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	**IDIQ CONTRACTS FOR PROFESSIONAL SUBSURFACE UTILITY ENGINEERING SERVICES STATEWIDE**
2. Contract number(s) as shown in the advertisement	**4400025510, 4400025511, AND 4400025512**
3. State Project Number(s), if shown in the advertisement	
4. Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	**SIGMA CONSULTING GROUP, INC.**
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.0001410** **VF.0000302** SIGMA CONSULTING GROUP, INC. ENGINEERING & SURVEYING
6. Prime consultant mailing address	**10305 Airline Highway, Baton Rouge, LA 70816**
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	**10305 Airline Highway, Baton Rouge, LA 70816**
8. Name, title, phone number, and email address of prime consultant's contract point of contact	**Robert J. Lear, PE, LSI – Vice President** **225-298-0800, rlear@sigmacg.com**
9. Name, title, phone number, and email address of the official with signing authority for this proposal	**Miles B. Williams, PE – President** **225-298-0800, mwilliams@sigmacg.com**

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: November 17, 2022
11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.	Firm(s): Firm(s)' %: **N/A**

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

Evaluation Disciplines	% of Overall Contract	**Sigma Consulting Group, Inc.**					Each Discipline must total to 100%
Other - SUE Services and Utilities	80%	**100%**					100%
Survey	20%	**100%**					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%**	**100%**	0%	0%	0%	0%	100%

13. **Firm Size**

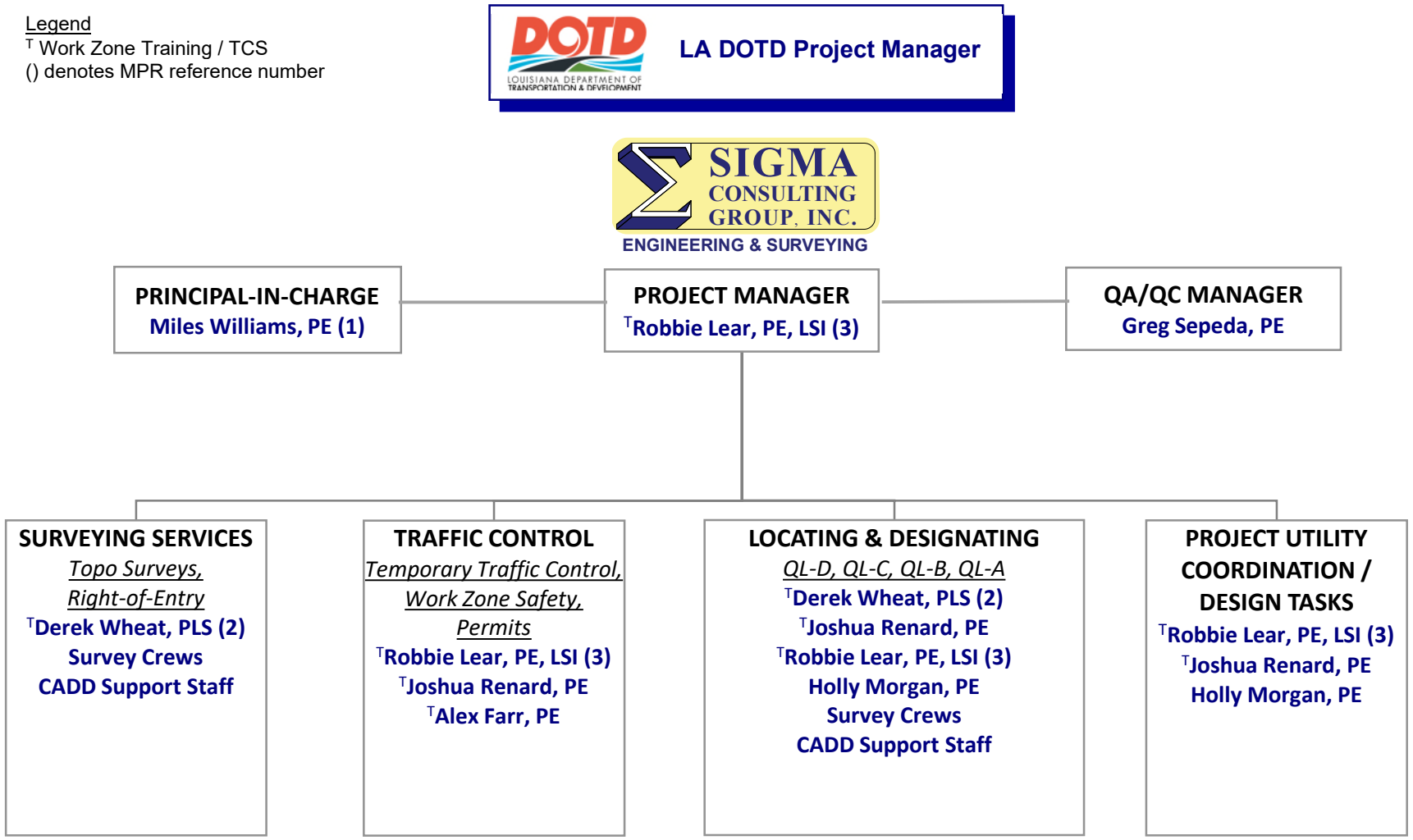
Firm Name	DOTD Job Classification	Number of Personnel Committed to this Contract	Total Number of Personnel Available in this DOTD Job Classification (if needed)
Sigma Consulting Group, Inc. SIGMA CONSULTING GROUP, INC. ENGINEERING & SURVEYING	Principal	-	1
	Supervisor - Eng.	1	4
	Engineer	3	2
	Engineer Intern	-	4
	CADD Operator	1	2
	CADD Technician	1	4
	Surveyor	1	1
	Instrument Man	1	1
	Rodman	2	2
	Sr. Technician	-	2
	Clerical	-	4

Sigma is "right-sized" for this project – small enough to be focused and efficient in our process; large enough to have the experience and resources to get the project done in a timely manner.

All Sigma Personnel Committed To This Project Are Also Assigned To The Current IDIQ SUE Contract

14. Organizational chart

Legend
[T] Work Zone Training / TCS
() denotes MPR reference number



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	**Miles Williams, PE**	**Sigma Consulting Group, Inc.**	**Professional Civil Engineer Lic. No. 23094**	**LA**	**Exp. 3/31/2024**
2	**Derek Wheat, PLS**	**Sigma Consulting Group, Inc.**	**Professional Land Surveyor, Lic. No. 5213**	**LA**	**Exp. 9/30/2023**
3	**Robert Lear, Jr., PE, LSI**	**Sigma Consulting Group, Inc.**	**Professional Civil Engineer Lic. No. 29394**	**LA**	**Exp. 3/31/2023**


Miles Williams, PE


Robert Lear, Jr., PE


Derek Wheat, PLS

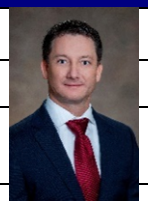
This project will have 50+ years of experience in our leadership team.

Learn more about our team members by looking at their resumes in Section 16.

16. **Staff Experience:**

See Resume Sheets on subsequent pages.

Name	Firm	Project Responsibilities
Robert Lear, Jr., PE, LSI	SIGMA CONSULTING GROUP, INC. ENGINEERING & SURVEYING	Project Management / Traffic Control / Locating & Designating / Utility Coordination / Design Tasks
Miles B. Williams, PE		Principal-in-Charge
Gregory Sepeda, PE		QC/QA Manager
Derek Wheat, PLS		Surveying Services / Locating & Designating
Joshua Renard, PE		Utility Coordination / Design Tasks / Locating & Designating / Traffic Control
Holly Morgan, PE		Utility Coordination / Design Tasks / Locating & Designating
Alex Farr, PE		Traffic Control

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**ROBERT LEAR, JR., PE, LSI**		Years of relevant experience with this employer		**23**
Title	**Vice President / Sr. Project Manager**		Years of relevant experience with other employer(s)		**3**
Degree(s) / Years / Specialization			**BS / 1996 / Civil Engineering**		
Active registration number / state / expiration date			**29394 / LA / 3-31-2023**		
Year registered	**2001 / 2005**	Discipline	**Civil / Land Surveyor Intern**		
Contract role(s) / brief description of responsibilities			**Mr. Lear will serve as the contract manager. He will be responsible for task management, project schedules, deliverable, LA DOTD Standards Compliance, and serve as the main point of contact. He has over 5 years of experience with Subsurface Utility Engineering (SUE) locates, relocation plans and design, and over 1 year of experience with QL-A locate management and field services.**		

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).
2013 2012 2005 2017	Mr. Lear has attended the following relevant training courses: **Roundabout Design Workshop** **NHI #380075 New Approaches to Highway Safety Analysis** **NEPA and Transportation Decision Making Seminar** **ATSSA Traffic Control Supervisor Certification #337850 (TCT/TCS)**
12/17 – 07/18	**LA 675 & LA 87 Improvements - Subsurface Utility Engineering, Iberia Parish, LA (H.011781)** Mr. Lear was the project manager and engineer of record for subsurface utility engineering on S. Hopkins Rd in New Iberia, LA. The project included Quality Level A, B, C and D locates in accordance with CI/ASCE Standard 38-02 for underground utilities owned by 9 companies. The 0.8 mile urban roadway included constricted right of way with multiple utilities in the roadway and under sidewalks. Quality Level B locates were conducted using multiple geophysical scanning methods, and 40 QL-A test holes were performed by Sigma. (SUE Services – 7 months including QL-A and QL-B)
04/19 – present	**I-20/I-220 Interchange at Barksdale Airforce Base Design-Build, Bossier Parish (H.003370)** Mr. Lear is the road design manager and utility coordinator for this design-build project. He is responsible for all horizontal and vertical geometrics for this partial cloverleaf interchange, interstate design, ramp design and rural arterial design. He also coordinated utilities during construction, including QL-B and QL-A services for existing telecom lines and an abandoned pipeline in the construction zone. He is also assisting with roadway lighting and service point locations for the project. (SUE Services – 6 months including 6 months QL-A and QL-B during construction)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**ROBERT LEAR, JR., PE, LSI**	Years of relevant experience with this employer	**23**
Title	**Vice President / Sr. Project Manager**	Years of relevant experience with other employer(s)	**3**

