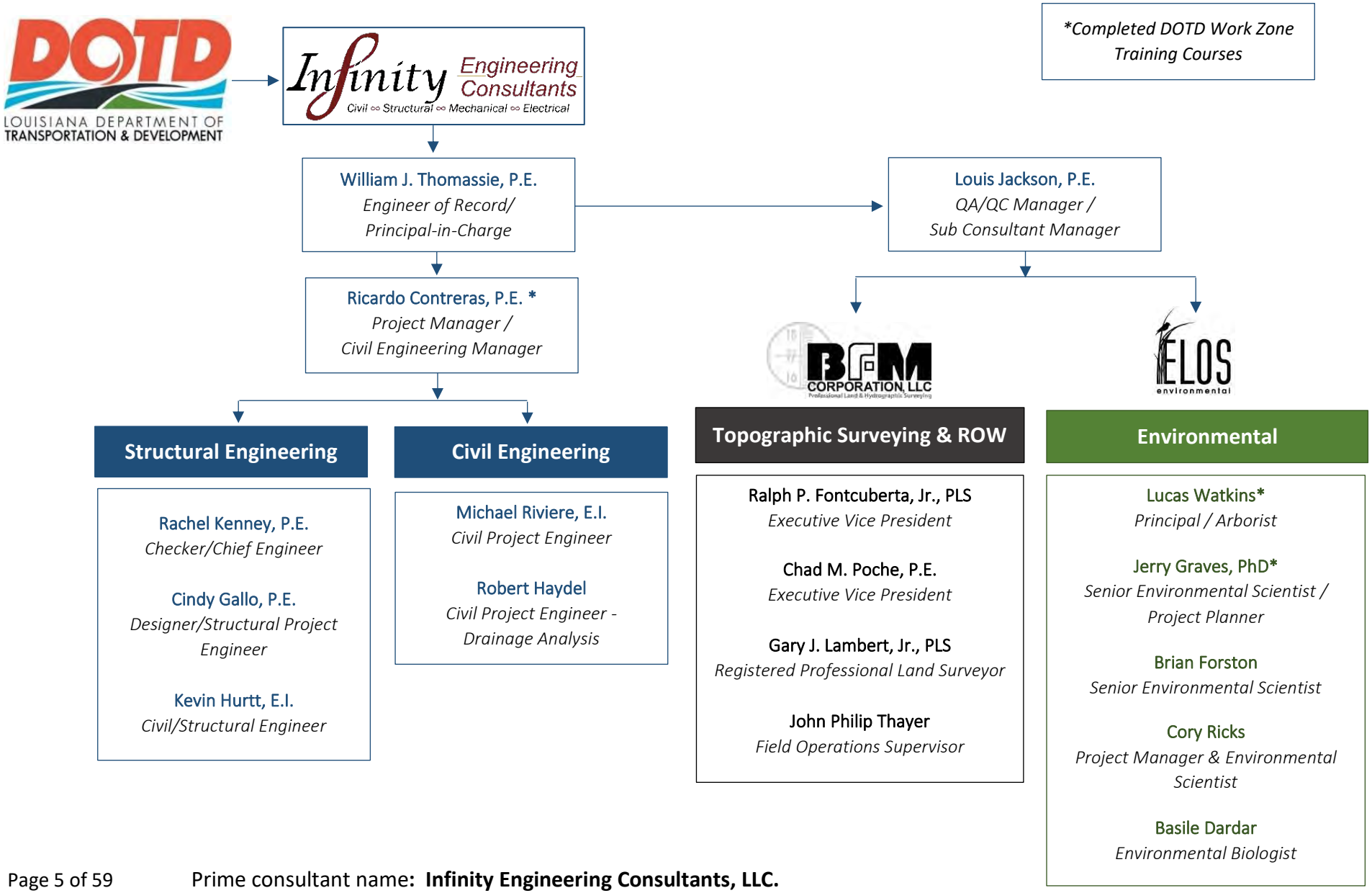
Evaluation Disciplines	% of Overall Contract	Infinity Engineering Consultants, LLC.	BFM Corporation, LLC.	ELOS Environmental, LLC.	Firm D	Firm E	Firm F
Bridge	70%	100%	-	-			
Environmental	15%	-	-	100%			
Survey	10%	-	100%	-			
Right-of-Way	5%	-	100%	-			
Identify the percentage of work for the **overall contract** to be performed by the prime consultant and each sub-consultant.							
Percent of Contract	100%	70%	15%	15%			

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

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
BFM Corporation, LLC.	Administrative	1	3
	CADD-Operator	2	3
	Clerical	1	3
	Instrument Men	2	5
	Party Chief	2	4
	Principal	1	2
	Supervisor – Other	1	1
	Surveyor	2	2
	Technician	1	2
ELOS Environmental, LLC.	Biologist/Wetlands	2	10
	Environmental Pro	3	11
	Environmental Manager	1	2
	GIS Analyst	2	6
	Archaeologist	1	2

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
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	Ralph P. Fontcuberta, Jr., PLS	BFM Corporation, LLC.	Professional Land Surveyor No: 0004329	LA	09/30/2024
4	Gary J. Lambert, Jr., PLS	BFM Corporation, LLC.	Professional Land Surveyor No: 0005259	LA	03/31/2023
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, PhD	ELOS Environmental, LLC	FHWA - NHI course No. 142005, "National Environmental Policy and Transportation Decision Making"	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 replacement of vehicular 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.	

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 – Ongoing Bidding Phase	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 – Ongoing Construction	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 – Served as the project manager for the $2M City of New Orleans Drainage Master Plan Project. Project Management responsibilities included development of a detailed budget for completion of the project along with development of a detailed project work plan which addressed a multitude of project aspects, including communications and coordination of efforts and quality management. Post project activities involved resulted in becoming a **credible resource to both governmental and non-governmental organizations seeking to further stormwater management across the Gulf Coast Region**.