01/19 - 5/19	**Causeway Blvd - Earhart Expressway Interchange SUE, Jefferson Parish, LA (H.003861.5-1)** Mr. Lear was the project manager for this SUE project for DOTD. His responsibilities included cost estimate proposals, project schedule and work planning, survey oversight and SUE plan development. He performed the QA/QC for the SUE plans and project management duties between the DOTD, the design consultant, utility owners and the Sigma team. Sigma performed QL-B and QL-A services on this project. (SUE Services – 4 months including QL-A and QL-B)
08/19 – 10/19	**Roundabout: US 171 @ Boone St. SUE, Vernon Parish, LA (H.011909)** Mr. Lear was the project manager for this SUE project for DOTD. His responsibilities included cost estimate proposals, project schedule and work planning, survey oversight and SUE plan development. He performed the QA/QC for the SUE plans and project management duties between the DOTD, the design consultant, utility owners and the Sigma team. Sigma performed QL-B and QL-A services on this project. (SUE Services – 2 months including QL-B)
9/18 – 11/18	**Town of Dubach Sidewalks, Lincoln Parish (H.011772)** Mr. Lear was the project manager for this SUE project for DOTD. His responsibilities included cost estimate proposals, project schedule and work planning, survey oversight and SUE plan development. He was the engineer of record for the SUE plans. He was responsible for re-coding DOTD District 05 survey data and adding Sigma's QL-D through and QL-B data to generate a single survey file for design purposes. (SUE Services – 3 months)
04/13 – 08/13	**East Baton Rouge South Wastewater Treatment Plan Outfall, Baton Rouge, LA (2013)** Mr. Lear served as a field engineer for the construction of the SWWTP outfall in Baton Rouge, LA. His responsibilities included supervising the QL-A locates of existing utilities along L'Auberge Crossing Drive and inspecting the jack and bore of a 54" steel casing under the roadway. (SUE Services – 4 months including QL-A field services 2 months)
03/03 - Present	**LA1 Improvements (Golden Meadow – Fourchon), Lafourche Parish, LA (700-29-0112/H.008145/H.004526)** As part of the LA1 improvements project, Mr. Lear was responsible for the pipeline, flowline and oil and gas field mapping of an active oil and gas field in Leeville, LA. These were treated as utilities by the DOTD. Mr. Lear was responsible for coordinating with known oil and gas producers, field surveying and mapping of found lines, determining ownerships, field verification of pipeline sizes with assistance of divers, coordination of hot-taps for unknown pipelines in the field, preparing pipeline removal plans, and field inspections/observations. He is currently working with DOTD HQ and District 02 for utility/pipeline relocations for Segment 2A. (SUE Services – 30 months including 6 months QL-A field and office)
10/16 - Present	**I-10: Highland Rd to LA73 Design-Build Project, East Baton Rouge/Ascension Parishes. H.009250** Mr. Lear is the Roadway Design Engineer for this LaDOTD Design Build Project. The project includes widening I-10 for 6.6 miles to 3-lanes in each direction from the Highland Road Interchange to the LA73 Interchange. He was responsible for the roadway geometrics for interstate widening and ramp terminal upgrades. He also managed the utility coordination and locating efforts for the contractor during construction. This included QL-A locates for a 16" water line and 14" duct bank along Highland road, and relocation coordination for various telecommunication lines. (SUE Services – 4 months including 1 month QL-A field and office during construction)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**MILES B. WILLIAMS, PE**		Years of relevant experience with this employer		**32**
Title	**President / Principal-in-Charge**		Years of relevant experience with other employer(s)		**5**
Degree(s) / Years / Specialization			**BS / 1983 / Civil Engineering**		
Active registration number / state / expiration date			**26669 / LA / 9-30-2024**		
Year registered	**1988**	Discipline	**Civil**		
Contract role(s) / brief description of responsibilities			**Principal-in-Charge for this project. He will be responsible for overall project oversight and will serve as a liaison to LA DOTD.**		

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).
2004	**NEPA and Transportation Decision Making Seminar**
12/17 – 07/18	**LA 675 & LA 87 Improvements - Subsurface Utility Engineering, Iberia Parish, LA (H.011781)** Mr. Williams was the project principal for SUE engineering for this 0.8 mile project through an urban section of New Iberia. He was responsible for contract administration, cost and scope proposal review, invoice certification, and project oversight. Sigma performed QL-B and QL-A services for DOTD on this project.
9/18 – 11/18	**Town of Dubach Sidewalks, Lincoln Parish (H.011772)** Mr. Williams was the project principal for SUE engineering for this road transfer project through an urban section of Dubach. He was responsible for contract administration, cost and scope proposal review, invoice certification, and project oversight. Sigma performed QL-B and surveying services for DOTD on this project.
01/19-5/19	**Causeway Blvd - Earhart Expressway Interchange SUE, Jefferson Parish, LA (H.003861.5-1)** Mr. Williams was the project principal for SUE engineering for this urban interchange project in Jefferson Parish. He was responsible for contract administration, cost and scope proposal review, invoice certification, and project oversight. Sigma performed QL-B, QL-A and surveying services for DOTD on this project.
03/13-Present	**I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish (H.003014)** Mr. Williams is the project principal for pavement replacement for 2.7 miles of I-10 and intersection safety improvements near Henderson, LA. The project scope also included two roundabouts at the ramp termini points and intersection improvements to LA352/LA347. He was responsible for graphical grades and superelevation transitions at tie-in points and sequence of construction. Sigma performed SUE QL-C and D services for utilities along LA352, prepared a conflict matrix for the project and worked with District 03 to stake out project features during the utility relocation process.

Miles Williams (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**MILES B. WILLIAMS, PE**	Years of relevant experience with this employer	**32**
Title	**President / Principal-in-Charge**	Years of relevant experience with other employer(s)	**5**

08/19 – 10/19	**Roundabout: US 171 @ Boone St. SUE, Vernon Parish, LA (H.011909)** Mr. Williams was the project principal for SUE engineering for this intersection safety improvement project in Leesville. He was responsible for contract administration, cost and scope proposal review, invoice certification, and project oversight. Sigma performed QL-B, QL-A and surveying services for DOTD on this project.
04/02 – 12/17	**Jones Creek Road Improvements (Tiger Bend - Coursey), East Baton Rouge Parish, LA (700-26-0078)** Mr. Williams was the principal-in-charge for the Jones Creek Road Improvements project for LA DOTD. The project involves widening an existing 2-lane roadway to a 5-lane curb and gutter roadway with subsurface drainage. He is responsible for contracts, geometrics, road design, sequence of construction, signing and coordination of traffic signalization. He was also the project manager during the topographic and boundary survey and R/W map preparation phases. Sigma performed QL-D through A services, designed utility relocation plans, and conducted utility coordination during the construction phase.
12/14 – 04/19	**S. Acadian Thruway (Perkins Rd - LA 73), East Baton Rouge Parish (H.011261)** Mr. Williams was the principal-in-charge for the safety project designed to reduce the number of accidents along the stretch of Acadian Thruway. The project includes replacing the asphalt overlay and improving the intersection design at Claycut Road. Mr. Williams reviewed proposed safety and sidewalk improvements as they were implemented in the project. Sigma performed QL-D and C services for this project.
01/13 - Present	**I-49 South: US 90 & Ambassador Caffery Interchange, Lafayette Parish, (H.002868)** Mr. Williams is the project principal and serves as a roadway design engineer for a new interchange on future I-49 at Ambassador Caffery Parkway in Lafayette, LA. Mr. Williams is responsible for the drainage design which includes 6 cross drains, open ditch and subsurface drainage systems. He also is responsible for coordinating the frontage road extensions and interchange alternative design for future/interim condition implementation. Sigma also coordinated with the SUE team member for locating existing utilities and incorporating them in the project survey.
06/13 - Present	**I-10 East Jct. I-49 to LA 328: Lafayette & St. Martin Parishes, LA. (H.003003)** Miles was the principal in charge for the roadway design for the six laning of 6.7 miles of I-10 in Lafayette, LA. He supervised the preparation of the urban freeway design components of the project including typical sections, plan profiles, geometric details, sequencing and cross sections. The project included median barrier divided interstate with superelevation, bridge replacement and widening, and local road pier protection. Sigma surveyed the utilities located by the SUE engineers and created a conflict matrix for the project.
10/16 - Present	**I-10: Highland to LA 73 Design-Build Project, E. Baton Rouge and Ascension Parish, LA (H.009250)** Miles is serving as the Project Design Manager for all design efforts on this Design-Build project. As such, he is responsible for leading and coordinating all disciplines: road design; bridge design; lighting; geotechnical investigation; and traffic control. He also is the responsible engineer for geometric design, roadway construction and traffic control plans. During construction, he has interacted with the contractor, the designers of various temporary components and LADOTD to ensure that all project requirements are met. Sigma performed utility coordination during construction and QL-A services on utilities at the Highland Road interchange.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**GREGORY P. SEPEDA, PE**		Years of relevant experience with this employer		**25**
Title	**Vice President / Chief Engineer**		Years of relevant experience with other employer(s)		**5**
Degree(s) / Years / Specialization			**BS / 1990 / Civil Engineering** **MS / 2002 / Civil Engineering - Structural**		
Active registration number / state / expiration date			**26669 / LA / 9-30-2024**		
Year registered	**1996**	Discipline	**Civil**		
Contract role(s) / brief description of responsibilities			**He will be responsible for the overall quality control/ quality assurance of Sigma's work efforts.**		

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).
2012 2016 2018	**NEPA and Transportation Decision Making Seminar** **Maintenance and Rehabilitation of Historic Bridges Course** **Traffic Control Supervisor (TCS) course**
12/16 – 02/20	**I-10: Highland to LA 73 Design-Build Project, E. Baton Rouge and Ascension Parish, LA (H.009250)** Mr. Sepeda is serving as the project Design Quality Manager (DQM) for all design efforts on the project. Mr. Sepeda developed a project specific Design Quality Plan as well as QA processes to ensure that the design activities comply with the Contract requirements. As a component of the QA process, he also performed design assessment reviews of every submittal to review for general compliance with the requirements of the Contract, taking into consideration the proposed method of construction, and covered areas such as: design criteria; codes and standards; constructability; and fatigue and durability performance. For critical structural members, Mr. Sepeda also performed an independent analytical design check using separate calculations to verify the structural adequacy and integrity of the members. This analytical check included the following: structural geometry & modeling; material and member properties; loads; and structural boundary conditions.
2013-present	**I-10: East Jct. I-49 to Atchafalaya Floodway Bridge, Lafayette & St. Martin Parishes (H.003003/H.010601/H.003014)** Mr. Sepeda oversaw the development of all sequencing and the Level 4 Transportation Management Plan (TMP) for the I-10 widening project from I-49 to the Atchafalaya Floodway Bridge. This roadway improvement is split into three segments requiring three separate TMPs. The first 2 segments also required an Initial Financial Plan to be developed. Mr. Sepeda drafted this plan which included cost estimates, scheduling, and identifying risk.
2013-2016	**I-10 – LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish, LA (H.003014)** Mr. Sepeda oversaw the development of all sequencing and the Transportation Management Plan (TMP) for the I-10 widening project from Henderson to the I-49 to the Atchafalaya Basin. The project for capacity and pavement replacement of 2.7 miles of Interstate Highway included both barrier and median divided freeway with bridge replacement and widening, local road pier protection, and an interchange with two roundabouts at the ramp termini points and intersection improvements to LA352/LA347. Mr. Sepeda helped develop a construction cost estimate that accounted for scheduling and contractor risk items as well as access, phasing, and maintenance of traffic.

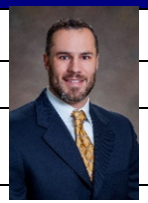
Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**DEREK WHEAT, PLS**		Years of relevant experience with this employer		**7**
Title	**Land Surveyor**		Years of relevant experience with other employer(s)		**4**
Degree(s) / Years / Specialization			**BS / 2009 / Industrial Technology**		
Active registration number / state / expiration date			**5213 / LA / 9-30-2023**		
Year registered	**2019**	Discipline	**Survey**		
Contract role(s) / brief description of responsibilities			**Derek will serve as a project surveyor and in responsible charge of all QL-A and QL-B field work for this contract.**		

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).
2019 2019 2019	**Traffic Control Supervisor (TCS) course** **U.T.A CERTIFIED PROFESSIONAL UTILITY LOCATOR** **Certificate of Completion of the 40 hour Trenchless Technology Center Utility Investigation School**
12/17 – 7/18	**LA 675 & LA 87 Improvements SUE Services, New Iberia, LA (H.011781)** Mr. Wheat served as the QL-B designating and QL-A locates party chief subsurface utility engineering on S. Hopkins Rd in New Iberia. The project included Quality Level A, B, C and D locates for underground utilities owned by 9 companies. Quality Level B locates were conducted using multiple geophysical scanning methods including PCL and GPR, and 40 QL-A test holes were performed by Sigma. Final SUE plans were prepared in accordance with CI/ASCE Standard 38-02 and DOTD standards. He was responsible for QL-B locates, shot count sheets, QL-A test hole data sheets, SUE plan preparation, coordinating with utility companies, unknown line research and implementing traffic control in the field.
9/18 – 11/18	**Town of Dubach Sidewalks SUE Services, Lincoln Parish (H.011772)** Mr. Wheat served as a party chief for topographic surveying and QL-D thru QL-B SUE designations along 3 streets in the Town of Dubach. The survey included supplemental topography for utility, building lines, awnings, drainage features, sidewalks and misc features. The survey was performed using DOTD codes and linework automation. He also was responsible for on-site traffic control. Mr. Wheat used a Pipe and Cable Locator (PCL) and Ground Penetrating Radar (GPR) to designate the utilities.
04/18 - 5/19	**Causeway Blvd - Earhart Expressway Interchange SUE Services, Jefferson Parish, LA (H.003861.5-1)** Mr. Wheat served as the QL-B designator and QL-A lead for SUE services at the Causeway/ Earhart interchange project. The designation, survey, and plans were performed to the appropriate quality level as outlined by CI/ASCE Standard 38-02 and DOTD standards. To provide accurate information Mr. Wheat met with the parish and private facility owners to acquire maps and knowledge of the whereabouts of the possible facilities in the work area. He then used a Pipe and Cable Locator (PCL) and Ground Penetrating Radar (GPR) to designate these utilities. Mr. Wheat coordinated with the project engineers to ensure the QL-A test holes were in proper location with design conflict points. Mr. Wheat provided the QL-B shot count sheets, QL-A test hole datasheets, and assisted with the SUE plans provided to the client.

Derek Wheat (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**DEREK WHEAT, PLS**	Years of relevant experience with this employer	**7**
Title	**Land Surveyor**	Years of relevant experience with other employer(s)	**4**

08/19 – 10/19	**Roundabout: US 171 @ Boone St. SUE, Vernon Parish, LA (H.011909)** Mr. Wheat served as the QL-B designator and professional land surveyor of record for the US 171 @ Boone St. Roundabout in Leesville, LA. He coordinated with the facility owners to acquire maps and knowledge of the facilities in the area. He then performed QL-B locates using Pipe and Cable Locators (PCL) as well as Ground Penetrating Radar (GPR) to designate utilities which established the locations for QL-A test holes. Mr. Wheat recovered the project survey control and utilized this control to survey the utilities while designating. He provided DOTD with QL-B Shot count sheets. He was responsible for SUE Plans QA/QC and preparation of the QL-B shot count sheets and Test Hole Data Sheets.
2019-2020	**Hooper Road (LA 408) Blackwater Bayou – Joor Road, East Baton Rouge Parish (H.002316)** The project involved topographic surveying and engineering design for the upgrade of the existing 2-lane roadway with open ditches to a 4-lane boulevard with subsurface drainage. Mr. Wheat is the surveyor of record for the topographic survey of the 1.75-mile suburban arterial roadway. He was responsible for performing and managing the GPS control, digital leveling for vertical control, RTK survey, robotic total station survey, and scanning of the project corridor. QL-D maps provided by utility companies that were not marked in the field were electronically drawn and designated by QL in the project survey. The survey was conducted using DOTD surveying standards and CadConform deliverables.
2015-2018	**I-10: LA 328 to LA 347, St. Martin Parish (H.010601)** Mr. Wheat served as a party chief for topographic surveying of existing features and utilities for pavement replacement of 6.8 miles of I-10 between Breaux Bridge and Henderson, LA. He was responsible for data collection, utility coordination with the SUE subconsultant, data processing and mapping. The survey was performed using DOTD codes and linework automation. Mr. Wheat also coordinated with utility companies for QL-C and QL-B locates for utilities along Melvin Dupuis Road, which is being removed and replaced with a structure over the interstate. Mr. Wheat also performed the supplemental topographic surveying along Melvin Dupuis Rd.
2013-2019	**I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish (H.003014)** Mr. Wheat served as a party chief for topographic surveying of existing features and utilities for pavement replacement of 2.7 miles of I-10 near Henderson, LA. He was responsible for data collection, utility coordination with the SUE subconsultant, data processing and mapping. He also performed the topographic survey along LA347 and the LA352 outfall canal. The survey was performed using DOTD codes and linework automation.
09/19 – 3/20	**I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA (H.003370)** Mr. Wheat performed the QL-B designation and QL-A locates for multiple telecom lines and an abandoned pipeline for this design-build project. The QL-B designations were performed using PCL and GPR methods. Eighteen (18) QL-A test holes were performed by Sigma under Mr. Wheat's field supervision. He was responsible for preparing shot count sheets, test hole data sheets, test hole photographs and SUE plans for the contractor during construction.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**JOSHUA RENARD, PE**		Years of relevant experience with this employer		**16**
Title	**Project Manager**		Years of relevant experience with other employer(s)		**0**
Degree(s) / Years / Specialization			**BS / 2006 / Civil Engineering**		
Active registration number / state / expiration date			**36015 / LA / 3-31-23**		
Year registered	**2010**	Discipline	**Civil**		
Contract role(s) / brief description of responsibilities			**Mr. Renard will serve as a project engineer for utility coordination, design, traffic control, SUE mapping and plan preparation.**		