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 **BFM CORPORATION, LLC**			
Name	Ralph P. Fontcuberta, Jr., PLS	Years of relevant experience with this employer	40
Title	Executive Vice President Registered Professional Land Surveyor	Years of relevant experience with other employer(s)	15

Degree(s) / Years / Specialization			N/A
Active registration number / state / expiration date			4329 / LA / Sept 30 2024
Year registered	1974	Discipline	Registered Professional Land Surveyor
Contract role(s) / brief description of responsibilities			Registered 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).
06/20 - ONGOING	**Almonaster Avenue Bridge Rehabilitation Project (DOTD H.014530), New Orleans, LA**. The existing Almonaster Avenue Bridge over the Inner Harbor – Navigation Canal (IH-NC) is a movable Strauss-heel trunnion bridge built circa 1920 and is owned and operated by the Board of Commissioners of the Port of New Orleans. The bridge carries two railroad tracks owned by CSX Transportation, Inc., and one vehicular lane in each direction; however, the vehicular lanes are closed. The Board, in conjunction with the Louisiana DOTD and the City of New Orleans, wishes to modify the bridge and approach roadways. BFM was contracted to provide surveying services for multiple phases of the overall project, including topographic surveying, GPS static control, and survey line. Drone surveying is a key element. Mr. Fontcuberta was the PLS of Record for the project, overseeing all surveying services and final deliverables. ($46,550 (fee); ongoing)
11/14 - 04/15	**Kenner 2030 Program: Duncan Canal at West Esplanade Bridge Replacement Project, City of Kenner, LA**. BFM provided topographic surveying services for this Bridge Replacement Project, part of the Kenner 2030 Program, which involved replacement of the West Esplanade Bridge at the Duncan Canal. Mr. Fontcuberta was the PLS of Record for the project, overseeing all surveying services and final deliverables. ($23,710 (fee); 2015)
12/21 - 01/22	**LA Highway 39 (East Judge Perez Drive) 3D Survey Scan, Port of New Orleans, St. Bernard Parish, LA**. BFM Corporation was selected by the Port of New Orleans to prepare a 3D Scan Survey for the project located near the Violet Canal. The survey included a 3D Scan underneath the elevated portion of LA Hwy 39, beginning approximately 525 feet southeast of the centerline of Violet Canal and continuing southeast; approximately 700 liner feet. The project included surveying the underside of the elevated roadway only; there was no topographic survey of the roadway surface. Mr. Fontcuberta was the PLS of Record for the project, overseeing all surveying services and final deliverables. ($19,624 (fee); 2022)
06/20 - 02/21	**Almonaster Railroad Bridge 3D Scan Services, Inner Harbor Navigational Canal, New Orleans, LA**. BFM was selected to execute a 3-D Scan Survey of the Almonaster Railroad Bridge; the Scope of Services involved locating points on the Operating Strut. Subsequent points were taken with the bascule in the lowered, seated

	position. A second seat of shots were taken with the bascule span in the fully open position. BFM worked with the New Orleans Public Belt to set scheduling to execute the survey, as notice needed to be given to establish when the bridge could be raised and lowered to facilitate elements of the scanning process. Deliverables included a CSV file containing (a) Northing, (b) Easting, (c) Elevation, and (d) Description. Mr. Fontcuberta was the PLS of Record for the project, overseeing all surveying services and final deliverables. ($14,500 (fee); 2021)
02/19 - 09/20	**Lapalco Boulevard Bridge at Harvey Canal, (PW 2017-046-RBP; DOTD H.004396), Jefferson Parish, LA**. BFM Corporation provided extensive surveying services for a topographic survey and right-of-way (R/W) determination for the project. Project elements included setting GPS Static Control (5 permanent control points), traversing a proposed survey line, and land topography surveying. Additional phases include hydrographic topography/bathymetric surveying of the project area, the right-of-way determination, and subsurface utility engineering (SUE). Drone Surveying was utilized throughout the project. A Route Topographic Survey was also included as part of the scope, as was Subsurface Utility Engineering (SUE). Mr. Fontcuberta was the PLS of Record for the project, overseeing all surveying services and final deliverables. ($478,744 (fee); 2020)
06/19 - 09/20	**Causeway Boulevard Overpass (over Airline Drive), Jefferson Parish, LA**. BFM's surveying services included Route Topographic and Boundary Survey for the project, which was located at the Causeway Boulevard Overpass of Airline Drive. This was designated as Phase 3 of the Rehabilitation Project, which included Ramps 4, 5, and the Traffic Circle. Drone Surveying services were also included. Mr. Fontcuberta was the PLS of Record for the project, overseeing all surveying services and final deliverables. ($68,090 (fee); 2020)
08/18 - 10/19	**DOTD H.013494, Louisiana Highway 52 (Phase 1; Blueberry Hill to Angus Drive), St. Charles Parish, LA**. BFM executed a Route Topographic Survey for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. Project work in this multi-phase undertaking included GPS Static Control (Phase I; establishing the Survey Line and setting control points), Survey Line Traverse (Phase II; referencing 3-point ties, State Plane Coordinate System, and DOTD review), and Topography (Phase III; all topographic surveying elements, including location of utilities, cross sections, referencing drainage map, established record drawings referencing). Extensive records research was a key element of the project. Mr. Fontcuberta was the PLS of Record for the project, overseeing all surveying services and final deliverables. ($87,710 (fee); 2019)