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).
2016 2016	**NEPA and Transportation Decision Making Seminar** **Traffic Control Supervisor (TCS) course**
2019 - Present	**MoveBR Program- Lead Utility Coordinator, EBR Parish, LA** Mr. Renard serves as the main point of contact for utilities on the MoveBR transportation, road, and traffic program. He is leading the effort to create the Utility Coordination Process and Design Guidelines for Designers- Utility Section. He will serve in this role during both the design and construction phase for the program. He will also utilize SUE where appropriate to gain pertinent location information for design efforts. He will also work to ensure that relocations are successful and will resolve utility conflicts encountered during construction.
08/19 – 10/19	**Roundabout: US 171 @ Boone St. SUE, Vernon Parish, LA (H.011909)** Mr. Renard served as the project manager for this DOTD project, which included Level A through D underground utility location at the intersection of Boone Street and US 171 in Leesville, LA. Under his guidance, Sigma located utilities through Quality Levels A-D. His responsibilities included coordination with utility companies and local government representatives to obtain as-built drawings, meeting with DOTD representatives, design engineers, surveyors and subcontractors to coordinate the location work, providing valuable utility location information to the design team. He also is responsible for traffic control plan development, Level A field investigations, SUE plan development, and utility conflict matrix preparation.
04/19 – 3/20	**Subsurface Utility Engineering I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA (H.003370)** Mr. Renard coordinated with multiple utilities affected by this project. He was able to obtain detailed information on the size, type and location of the utilities in conflict or potential conflict with construction activities. These included abandoned pipelines, active fiber optic lines, buried cables with unknown ownership, and multiple utilities within KCS Railroad right of way. Mr. Renard then lead the SUE team in obtaining level A location information for these utilities.

Joshua Renard (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**JOSHUA RENARD, PE**	Years of relevant experience with this employer	**16**
Title	**Project Manager**	Years of relevant experience with other employer(s)	**0**

07/19 – 09/19	**Subsurface Utility Engineering Zachary Public Project, East Baton Rouge Parish, LA (2019)** Mr. Renard served as the project manager for this EBR City Parish SUE project, which included Level A through D underground utility location at two sites near the intersection of Old Scenic Hwy and LA 64 in Zachary, LA. Mr. Renard's responsibilities included coordination with utility companies and local government representatives to obtain as-built drawings and have the lines marked. He also coordinated the surveying and Level A test hole work, QA/QC of the test hole data sheets, assembled photographs, and prepared the final test hole summary sheet deliverable.
2015 - 2017	**Baton Rouge Sanitary Sewer Overflow Program- Utility Coordination, EBR Parish, LA** For over 2 years Mr. Renard served as the main point of contact for the sewer program with all utility companies during the design and construction phase for all projects. He worked directly with contractors, designers, and the utility owners to have poles moved or braced, underground lines relocated, and transformers and cable boxes relocated. Mr. Renard managed a test hole contract to obtain vital utility location information for design/re-design purposes. He also worked with Entergy and DEMCO to have numerous sewer pump stations energized.
12/17 – 7/18	**LA 675 & LA 87 Improvements, SUE Services New Iberia, LA (H.011781)** Mr. Renard served as the project manager for this DOTD project, which included Level A through D underground utility location work as well as video inspection of sewer mainlines and laterals along a one mile section of Hopkins Street in New Iberia, LA. Under his guidance Sigma located utilities through Quality Level A-D. His responsibilities included coordination with utility companies and local government representatives to obtain as-built drawings, meeting with DOTD representatives, design engineers, surveyors and subcontractors to coordinate the location work, providing valuable utility location information to the design team.
04/18 – 05/19	**Causeway Blvd - Earhart Expressway Interchange SUE Services, Jefferson Parish, LA (H.003861.5-1)** Mr. Renard managed this utility location project for DOTD. The primary goal of this project was to locate sewer, water, and fiber lines to provide DOTD's design team with sufficient information to adjust their design to miss the utilities or have the utilities relocated. Sigma located utilities through all Quality Levels. He coordinated with utility owners and Sigma's locating crew to identify, locate, and mark the utilities, as well as coordinated with Sigma's survey team to have the lines surveyed. Based on the location crew's fieldwork he helped develop a final plan set as well as a Utility Owner Contact List and a Utility Conflict Matrix for delivery to DOTD.
09/18 – 11/18	**Town of Dubach Sidewalks SUE Services , Lincoln Parish, LA (H.011772)** Mr. Renard serves as the utility coordinator for this DOTD project, which includes Level B through D underground utility location work along several downtown blocks of the small town of Dubach, LA. His responsibilities includes coordination with utility companies and local government representatives to obtain as-built drawings. He also met with DOTD representatives and surveyors to coordinate the location work, providing valuable utility location and surveying information to DOTD.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**HOLLY S. MORGAN, PE**		Years of relevant experience with this employer		**14**
Title	**Project Manager**		Years of relevant experience with other employer(s)		**0**
Degree(s) / Years / Specialization			**BS / 2007 / Civil Engineering**		
Active registration number / state / expiration date			**37247 / LA / 9-30-2024**		
Year registered	**2012**	Discipline	**Civil**		
Contract role(s) / brief description of responsibilities			**Holly will serve as a project engineer for utility design and inspection services.**		

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).
01/08 - Present	Ms. Morgan has experience as a program manager responsible for planning projects, management of other team members, maintaining schedules and budgets, preparing project specifications and bid packages, progress reporting to client, coordinating with engineering consultants and contractors, and general client consultation. She also has experience as a project engineer responsible for the engineering and design of drainage, wastewater, and transportation related projects. These projects have included site developments, dam improvements, sewer rehabilitation projects, and transportation projects for LA DOTD, EBR DPW and other clients. **Sanitary Sewer Overflow Reduction Program, East Baton Rouge Parish, LA** Sigma is the lead partner with Jacobs (formerly CH2M HILL) as the Program Management firm for the City-Parish of East Baton Rouge. The Program Managers are responsible for developing, planning, administering (design and construction) and delivering a $1.6 billion program consisting of 115 related individual projects to meet the EPA mandated consent decree to reduce SSO's. • **Sanitary Sewer Utility Rehabilitation Project Management:** Ms. Morgan currently serves as Rehabilitation Project Manager for the SSO Program managing the $300 million rehabilitation portion of the Program. This includes planning projects, management of other team members, maintaining schedules and budgets, preparing project specifications and bid packages, progress reporting to client, coordinating with engineering consultants and contractors, and general consultation to the client. In addition, Holly manages measurement and payment audits on all rehabilitation projects and manages, reviews, and processes all contract change orders for the entire SSO Program. • **Sanitary Sewer Inspection, Rehab Plans, Construction Oversight:** In addition to her project and team member management duties, Ms. Morgan provided QA/QC for inspection data and project deliverables. She assisted in developing design and quality related policies and procedures for the Rehabilitation Project portion of the overall Program. She provided QA and constructability review of the plans and bid documents. During construction, she was instrumental in resolving construction conflicts and issues, ensuring these experiences, resolutions, and lessons learned were incorporated as potential improvements in future designs and plans. Ms. Morgan was responsible for reviewing pay applications for proper payment and measurement in accordance with contract specifications.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**HOLLY S. MORGAN, PE**	Years of relevant experience with this employer	**14**
Title	**Project Manager**	Years of relevant experience with other employer(s)	**0**

- **Sanitary Sewer Construction Management / Cost Control:** Ms. Morgan also currently serves as Cost Control Manager for the SSO Program reviewing all potential Program change orders for validity and completeness and participating in claims negotiations with contractors and consultants. The lessons learned through this process are used during the design of future projects to identify potential areas of risk. In addition, she developed and maintained a spreadsheet tool to track the status of all potential and actual change orders to aid in timely payment processing. This data was also used to help identify areas of risk and forecast potential change order costs for future construction projects. Ms. Morgan would present the spreadsheet tool to Program and City-Parish personal on a quarterly basis to aid in the monitoring and management of the overall Program budget.

Sanitary Sewer Infrastructure Asset Management: Prior to Holly's current role on the Program, she analyzed smoke testing data, CCTV video inspections, and sonar profiling of sanitary sewer collection mainlines, sanitary sewer service laterals, and sewer manholes. With the analyzed data, she would prepare an I/I reduction plan which included repairs and rehabilitation to the basin sewer system. The types of repairs and rehabilitation methods recommended include point repairs, complete remove and replace, CIPP/Lining of service lateral connections (tophats), pipe-bursting, manhole rehab and replacement, and replacement of service laterals up to property lines. Ms. Morgan managed all data requested and received by the City-Parish Annual Physical Inspection Contractor. This included coordinating with the Contractor ensuring that the correct data was received, performed QA on all received data, coordinated field inspections for quality control, and attended monthly progress meetings with the Contractor. She trained team members to also analyze this data and managed team members in the characterization of the data. Ms. Morgan was tasked with reviewing conflicts that are identified in the field during construction and developed alternative solutions.

At this time, Ms. Morgan is managing multiple projects funded through the Louisiana Clean Water State Revolving Fund (CWSRF). This includes preparing bid packages with all required guidelines and federal forms including Davis-Bacon and American Iron & Steel requirements, contractor payroll reports, progress reporting to LDEQ, and insuring compliance with CWSRF project guidelines during construction.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**ALEX D. FARR, PE**		Years of relevant experience with this employer		**8**
Title	**Project Engineer**		Years of relevant experience with other employer(s)		**2**
Degree(s) / Years / Specialization			**BS / 2011 / Civil Engineering**		
Active registration number / state / expiration date			**40426 / LA / 9-30-2024**		
Year registered	**2016**	Discipline	**Civil**		
Contract role(s) / brief description of responsibilities			**Alex will serve as a project engineer for traffic control plans, conflict matrices and utility design.**		

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).
2011 2012 2015 2018	**Highway Safety Manual Workshop** **Interactive Highway Safety Design Model (IHSDM) Course** **Traffic Control Supervisor (TCS) course** **DOTD Traffic Engineering and Analysis Process & Report Modules 1, 2, & 3**
01/14 – 07/16	**LA342: Roundabout @ LA 724, Lafayette Parish, LA (H.002163)** Mr. Farr was responsible for the permanent signing and striping design plans of this project. Mr. Farr also assisted in the design of the sequence of construction, determining pay items and computing quantities. This project was a 4-legged single lane roundabout.
01/14 – 12/16	**LA347: Roundabout @ Melancon Road, St. Martin Parish, LA (H.009456)** Mr. Farr was responsible for the permanent signing and striping design, sequence of construction development, Level 2 TMP, and quantity computation for a 4-legged single lane roundabout near Breaux Bridge, LA.
01/14 - Present	**I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish, LA (H.003014)** Mr. Farr was responsible for producing the Level 4 Transportation Management Plan (TMP) for the I-10 widening project from LA 347 to the Atchafalaya Floodway Bridge. The TMP pertained to alternate route analysis, public information, stakeholder involvement, traffic and safety data, temporary traffic control, and work zone impact management strategies. Mr. Farr was also responsible for the suggested sequence of construction, temporary signing, quantity computations and pay items using DOTD 2016 specifications, and roadway plan preparation.

Alex Farr (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**ALEX D. FARR, PE**	Years of relevant experience with this employer	**8**
Title	**Project Engineer**	Years of relevant experience with other employer(s)	**2**

01/17 - Present	**I-49 South: US 90 & Ambassador Caffery Interchange, Lafayette Parish, LA (H.002868)** Mr. Farr was responsible for the storm sewer drainage design along the northbound and southbound service roads for this project. Mr. Farr was also responsible for preparing a traffic signal plan including a traffic signal warrant analysis as well as an operational analysis concerning the two new proposed signals at the NB and SB service roads and Ambassador Caffery.
10/16 - Present	**I-10: Highland to LA 73 Design-Build Project, E. Baton Rouge and Ascension Parish, LA (H.009250)** Mr. Farr was responsible for performing the Transportation Management Plan (TMP) as well as the Safety Analysis for this project to determine what safety concerns correlated to the construction of this segment. Mr. Farr was also responsible for the suggested sequence of construction, guardrail design, and the quantity estimate for this project.
04/19 - Present	**I-220/I-20 Interchange Improvements and BAFB Access, Bossier Parish, LA (H.003370)** Mr. Farr was responsible for performing the design of the ramp's profiles, including the super elevation calculations as well as the graphical grades. Mr. Farr was also responsible for the permanent striping plans, clearing and grubbing plans, and the quantity estimate for this project.
12/14 – 04/19	**Acadian Thruway Safety Improvements (H.011261)** Mr. Farr was responsible for project coordination pertaining to quantities, sequence of construction, and the striping plan for this mill and overlay project. Mr. Farr also was responsible for utility location along this segment as well as geometric alternates for the intersection at Claycut Rd.

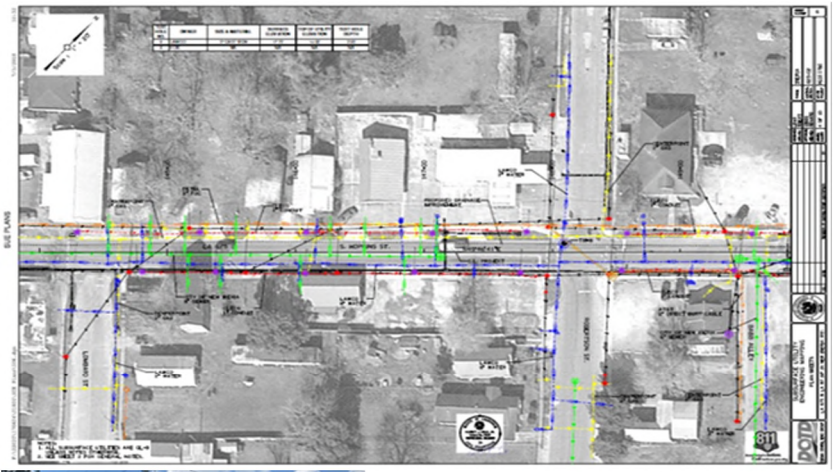
17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Other (SUE), Survey**	
Project name	**Subsurface Utility Engineering – LA 675 & 87 Improvements**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**H.011781**	Owner's name	**LA DOTD**		
Project location	**Iberia Parish**		Owner's Project Manager	**JoAnn Kurts, PE**	
Owner's address, phone, email	**P.O. Box 94245, Baton Rouge, LA 70806 | (225) 379-1427 | JoAnn.Kurts@la.gov**				
Services commenced by this firm (mm/yy)	**12/2017**	Total consultant contract cost ($1,000's)		**$196**	
Services completed by this firm (mm/yy)	**07/2018**	Cost of consultant services provided by this firm ($1,000's)		**$196**	

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

Sigma was the lead firm for this $196,000 Subsurface Engineering Project (SUE) in Iberia Parish. The project consists of providing quality level A through D utility locates on LA 675 (S. Hopkins Street) for 0.8 miles, extending from West Dale to Bayou Teche. The locates were provided to DOTD for use in the plan development for drainage improvements and resurfacing project on Hopkins Street. The 0.8 mile urban roadway included constricted right of way with multiple utilities in the roadway and under sidewalks. Quality Level B locates were conducted using multiple geophysical scanning methods such as electromagnetic PCL and GPR, and 40 QL-A test holes were performed by Sigma. Final SUE plans were prepared in accordance with CI/ASCE Standard 38-02 and DOTD standards.

During this project, we coordinated with applicable utility companies and performed all quality level A through D utility identification, locates, and markings, including service laterals within the DOTD right of way. Sigma also maintained traffic control throughout the project site during field locating and designating services. We utilized a specialty sub-consultant for the CCTV of sewer trunk lines and laterals. Sigma coordinated with the project's surveying consultant to have all markings surveyed. Sigma's final deliverables included the SUE Plan Set, Utility Contact List, Test Hole Data Form, Utility Conflict Matrix, and Shot Count Sheets.



Sigma Firm Members Involved:
Miles Williams
Robbie Lear
Joshua Renard
Derek Wheat
Jenee Gibbs

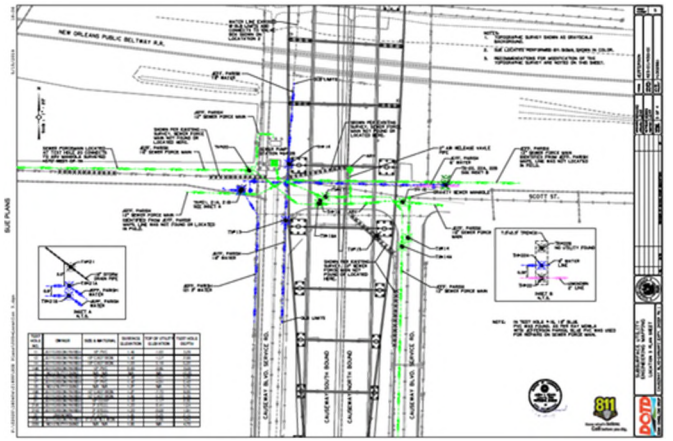
17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Other (SUE), Survey**	
Project name	**Causeway Blvd at Earhart Expressway – SUE Services**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**H.002861**	Owner's name	**LA DOTD**		
Project location	**Jefferson Parish**		Owner's Project Manager	**Jacques Cancienne, EI**	
Owner's address, phone, email	**P.O. Box 94245, Baton Rouge, LA 70806 | (225) 379-1442 | Jacques.Cancienne@la.gov**				
Services commenced by this firm (mm/yy)	**04/18**	Total consultant contract cost ($1,000's)		**$90**	
Services completed by this firm (mm/yy)	**05/19**	Cost of consultant services provided by this firm ($1,000's)		**$90**	

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

Sigma is the Subsurface Utility Engineering (SUE) Services consultant on this roadway project in Jefferson Parish. The project includes a new complex grade separated interchange on Causeway Blvd at Earhart Expressway. During the design phase, LADOTD's engineering consultants identified four areas of concern for the proposed bridge structures. Sigma was tasked with providing Level A and B locates on 14-inch through 60-inch water lines and various diameter sewer force mains.

Sigma provided extensive coordination with the utility companies and Jefferson Parish DPW to obtain information on their lines. We then performed Quality Level B and Level A locates. 24 test holes were performed both in the street and in natural ground. QL-B designations were performed using electromagnetic PCLs and GPR. We completed the surveying for all Level A and B work. As some of this effort was within the roadway, Sigma obtained the required local and state lane closure permits and maintained traffic control safely and with no issues during this project. We prepared SUE plans identifying the utility locations, as well as depths, and a utility conflict matrix to LA DOTD.