Firm employed by **BFM CORPORATION, LLC**					
Name	Chad M. Poché, P.E.			Years of relevant experience with this employer	5
Title	Executive Vice President			Years of relevant experience with other employer(s)	24
Degree(s) / Years / Specialization			M.S. / 1998 / Civil Engineering (UNO) B.S. / 1993 / Civil Engineering (LSU)		
Active registration number / state / expiration date			27667 / LA / Sept 30 2022		
Year registered	1998	Discipline	Registered Professional Civil Engineer (Geotechnical)		
Contract role(s) / brief description of responsibilities			Principal / Engineering Liaison		

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).
02/19 - 09/20	**Lapalco Boulevard Bridge at Harvey Canal, (PW 2017-046-RBP; DOTD H.004396), Jefferson Parish, LA.** BFM Corporation provided extensive surveying services for a topographic survey and right-of-way (R/W) determination for the project. Project elements included setting GPS Static Control (5 permanent control points), traversing a proposed survey line, and land topography surveying. Additional phases include hydrographic topography/bathymetric surveying of the project area, the right-of-way determination, and subsurface utility engineering (SUE). Drone Surveying was utilized throughout the project. A Route Topographic Survey was also included as part of the scope, as was Subsurface Utility Engineering (SUE). ($478,744 (fee); 2020)
01/17 - 08/19	**DOTD H.010570, LA 49, Williams Boulevard from West Metairie Avenue to the I-10 East Ramp, Kenner, Jefferson Parish, LA**. BFM's surveying services for the project included topographic surveying along Williams Boulevard (LA 49) from 200 feet south of West Metairie Avenue to the I-10 East Ramp. Project involved multiple visits on an as-needed basis over several years. Mr. Poché served as the Engineering Liaison for BFM, interacting directly with the engineering firm as necessary. ($117,732 (fee); 2019)
08/18 - 10/19	**DOTD H.013494, Louisiana Highway 52 (Phase 1; Blueberry Hill to Angus Drive), St. Charles Parish, LA**. BFM executed a Route Topographic Survey for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. Project work in this multi-phase undertaking included GPS Static Control (Phase I; establishing the Survey Line and setting control points), Survey Line Traverse (Phase II; referencing 3-point ties, State Plane Coordinate System, and DOTD review), and Topography (Phase III; all topographic surveying elements, including location of utilities, cross sections, referencing drainage map, established record drawings referencing). Extensive records research was a key element of the project. Mr. Poché served as the Engineering Liaison for BFM, interacting directly with the engineering firm as necessary. ($87,710 (fee); 2019)
06/20 – 09/22	**Almonaster Avenue Bridge Rehabilitation Project (DOTD H.014530), New Orleans, LA**. The existing Almonaster Avenue Bridge over the Inner Harbor – Navigation Canal (IH-NC) is a movable Strauss-heel trunnion bridge built circa 1920 and is owned and operated by the Board of Commissioners of the Port of New Orleans.

	The bridge carries two railroad tracks owned by CSX Transportation, Inc., and one vehicular lane in each direction; however, the vehicular lanes are closed. The Board, in conjunction with the Louisiana Department of Transportation and Development (LADOTD) and the City of New Orleans, wishes to modify the bridge and approach roadways. BFM was contracted to provide surveying services for multiple phases of the overall project, including topographic surveying, GPS static control, and survey line. Drone surveying is a key element. Mr. Poché served as the Engineering Liaison for BFM, interacting directly with the engineering firm as necessary. ($46,550 (fee); ongoing)
12/21 - 01/22	**LA Highway 39 (East Judge Perez Drive) 3D Survey Scan, Port of New Orleans, St. Bernard Parish, LA**. BFM Corporation was selected by the Port of New Orleans to prepare a 3D Scan Survey for the project located near the Violet Canal. The survey included a 3D Scan underneath the elevated portion of LA Hwy 39, beginning approximately 525 feet southeast of the centerline of Violet Canal and continuing southeast; approximately 700 liner feet. The project included surveying the underside of the elevated roadway only; there was no topographic survey of the roadway surface. Mr. Poché served as the Engineering Liaison for BFM, interacting directly with the engineering firm as necessary. ($19,624 (fee); 2022)
06/20 - 02/21	**Almonaster Railroad Bridge 3D Scan Services, Inner Harbor Navigational Canal, New Orleans, LA**. BFM Corporation was selected to execute a 3-D Scan Survey of the Almonaster Railroad Bridge; the Scope of Services involved locating points on the Operating Strut. Subsequent points were taken with the bascule in the lowered, seated position. A second seat of shots were taken with the bascule span in the fully open position. BFM worked with the New Orleans Public Belt to set scheduling to execute the survey, as notice needed to be given to establish when the bridge could be raised and lowered to facilitate elements of the scanning process. Deliverables included a CSV file containing (a) Northing, (b) Easting, (c) Elevation, and (d) Description. Mr. Poché served as the Engineering Liaison for BFM, interacting directly with the engineering firm as necessary. ($14,500 (fee); 2021)

Firm employed by **BFM CORPORATION, LLC**			
Name	Gary J. Lambert, Jr., PLS	Years of relevant experience with this employer	4
Title	Registered Professional Land Surveyor	Years of relevant experience with other employer(s)	7

Degree(s) / Years / Specialization			B.S. / 2018 / Geomatics (Nicholls State University) B.S. / 2014 / Construction Management (Louisiana State University)
Active registration number / state / expiration date			0005259 / Louisiana / March 31 2023
Year registered	2021	Discipline	Registered Professional Land Surveyor
Contract role(s) / brief description of responsibilities			Project Manager/Drafting Supervisor