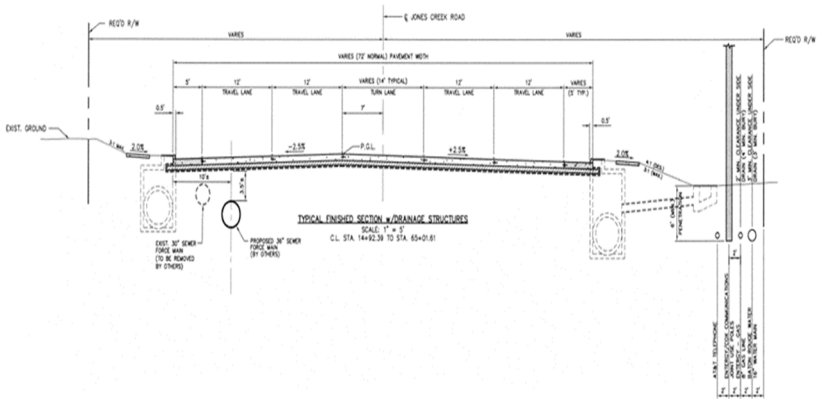
Sigma Firm Members Involved:
Miles Williams, Robbie Lear,
Joshua Renard, Derek Wheat
Jenee Gibbs, Jamal Yarbrough

17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Other (SUE), Survey**	
Project name	**Jones Creek Road Improvements - Tiger Bend to Coursey**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**H.007137**	Owner's name	**East Baton Rouge Parish DPW / LA DOTD**		
Project location	**East Baton Rouge Parish**		Owner's Project Manager	**Tom Stephens, PE Laura Riggs, PE**	
Owner's address, phone, email	**222 Saint Louis St., 8th Floor, Baton Rouge, LA 70802, TStephens@brgov.com P.O. Box 94245, Baton Rouge, LA 70806 | (225) 379-1525 | Laura.Riggs@la.gov**				
Services commenced by this firm (mm/yy)	**04/02**	Total consultant contract cost ($1,000's)		**$798**	
Services completed by this firm (mm/yy)	**11/18**	Cost of consultant services provided by this firm ($1,000's)		**$798**	

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

Sigma was the prime consultant for this urban systems road improvement in Baton Rouge. Jones Creek Rd was widened from a 2-lane roadway with open ditch drainage to a 5-lane roadway with subsurface drainage. Sigma was responsible for the topographic and control survey, right of way maps, EA line and grade, roadway design, clearing and grubbing plans, utility relocation plans, and construction support. Due to the congestion of utilities in the project corridor, Sigma performed extensive QL-D and QL-C services during the topographic survey phase. This included acquiring as-built maps, meeting with each utility owner face to face and in the field for utility identification, and back and forth communications to confirm the surveyed utility information. The SUE Services performed by Sigma during design identified a major 16-duct bank that required QL-A locates. This utility was identified as a project constraint and design was modified to avoid conflicts with this utility. A space allocation plan was designed by Sigma for relocation purposes. Relocation plans were developed by Sigma to assist utilities with their relocation efforts. During construction, Sigma coordinated between AT&T, the EBR City Parish and the contractor to ensure adequate markings were performed in the field to avoid utility strikes and service outages to the utility customers. Field engineering was required when infrastructure unknown to the utility company was located by the contractor.



Sigma Firm Members Involved

Miles Williams, Robbie Lear, Josh Renard, Greg Sepeda

17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Road / Bridge / Other (SUE)**	
Project name	**LA 1 Improvements, Fourchon – Golden Meadow Route LA 1**		Firm responsibility (prime or sub?)	**Sub & Prime**	
Project number	**H.008145 & H.004526**	Owner's name	**LA DOTD (multiple contracts)**		
Project location	**Lafourche Parish**		Owner's Project Manager	**Tim Nickel, PE & Anna Hanks, PE**	
Owner's address, phone, email	**P.O. Box 94245, Baton Rouge, LA 70806 | (225) 379-1110 | Tim.Nickel@la.gov**				
Services commenced by this firm (mm/yy)	**03/03**	Total consultant contract cost ($1,000's)		**$5,042**	
Services completed by this firm (mm/yy)	**Present**	Cost of consultant services provided by this firm ($1,000's)		**$5,042**	

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

Sigma served as the task manager for the mapping of existing pipelines from Fourchon to Golden Meadow. The project included a new bridge on new alignment through the Leeville Oil and Gas Field which was discovered in 1931. Hundreds of flow lines, feeder lines, and transmission lines run throughout the field. Also located within the project limits were underground and submerged water electric lines; and aerial electrical transmission and distribution lines. Sigma was tasked with mapping the pipelines and utilities, determining the status and contents of the lines, ownerships, and developing relocation and/or removal plans for lines impacted by the project. This effort was conducted for Phase 1 in 2003-2005 and for Phase 2 in 2009-2012. Sigma is also currently working with District 02 and DOTD HQ to coordinate oil and gas pipelines and well removal and relocation for Phase 2A construction.

Sigma initiated a QL-D investigation including records research, interviewing landowners and oil field operators, and contacting known pipeline owners. The same was done for the water and electric lines. QL-B magnetometer surveys and QL-A test holes/hot taps were conducted by team members to develop a finite map of the pipelines and wells. Additional interviews with pipeline owners were conducted to confirm ownerships and status of the pipelines. Sigma was responsible for pre-relocation/acquisition utility coordination in this task.

After exhaustive research, lines that remained in unknown status were located using QL-A methods. This included divers in the marsh and canals. Lines whose activity and contents were unknown were hot tapped. All lines that were tapped were found to be inactive. A final map of all lines and tables showing locations, ownership, status, size, and removal limits were prepared by Sigma. These maps were used by DOTD as construction/demolition plans for removal and relocation of the pipelines.

Sigma also coordinated the electrical service requirements for the tolling and lighting. Sigma designed the roadway lighting for the bridge intersections, new step-down transformers and switchracks for the lighting and toll facility, and navigational lighting.

Sigma Firm Members Involved

Miles Williams, Robbie Lear, Josh Renard, Lance Amedee

Pipeline Mapping / SUE Services

- Existing pipeline mapping
- SUE Quality Level A-D Services
- Records Research, Collection & Review
- Coordination with Pipeline Owners
- Pipeline Removal Plans
- Pipeline Relocation Plans

17. **Firm Experience**

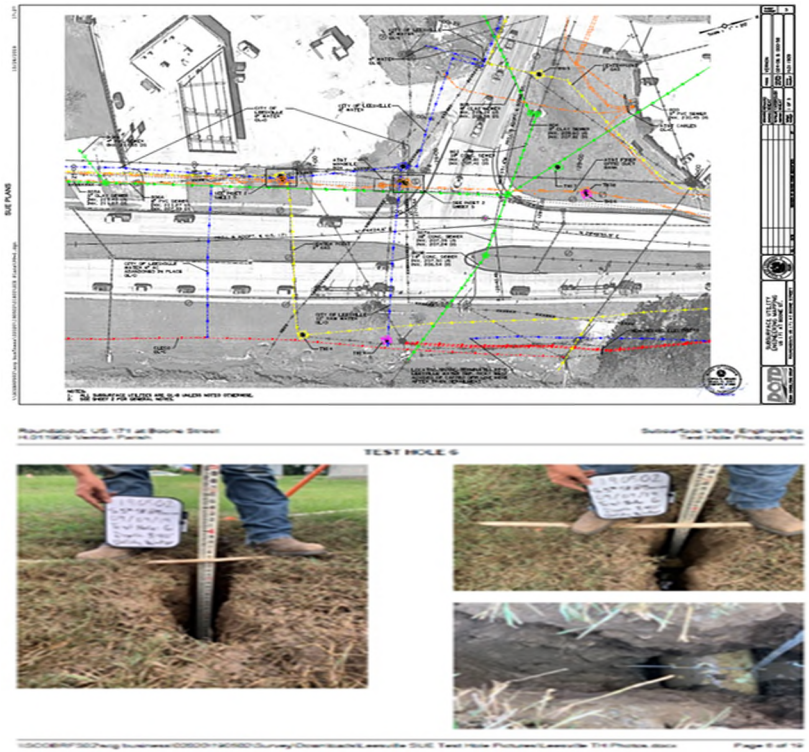
Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Other (SUE)**	
Project name	**Roundabout: US 171 @ Boone St. – SUE Services**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**H.011909**	Owner's name	**LA DOTD**		
Project location	**Vernon Parish**		Owner's Project Manager	**Jacques Cancienne, EI**	
Owner's address, phone, email	**P.O. Box 94245, Baton Rouge, LA 70806 | (225) 379-1442 | Jacques.Cancienne@la.gov**				
Services commenced by this firm (mm/yy)	**08/19**	Total consultant contract cost ($1,000's)		**$120**	
Services completed by this firm (mm/yy)	**10/19**	Cost of consultant services provided by this firm ($1,000's)		**$120**	

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

Sigma provided Subsurface Utility Engineering (SUE) Services on this roadway project in Leesville, LA. The project includes converting a 3-way intersection to a roundabout. During the design phase, DOTD's designers identified areas of concern and potential conflict points for the proposed drainage improvements. Sigma was tasked with providing Level A and B locates on a variety of utilities owned by seven different utility companies.