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).
06/19 - 09/20	**Causeway Boulevard Overpass (over Airline Drive), Jefferson Parish, LA**. BFM's surveying services included Route Topographic and Boundary Survey for the project, which was located at the Causeway Boulevard Overpass of Airline Drive. This was designated as Phase 3 of the Rehabilitation Project, which included Ramps 4, 5, and the Traffic Circle. Drone Surveying services were also included. Mr. Lambert provided surveying services and oversaw drafting department work for the project. ($68,090 (fee); 2020)
06/20 – 09/22	**Almonaster Avenue Bridge Rehabilitation Project (DOTD H.014530), New Orleans, LA**. The existing Almonaster Avenue Bridge over the Inner Harbor – Navigation Canal (IH-NC) is a movable Strauss-heel trunnion bridge built circa 1920 and is owned and operated by the Board of Commissioners of the Port of New Orleans. The bridge carries two railroad tracks owned by CSX Transportation, Inc., and one vehicular lane in each direction; however, the vehicular lanes are closed. The Board, in conjunction with the Louisiana Department of Transportation and Development (LADOTD) and the City of New Orleans, wishes to modify the bridge and approach roadways. BFM was contracted to provide surveying services for multiple phases of the overall project, including topographic surveying, GPS static control, and survey line. Drone surveying is a key element. Mr. Lambert provided surveying services and oversaw drafting department work for the project. ($46,550 (fee); ongoing)
12/21 - 01/22	**LA Highway 39 (East Judge Perez Drive) 3D Survey Scan, Port of New Orleans, St. Bernard Parish, LA.** BFM Corporation was selected by the Port of New Orleans to prepare a 3D Scan Survey for the project located near the Violet Canal. The survey included a 3D Scan underneath the elevated portion of LA Hwy 39, beginning approximately 525 feet southeast of the centerline of Violet Canal and continuing southeast; approximately 700 liner feet. The project included surveying the underside of the elevated roadway only; there was no topographic survey of the roadway surface. Mr. Lambert provided surveying services and oversaw drafting department work for the project. ($19,624 (fee); 2022)

02/19 - 09/20	**Lapalco Boulevard Bridge at Harvey Canal, (PW 2017-046-RBP; DOTD H.004396), Jefferson Parish, LA**. BFM Corporation provided extensive surveying services for a topographic survey and right-of-way (R/W) determination for the project. Project elements included setting GPS Static Control (5 permanent control points), traversing a proposed survey line, and land topography surveying. Additional phases include hydrographic topography/bathymetric surveying of the project area, the right-of-way determination, and subsurface utility engineering (SUE). Drone Surveying was utilized throughout the project. A Route Topographic Survey was also included as part of the scope, as was Subsurface Utility Engineering (SUE). Mr. Lambert provided surveying services and oversaw drafting department work for the project. ($478,744 (fee); 2020)
03/19 - 05/19	**Metairie Road Smart Growth: Causeway Boulevard and Metairie Road, Metairie, Jefferson Parish, LA**. BFM prepared a topographic survey of the project site for the Metairie Road Smart Growth Program. This included Metairie Road beneath the Causeway Boulevard Overpass. BFM established a baseline parallel to Metairie Road, set up two temporary benchmarks (TBMs), and located all existing improvements. Cross sections for the project area were taken on a 25 ft. grid within established limits. Mr. Lambert provided surveying services and oversaw drafting department work for the project. ($12,660 (fee); 2019)
12/21 - 01/22	**LA Highway 39 (East Judge Perez Drive) 3D Survey Scan, Port of New Orleans, St. Bernard Parish, LA**. BFM Corporation was selected by the Port of New Orleans to prepare a 3D Scan Survey for the project located near the Violet Canal. The survey included a 3D Scan underneath the elevated portion of LA Hwy 39, beginning approximately 525 feet southeast of the centerline of Violet Canal and continuing southeast; approximately 700 liner feet. The project included surveying the underside of the elevated roadway only; there was no topographic survey of the roadway surface. Mr. Lambert provided surveying services and oversaw drafting department work for the project. ($19,624 (fee); 2022)

Firm employed by **BFM CORPORATION, LLC**			
Name	John Philip Thayer	Years of relevant experience with this employer	14
Title	Field Operations Supervisor	Years of relevant experience with other employer(s)	1

Degree(s) / Years / Specialization	Certificate / 2015 / Land Surveying Services B.S. / 2007 / Physical Education (Trevecca Nazarene University)
Active registration number / state / expiration date	N/A
Year registered: N/A — Discipline	N/A
Contract role(s) / brief description of responsibilities	Field Operations Supervisor

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).
01/17 - 06/17	**Leo Lane at Bridge Washout Location, Tangipahoa Parish, LA**. BFM provided a Route Topographic Survey (FEMA) for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. As Field Operations Supervisor, Mr. Thayer oversaw field work and execution of all field services associated with the project. ($9,330 (fee); 2017)
06/19 - 09/20	**Causeway Boulevard Overpass (over Airline Drive), Jefferson Parish, LA**. Provision of Route Topographic and Boundary Survey for the project, which was located at the Causeway Boulevard Overpass of Airline Drive. This was designated as Phase 3 of the Rehabilitation Project, which included Ramps 4, 5, and the Traffic Circle. Drone Surveying services were also included. As Field Operations Supervisor, Mr. Thayer oversaw field work and execution of all field services associated with the project. ($68,090 (fee); 2020)
12/21 - 01/22	**LA Highway 39 (East Judge Perez Drive) 3D Survey Scan, Port of New Orleans, St. Bernard Parish, LA**. The survey included a 3D Scan underneath the elevated portion of LA Hwy 39, beginning approximately 525 feet southeast of the centerline of Violet Canal and continuing southeast; approximately 700 liner feet. The project included surveying the underside of the elevated roadway only; there was no topographic survey of the roadway surface. As Field Operations Supervisor, Mr. Thayer oversaw field work and execution of all field services associated with the project. ($19,624 (fee); 2022)
02/10 - 11/13	**Wisner Boulevard Bridge over I-610 Reconstruction, New Orleans, LA**. BFM's services included measuring existing bridge panels and supports for replacement. BFM also surveyed underground utilities, rights of way, and servitudes for new bridge location. As Field Operations Supervisor, Mr. Thayer oversaw field work and execution of all field services associated with the project. ($15,232 (fee); 2013)
01/17 – 08/19	**DOTD H.010570, LA 49, Williams Boulevard from West Metairie Avenue to the I-10 East Ramp, Kenner, Jefferson Parish, LA**. BFM's surveying services for the project included topographic surveying along Williams Boulevard (LA 49) from 200 feet south of West Metairie Avenue to the I-10 East Ramp. Project involved