Sigma coordinated with the utility companies, and in several cases met onsite and at their offices to obtain the size, material, location, and depth of their lines. We then performed over six thousand linear feet of Level B locates on the lines in question using GPR and electromagnetic PCLs. Sigma coordinated with DOTD to identify their preferred test hole sites prior to completing the 24 Level A test holes. We completed the surveying for all Level A and B work. As some of this effort was within the roadway, Sigma obtained the required lane closure permits and maintained traffic control with no incidents through the intersection and adjacent streets during this project. We provided a set of SUE plans identifying the utility locations, as well as depths, to DOTD. Additional deliverables included a conflict matrix, test hole photographs, shot count sheets, and survey data files.

Sigma Firm Members Involved
Miles Williams, Robbie Lear, Josh Renard, Derek Wheat, Jenee Gibbs, Jamal Yarborough



18. Approach and Methodology:

Sigma has served as the prime consultant on multiple retainer contracts for DOTD and understand how task order based contracts work. We have held a SUE Services Retainer Contract with DOTD since 2017 and have performed all the services identified in the advertisement scope of work. We have also served on several large project teams where communication, identifying team responsibilities and deadlines, and data sharing were paramount to the success of the project. We have a past working relationship with each of our subconsultants with successful partnering and positive project results.

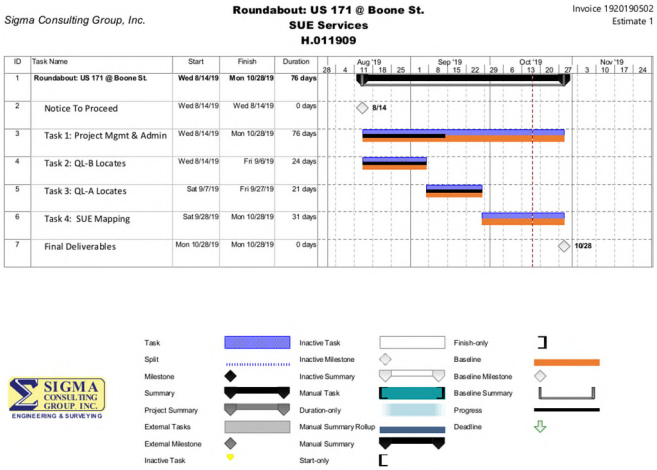
Specific Software and/or Equipment Desired

Sigma owns the following software and equipment which will satisfy the equipment needs for this contract:

- **Ground-Penetrating Radar:** Leica DS2000 4-wheeled radar utility detector with CT2000G controller. Dual antenna 250MHz and 700 MHz frequencies.
- **Telecom Toner and Wand:** Radiodetection RD8100 has the capability to add specific frequencies to dial into a telecom utility's specific locating frequency.
- **Electromagnetic Pipe and Cable Locating Equipment capable of both passive and active means of detection:** Radiodetection RD8100 has both passive and active means for detection with multiple frequencies and power filters to eliminate noise and interference.
- **Vacuum Truck**: Sigma has a contractual agreement with Badger Daylighting Corp. (vendor) to provide a mechanically sound vacuum truck throughout the life of this contract.
- **Microstation / InRoads / CadConform / ProjectWise**: Sigma has multiple licenses of Microstation, InRoads, CadConform and ProjectWise access to DOTD's Gateway. Our staff has prepared deliverables using this software for DOTD on SUE projects.

Pre-Task Order Scope and Task Development

At the onset of a potential task order, Sigma will work with the project manager to develop the contract scope and items necessary to deliver the project. We will work with the project manager to develop the blank manhour spreadsheet, sheet count, and conceptual delivery schedule. This early coordination ensures that both DOTD and Sigma are on the same page with respect to project goals, deliverables, and expectations. Once these items are established, independent manhour estimates will be completed for negotiated fee projects.



Kick-Off Meeting / Pre-Design Planning Conference & Work Planning

Once a Notice to Proceed is issued, Sigma and the DOTD will hold a project kickoff meeting, preferably in person. The appropriate DOTD team members and Sigma will walk through the project scope, discuss the items listed in the ***Reconnaissance Evaluation / Pre-Design Planning Conference Form***, determine the dates for milestone deliverables, and estimate DOTD review periods at each milestone. The project design criteria, Stage 0 identified environmental constraints, and DOTD project concerns will also be discussed and documented. Any DOTD provided services such as as-builts, pavement design, project design files, environmental permitting needs, etc. will be requested at this meeting. All project points of contact with contact information will be collected and minutes of the meeting will be distributed to all pertinent personnel.

Topographic Survey

Sigma will perform the surveying services needed to collect SUE data marked in the field. We will dedicate the resources to quickly mobilize and collect data necessary for each task order. The team members responsible for the topo survey will also be responsible for the SUE designation and location services. DOTD Location & Survey standards will be followed for all surveying services. The use of scanning technology will be incorporated where practical to avoid any traffic disruptions and for the safety of our surveying personnel. Final deliverables will be in accordance with DOTD Location and Survey requirements, including Microstation and Inroads Survey automation for mapping and terrain modeling.

- ✓ **Work Zone** - All staff performing pre-construction services such as design, survey, and utility work have been trained in work zone safety. Whenever work shall affect the movement of traffic or traffic safety, we shall provide traffic control in conformance with the MUTCD and under the direction of a Traffic Control Supervisor (TCS). Prior to contract execution, Sigma will ensure that all appropriate personnel meet the work zone training requirements.

Name	Role	TCS/TCT	Flagger
Robert Lear	Design/Field Eng.	✓	
Alex Farr	Design/Field Eng.	✓	
Joshua Renard	Design/Field Eng.	✓	
Derek Wheat	PLS Field	✓	
Trey King	Field Crew		✓
Milan Lear	Field Crew		✓

All utilities within the project limits, above and below ground, will be located. Establishment of utility ownership shall also be included. Initial utility locates will be to Quality Level D or C services as defined by CI/ASCE Standard 38-22. Sigma will coordinate with the utility companies to perform Quality Levels B and A services as part of the Subsurface Utility Engineering scope of services. All paint marks, flagging, markings will be surveyed using topo survey grade accuracy. Shot count sheets, test hole data sheets, photographs, line coding, and point attribute data will be collected in the field.

Subsurface Utility Engineering (SUE)

Sigma's approach and methodology for successfully performing SUE Services is centered on communication. Once a clear scope of work and definition of the project goals are established, a work plan will be developed by the Sigma Project Manager. This work plan includes resource assignments and schedules that lead to a successful project delivery. For a standard SUE task, this plan begins with determining and contacting the existing utility owners in the project corridor. This information is gathered through 811 locate tickets which are logged for documentation and coordinating with the District Utility Specialist (DUS) for copies of utility permits within the project limits.

Utility coordination meetings are then set up to directly communicate with the utility companies. This can be done either in person or via virtual meetings. We will review any existing survey or mapping data collected by DOTD and request copies of as-builts or GIS data maintained by the utility company of their infrastructure. Any information provided by the utility owner and/or DUS is then compared to the project survey data (assuming a survey has already been performed). Any correlation between the survey and utility data is logged both electronically and on plan sheets for continuous communication with all stakeholders.

UTILITY CONFLICT MATRIX

Project # **H.002861** | Description: **Causway Blvd- Earhart Expressway Interchange**
Status: **SUE Plans** | Plans Date: **May, 2019**
Reviewer:
Date: **5/15/2019**

Utility conflicts were identified based on the 90% Final Plans provided to Sigma by BKI. This matrix should be updated during the final design process to assist with identifying utility conflicts and potential conflict resolutions.

This matrix was originally created by Sigma to assist the DOTD, Design Consultant, & Utility Companies in identifying conflicts between the Utility Company's facilities and proposed roadway construction. Sigma accepts no liability for conflicts overlooked for this report. Additional conflicts may be encountered. The preliminary conflicts identified in this matrix do not relieve the Utility Company/Owner from the responsibility to identify all conflicts with their facilities.

Conflict #	Utility Agency/ Owner (UAO)	Plan Sheet #	Alignment	Station (From C/L Project)	TO	Station (From C/L Project)	Offset (ft)	Side	Facility Description (Material, Type, Number, Size)	Conflict Description (Possible or Actual) & Notes	Test Hole Recommended (Y/N)	Test Hole #	Depth @ Test Hole	Recommended Conflict Resolution
1	Jeff. Parish Sewer Department	5	Jimco Rd	39+03		N/A	5	LT	10" Sewer Gravity Main	Drainage Structure #926 crosses Sewer Main	N	N/A	N/A	Review inverts and pipe sizes
2/13	AT&T Transmission	6	Earhart	826+37		N/A	NIA	LT	Fiber Optic	Manhole #752 in conflict with Fiber Optic Line	Y			BKI plans recommend relocation
3	AT&T Transmission	6	BL Ramp NW	60+89		N/A	20	RT	Fiber Optic	Modification of existing manhole #623 is near Fiber Optic Line	Y			BKI plans recommend relocation
4	AT&T Transmission	6,11	Earhart	827+78		N/A	65	RT	Fiber Optic	Manhole #212 is near and Drainage Pipe #211 is in conflict with Fiber Optic Line	Y			BKI plans recommend relocation
	Zayo Confirmed. Also													Per discussion with Henry Morris of Zayo Group on 4/9/19, this is

Updated maps/plans are then shared with DOTD to review and determine if any previously unknown utilities exist that may conflict with the project design. At that time, any scope adjustments will be discussed and documented accordingly. Quality Level B designates will then be performed in the field using ASCE 38-22 methodologies to accurately locate subsurface utilities. All paint markings and flagging will be performed in accordance with ASCE 38-22 and Louisiana 811 requirements. Once the data is surveyed and maps/plans are updated, a conflict matrix will be developed to shown all locations where utilities and project design conflict. Additional coordination meetings with the utility companies and DOTD will be scheduled to confirm the data and to discuss the Quality Level A locate plan.