	multiple visits on an as-needed basis over several years. As Field Operations Supervisor, Mr. Thayer oversaw field work and execution of all field services associated with the project. ($117,732 (fee); 2019)
01/17 – 06/17	**Troy Spears Road at Bridge Washout Location, Tangipahoa Parish, LA**. BFM provided a Route Topographic Survey (FEMA) for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. As Field Operations Supervisor, Mr. Thayer oversaw field work and execution of all field services associated with the project. ($11,730 (fee); 2017)
02/19 – 09/20	**Lapalco Boulevard Bridge at Harvey Canal, (PW 2017-046-RBP; DOTD H.004396), Jefferson Parish, LA**. BFM Corporation provided extensive surveying services for a topographic survey and right-of-way (R/W) determination for the project. Project elements included setting GPS Static Control (5 permanent control points), traversing a proposed survey line, and land topography surveying. Additional phases include hydrographic topography/bathymetric surveying of the project area, the right-of-way determination, and subsurface utility engineering (SUE). Drone Surveying was utilized throughout the project. A Route Topographic Survey was also included as part of the scope, as was Subsurface Utility Engineering (SUE). Mr. Thayer oversaw field work and execution of all field services associated with the project. ($478,744 (fee); 2020)
08/18 - 10/19	**DOTD H.013494, Louisiana Highway 52 (Phase 1; Blueberry Hill to Angus Drive), St. Charles Parish, LA**. BFM executed a Route Topographic Survey for the project; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. Project work in this multi-phase undertaking included GPS Static Control (Phase I; establishing the Survey Line and setting control points), Survey Line Traverse (Phase II; referencing 3-point ties, State Plane Coordinate System, and DOTD review), and Topography (Phase III; all topographic surveying elements, including location of utilities, cross sections, referencing drainage map, established record drawings referencing). Extensive records research was a key element of the project. Mr. Thayer oversaw field work and execution of all field services associated with the project. ($87,710 (fee); 2019)

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 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 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 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 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 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 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 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 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.

MEETS MINIMUM LADOTD PERSONNEL REQ.

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 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 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 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 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 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 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 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 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 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 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 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)	1/2023	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

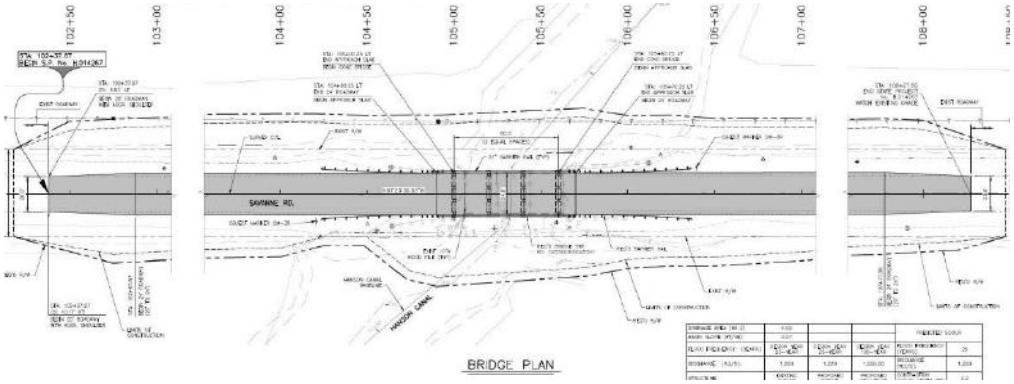
Infinity engineers involved with project: William Thomassie, P.E; Rachel Kenney, P.E.; Ricardo Contreras, P.E.; Louis Jackson, P.E.

17. **Firm Experience:**

Firm name	**Infinity Engineering Consultants, LLC.**		Past Performance Evaluation Category(ies)*	Bridge	
Project name	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.



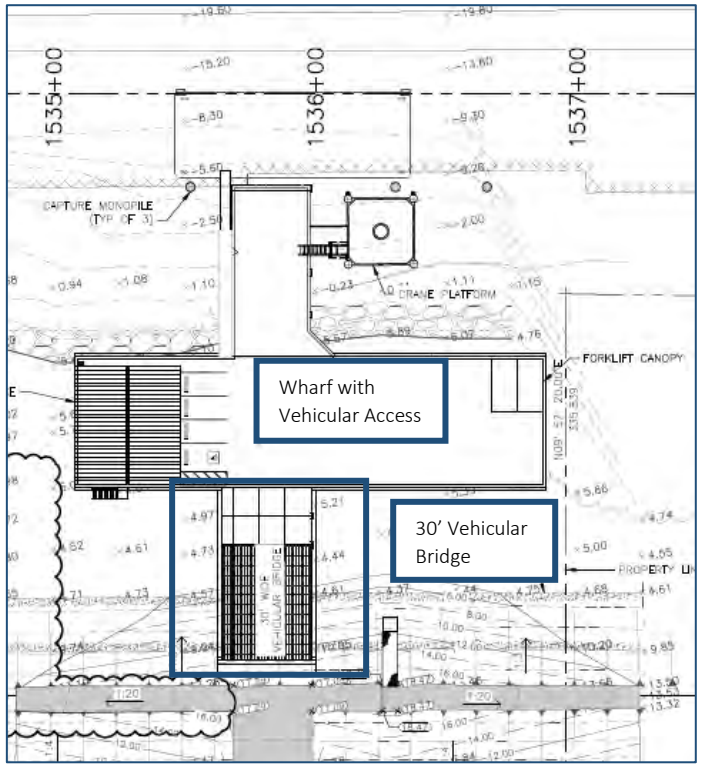
If called upon Infinity's engineers have the capabilities to see this project through final design and construction administration.

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	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	Shintech 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, civil, structural, mechanical, and electrical engineering, as well as instrumentation and field services. 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	BFM CORPORATION, LLC		Past Performance Evaluation Discipline(s)*	Survey	
Project name	Lapalco Boulevard Bridge at Harvey Canal		Firm responsibility (prime or sub?)	SUB	
Project number	DOTD H.004396 JPPW 2017-046-RBP	Owner's name	Hardesty & Hanover		
Project location	Jefferson Parish, Louisiana		Owner's Project Manager	Dr. Babak Naghavi, P.E.	
Owner's address, phone, email	3850 N Causeway Blvd Ste 1850, Metairie LA 70002, 504-962-9212, bnaghavi@hardestyhanover.com				
Services commenced by this firm (mm/yy)	02/19	Total consultant contract cost ($1,000's)	N/A		
Services completed by this firm (mm/yy)	09/20	Cost of consultant services provided by this firm ($1,000's)	$478.7		

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

BFM Corporation provided extensive surveying services for a topographic survey and right-of-way (R/W) determination for the project. Project elements included setting GPS Static Control (5 permanent control points), traversing a proposed survey line, and land topography surveying. Additional phases include hydrographic topography/bathymetric surveying of the project area, the right-of-way determination, and subsurface utility engineering (SUE). Drone Surveying was utilized throughout the project. A Route Topographic Survey was also included as part of the scope, as was Subsurface Utility Engineering (SUE).

BFM firm members featured in this proposal included Ralph P Fontcuberta, Jr, PLS; Chad M. Poché, P.E.; John Philip Thayer, and; Gary J. Lambert, Jr., LSI.

17. **Firm Experience:**

Firm name	BFM CORPORATION, LLC		Past Performance Evaluation Discipline(s)*	Survey	
Project name	Almonaster Avenue Bridge Rehabilitation Project		Firm responsibility (prime or sub?)	SUB	
Project number	DOTD H.014530	Owner's name	Hardesty & Hanover		
Project location	New Orleans, Louisiana		Owner's Project Manager	Dr. Babak Naghavi, P.E.	
Owner's address, phone, email	3850 N Causeway Blvd Ste 1850, Metairie LA 70002 504-962-9212, bnaghavi@hardestyhanover.com				
Services commenced by this firm (mm/yy)	06/20	Total consultant contract cost ($1,000's)		N/A	
Services completed by this firm (mm/yy)	9/22	Cost of consultant services provided by this firm ($1,000's)		$46.6	

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

The existing Almonaster Avenue Bridge over the Inner Harbor – Navigation Canal (IH-NC) is a movable Strauss-heel trunnion bridge built circa 1920 and is owned and operated by the Board of Commissioners of the Port of New Orleans. The bridge carries two railroad tracks owned by CSX Transportation, Inc., and one vehicular lane in each direction; however, the vehicular lanes are closed.

The Board, in conjunction with the Louisiana Department of Transportation and Development (LADOTD) and the City of New Orleans, wishes to modify the bridge and approach roadways. BFM was contracted to provide surveying services for multiple phases of the overall project, including topographic surveying, GPS static control, and survey line. Drone surveying is a key element

BFM firm members featured in this proposal included Ralph P Fontcuberta, Jr, PLS; Chad M. Poché, P.E.; John Philip Thayer, and; Gary J. Lambert, Jr., LSI.

17. **Firm Experience:**

Firm name	BFM CORPORATION, LLC		Past Performance Evaluation Discipline(s)*	Survey	
Project name	Almonaster Railroad Bridge 3D Scan Services		Firm responsibility (prime or sub?)	SUB	
Project number	N/A	Owner's name	Hardesty & Hanover		
Project location	Inner Harbor Navigational Canal, New Orleans, Louisiana		Owner's Project Manager	Dr. Babak Naghavi, P.E.	
Owner's address, phone, email	3850 N Causeway Blvd Ste 1850, Metairie LA 70002 504-962-9212, bnaghavi@hardestyhanover.com				
Services commenced by this firm (mm/yy)	06/20	Total consultant contract cost ($1,000's)		N/A	
Services completed by this firm (mm/yy)	02/21	Cost of consultant services provided by this firm ($1,000's)		$14.5	

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

BFM Corporation was selected to execute a 3-D Scan Survey of the Almonaster Railroad Bridge; the Scope of Services involved locating points on the Operating Strut. Subsequent points were taken with the bascule in the lowered, seated position. A second seat of shots were taken with the bascule span in the fully open position. BFM worked with the New Orleans Public Belt to set scheduling to execute the survey, as notice needed to be given to establish when the bridge could be raised and lowered to facilitate elements of the scanning process. Deliverables included a CSV file containing (a) Northing, (b) Easting, (c) Elevation, and (d) Description

BFM firm members featured in this proposal included Ralph P Fontcuberta, Jr, PLS; Chad M. Poché, P.E.; John Philip Thayer, and; Gary J. Lambert, Jr., LSI.