Once QL-A pothole locations are agreed upon, Sigma will perform the test hole excavation process in accordance with the contract requirements. Test hole data sheets and photographs will be taken to document the utility location, size, material, depth, condition, etc. Any new lines located as part of the QL-A process will also be surveyed and additional efforts to determine ownership will be performed.

Final SUE maps with all pertinent information collected will be prepared using georeferenced aerial photography backgrounds and colorized linework. Ownership of each utility will be identified and any QL-A data shown in the plans. This information, along with a final utility conflict matrix will be provided to DOTD for design considerations, construction plan development, and utility relocation agreement preparations.

If necessary, Sigma will then prepare any utility relocation design plans, cost estimates, specifications, and assist with utility relocation agreements. We can follow the process through the field relocation process if necessary.

Project Management

Robbie Lear will be the overall contract manager for the IDIQ contract. The PM will be responsible for meeting all project delivery requirements and engage subconsultants where necessary. Their duties include preparing monthly status reports to accompany invoices, developing and maintaining project schedules, and preparing internal work plans to meet each project milestone.

Sigma offers a longstanding staff with a strong background in surveying, SUE services, and DOTD project design and delivery. Most of our core engineering group has been with Sigma for over 10 years and has their primary experience in transportation related projects for DOTD. Please refer to the resumes of Section 17 for specific personnel experience. The longevity of the core group helps facilitate the communication necessary for project success. Task orders will be assigned to one of the following 3 project managers:

- ✓ **Robbie Lear, PE, LSI** will serve as Project Manager for this project. He is the project manager for Sigma's current SUE Contract 44-7310 and has managed all task orders issued. He also has experience with performing surveys and engineering design for DOTD projects. This includes road design, maintenance of traffic, utility conflicts, utility coordination. He understands the DOTD's standard specifications, design requirements, surveying standards and overall project delivery process. With his diverse background, Mr. Lear is able to effectively communicate with DOTD HQ, Districts, other consultants and contractors to make sure that everyone's goals for each project are

understood and adequately met. He is also an ATSSA Certified Traffic Control Supervisor and has designed safe maintenance of traffic plans for a variety of DOTD project settings and conditions.

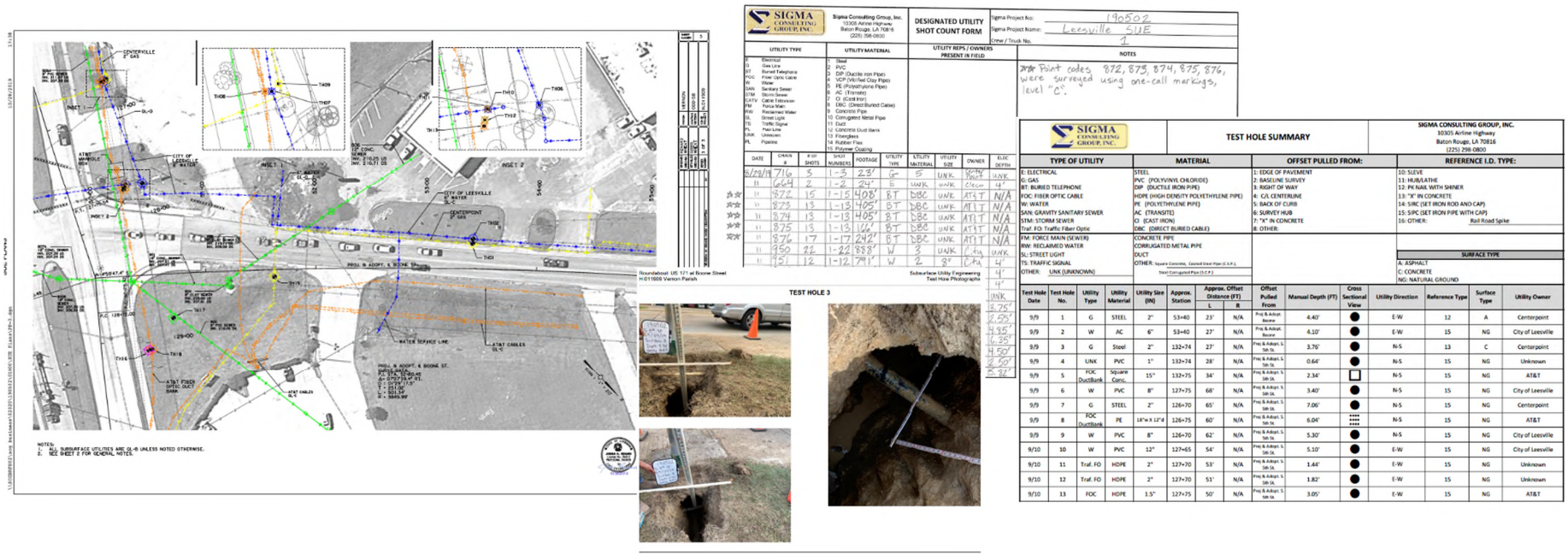
- ✓ **Derek Wheat, PLS** will serve as a project surveyor and will be in responsible charge of all QL-B designations and QL-A locates. Derek is a UTA certified professional utility locator and has completed the 40-hr Trenchless Technology Center Utility Investigation School course. He has experience with several types of geophysical utility designation techniques including ground penetrating radar and electromagnetic radio detection and has successfully applied his skills in the field for DOTD projects. He also has managed all field services for QL-A test holes using hydrovac techniques. He has prepared SUE plans, shot count sheets, test hole data sheets and test hole / utility photographic evidence for DOTD.
- ✓ **Josh Renard, PE** will serve as a project engineer and will be responsible for coordinating with utility companies, office production and SUE Plan development, and utility coordination efforts. Josh has performed these services on all SUE task orders performed by Sigma. He also has provided SUE coordination services for both the East Baton Rouge SSO Program and the MovEBR transportation enhancement program. He regularly attends the Utility Council meetings and has a wide network of contacts in the utility field. He also has experience in preparing traffic control permits for SUE projects which include closing lanes, shoulders, and work adjacent to active traffic.

Quality Control / Quality Assurance

Sigma proposes to utilize our currently implemented quality control plan for this contract, which includes DOTD's QA/QC requirements and forms. Built around DOTD's philosophy and internal QA/QC plans, the key components to this plan include communication, redundancy, and application of experience. The first element of our quality control approach is to establish and maintain an open line of communication between all members of the project team and all concerned parties within DOTD. The second element for quality control is applying redundancy throughout the project. This is frequently accomplished by establishing alternate lines of communication, overlapping technical expertise and thorough project documentation. Finally, the 3rd component of maintaining quality throughout the project life is the proper application of our expertise and experience during all phases of work. We intend to assign key members of our staff to vital roles in each and every phase. In order to balance continuity and redundancy, independent reviews by the Principal-in-Charge are incorporated into every project.

Cybersecurity Training

All members of Sigma who have access to ProjectWise through DOTD have completed the LA Dept. of State Civil Service cybersecurity training. In fact, we have enlisted our entire company to complete the training to promote awareness of cyber threats to both ourselves and our clients.



19. **Workload:**

Firm	Past Performance Evaluation Disciplines(s)*	State Project Number	Project Name	Remaining Unpaid Balance**
Sigma Consulting Group, Inc.	Survey		(we have no current survey work with DOTD)	$0
	Other		(we have no current SUE work with DOTD)	$0
	Road	H.014415	LA 352 Drainage Improvements	$18,527
		H.004791	Belle Chasse Bridge & Tunnel Replacement	$5,307
		H.004100	I-10: LA 415 to Essen Lane on I-10 and I-12	$974,206
		H.013797	LA 30: EBR PL - I-10 (Environmental Assessment)	$88,810
		H.010652	LA 73: US 61 (Airline) – Essen Lane	$3,066
		H.010116	LA 1088: Soult and Trinity Roundabouts	$200,989
	Bridge	4400019338	Rural Bridge Replacement Initiative Phase II (South)	
		H.012061	LA 1	$91,063
		H.012565	LA 963	$96,772
		H.012891	LA 300	$46,976
		H.014213	LA 700	$68,500
		H.014215	LA 20	$99,422
		H.014216	LA 682	$115,094
		H.014241	LA 10	$48,845
		H.014251	LA 422	$53,066
		H.014252	LA 1054	$48,076
		H.014253	LA 421	$46,625
		H.014254	LA 955	$159,748
		H.014256	LA 952	$103,389
		H.014257	LA 68	$117,539
		H.014276	LA 975	$60,995
		H.014278	LA 85	$71,745
		H.014279	LA 35	$53,708
		H.015333	D62: IIJA Off-System Bridge Replacement Program	$35,081
	Environmental	H.004526.5	Leeville - Golden Meadow (Ph. 2 Permits)	$212,789
	CE&I / OV	H.002868	Ambassador Caffery & US 90 Interchange Construction Support	$109,693
		H.003003	I-10 (East Jct. I-49 to LA328) Construction Support	$4,312
		H.010601	I-10 (LA328 - LA347) Construction Support	$255
		H.013897	Owner Verification Services For College Drive Flyover Ramp I-10/I-12 West	$45,210

20. **Certifications/Licenses:**

N/A

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

N/A

22. **Sub-consultant information:**

Firm Name (as registered with Louisiana's Secretary of State)	Address	Point of Contact and email address	Phone Number

23. **Location:**

N/A