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

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

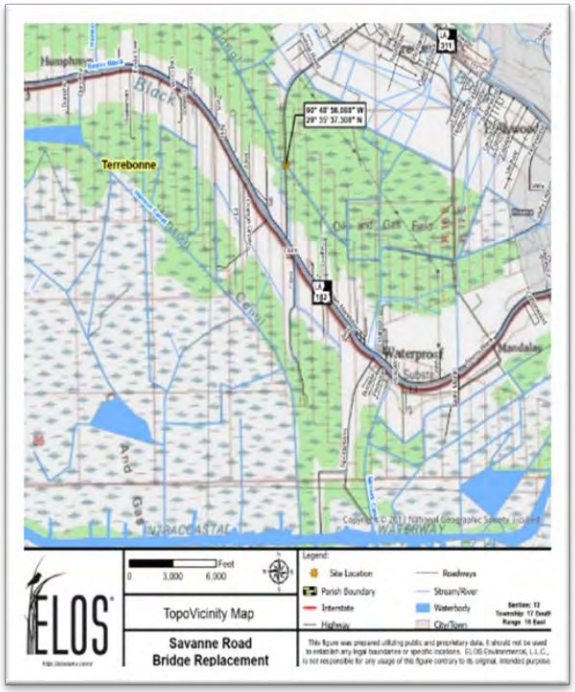
Firm name	ELOS Environmental, LLC			Past Performance Evaluation Discipline(s)*	Environmental
Project name	Savanne Road Bridge Over Hanson Canal			Firm responsibility (prime or sub?)	Sub
Project number	H.014267	Owner's name	LADOTD		
Project location	Terrebonne Parish, LA			Owner's Project Manager	Amanda 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:**

The existing Gravolet Road bridge spans a drainage canal leading to a two-lane roadway in Braithwaite, Louisiana. The concrete precast panal bridge was built in 1968, and based on its condition, the bridge has been rated as being in fair condition. According to the condition report, the embankment protection has minor damage. There is also evidence of minor stream bed movement. It is our understanding that the LADOTD seeks to develop preliminary engineering plans for the replacement of this bridge.

Gravolet Road over Drainage Canal
Davant, LA

Infinity Engineering Consultants is a Metairie, Louisiana-based firm, located one hour from the project site. With Infinity's unique multi-disciplinary skill sets and structural engineering experience, the firm is well positioned to project manage the preliminary, Stage 3, design phase of the off-system bridge replacement.

We have reviewed the background information provided in the RFQ documents and discussed environmental and construction concerns with Ken Dugas, P.E., Plaquemines Parish Chief Engineer. Over Infinity's 18 years in business, the firm has enjoyed a strong working relationship with Plaquemines Parish; serving as prime consultant for projects ranging from providing designs for new bridges as part of the expansion of the Ollie Drainage Pumping Station to installation of new utilities. Within Davant itself, Infinity provided engineering designs for the refurbishment of (3) large detention ponds and containment berms. Additionally, Infinity created design repair plans for a new raw water siphon with Davant, Louisiana. Infinity has become well versed at designing for the soil conditions found in Plaquemines Parish, specifically Davant.

Infinity recognizes that Gravolet Road serves as an important connector between LA-39 and Highway 15. With few roadways providing a connection between these two highways, closing Gravolet Road during construction will place a traffic burden on local residents. When creating the preliminary designs for this off-system bridge, Infinity's engineers will be mindful of the necessity of efficient and effective construction.

As outlined in the scope of services, beyond engineering design, this contract requires topographic survey, right of way sketches, and environmental reporting 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:

Ollie Pumping Station Vehicular
Bridge Design
Jesuit Bend, LA

INFINITY ENGINEERING CONSULTANTS, LLC:

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

BFM Corporation, 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 projects 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 Gravolet 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
4. Coordinate with the surveyor (BFM) 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 USACE 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.

Environmental Clearance & Wetland Delineation

Solicitation of Views and Categorical Exclusion/Environmental Clearance

Immediately following approval of the replacement structures, ELOS will distribute Solicitation of Views to the appropriate parish mailing list as provided by the DOTD Environmental Section. The Solicitation of Views packet will contain a concise project description and appropriate project location maps. Comments received from the Solicitation of Views will be complied, and the appropriate Categorical Exclusion Clearance Documentation will be prepared, including the environmental checklist and appropriate permit drawings. It is anticipated that the Categorical Exclusion Clearance Documentation can be completed within 90 days of notice to proceed.

Wetland Studies

ELOS will review available aerial imagery, topographic maps, soils data, and elevation data prior to field surveys to determine anticipated ground conditions. Once the Limits of Construction are determined, ELOS will mobilize to perform a wetland delineation, collecting field data on the three wetland parameters (soils, vegetation, and hydrology) in accordance with the Corps of Engineers Wetlands Delineation Manual (U.S. Army Corps of Engineers, Waterways Experiment Station 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (U.S. Army Corps of Engineers, Wetland Regulatory Assistance Program 2010), as well as subsequent New Orleans District wetland delineation requirements. Wetland and waters boundaries, along with sampling point locations, will be mapped using sub-centimeter-accuracy Global Positioning System (GPS) units.

The Wetland Findings Reports will contain concise narratives on the three wetland parameters, (routine wetland determination forms, copies of high-resolution site photographs, soils information, and maps showing areas of potential jurisdictional wetlands and other waters of the United States (i.e., non-wetland waters). The Wetland Findings Reports will also contain all appropriate maps/figures, including but not limited to, a vicinity (street) map, site location (topographic) map, site plan, wetland habitat map, soils map, LIDAR map, infrared aerial map(s), and true color aerial map(s). It is anticipated that field visits can be scheduled within 10 business days of determining the limits of construction, and that field data collection will take 1 day. The Wetland Findings Report can be provided to the DOTD Environmental Section for review after completion of the field surveys.

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 prides itself on customer satisfaction accomplished through producing good work for every project. We recognize that as consultants, the most important element of our existence is our reputation. 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.

Ken Dugas, P.E., Chief Engineer Plaquemines Parish - "Infinity completed a very thorough drainage study to justify expanding Ollie Drainage Pump Station. The $16,500,000 station addition was constructed and has performed, as designed, through several heavy rain events and hurricanes. Infinity has designed several street and utility infrastructure improvements…They've proven to be good stewards of public funds. I would highly recommend Infinity."

Martin Pospisil, EUR ING, Director of Infrastructure, Regional Transit Authority – Due to past experiences with them, and their vast experience providing detailed design of multiple river structures, we selected Infinity to perform the design of the new Canal Street Ferry Terminal. Infinity provided all dock structural components, including land and river piles, decks, and foundations, civil plans, and utility re-locations. I would highly recommend Infinity Engineering Consultants for projects requiring any riverfront developments."

Billy Nungesser, Lt. Governor and Former Plaquemines Parish President – "Based on our familiarity with Infinity Engineering through their design of the Ollie Drainage Pump Station Expansion…we had the confidence in this firm to provide the expertise necessary to responsibly utilize public funds.
My directors relayed that their designs were completed in a timely manner….and was committed to providing Plaquemines Parish with the best possible service. I would recommend Infinity Engineering."

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
- 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
- Gary Lambert, Jr., PLS is BFM Corporation's professional land surveyor registered in Louisiana with over five years of experience
- Jerry Graves, PhD 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).

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
BFM Corporation, LLC	Not Applicable	Not Applicable	Not Applicable	Not Applicable
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

BFM Corporation, LLC.

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

Name:	Public Address:
BFM Corporation, LLC	15 Veterans Memorial Boulevard Kenner, Louisiana 70062

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
VF.0000008	Active	09/11/1984	09/30/2023	Mr. Ralph P. Fontcuberta Jr. # PLS.0004329

LED LOUISIANA ECONOMIC DEVELOPMENT

Division of Small and Emerging Business Development

SEBD CERTIFICATION

BFM CORPORATION, LLC

is hereby certified as a Small and Emerging Business Enterprise.

This certification is valid beginning 7/19/2019 and supersedes any registration or listing previously issued. At any time there is a change in ownership or control of the firm, notification must be made immediately to the Division of Small and Emerging Business Development.

Issued at Baton Rouge, Louisiana 7/19/2019

This certification expires on: 7/19/2029

Certification No. 9551

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

LED LOUISIANA ECONOMIC DEVELOPMENT

DIVISION OF SMALL BUSINESS SERVICES

This certification acknowledges that

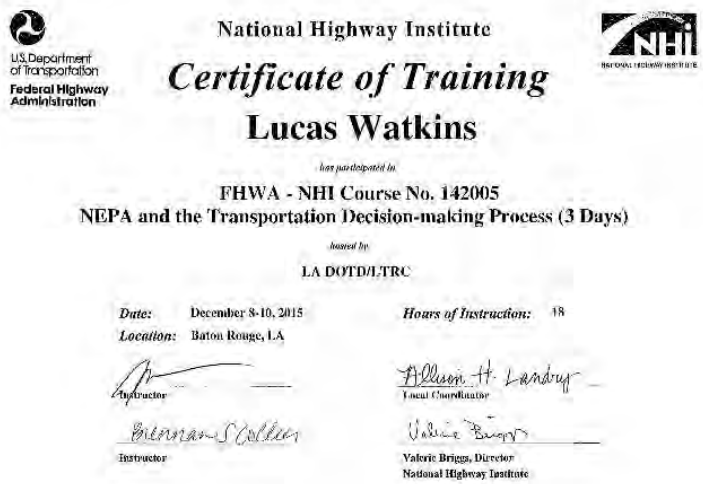
BFM CORPORATION, LLC

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

This certification is valid from 10/12/2022 to 10/12/2023

Certification No. 9551

Stephanie Hartman,
Director, Small Business Services



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 — 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

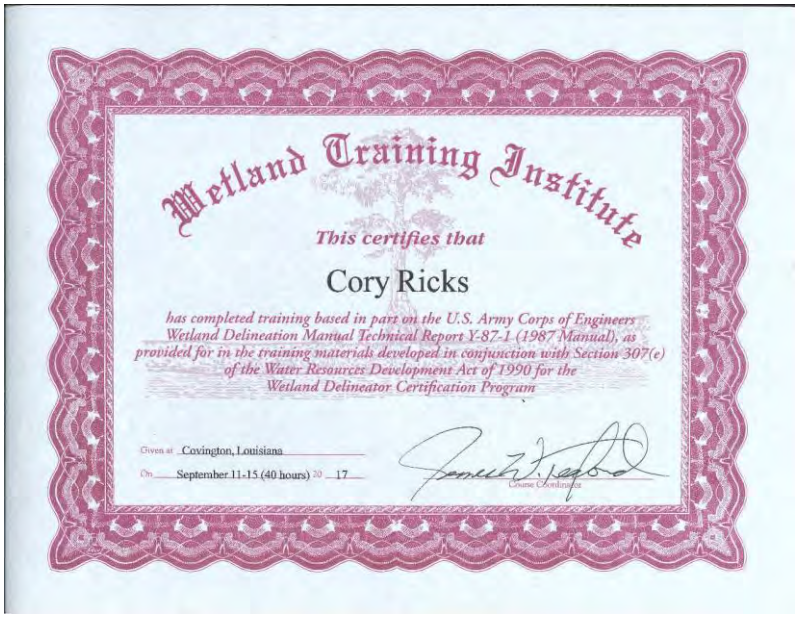
hosted by

LA DOTD/LTRC

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

Instructor — 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**
BFM Corporation, LLC.	15 Veterans Blvd. Kenner, LA 70062	Chad Poche, P.E. cpoche@gulfsoutheng.com	504-468-8800
ELOS Environmental, LLC.	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.