DOTD FORM: 24-102

(Revised January 1, 2023)

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 CONTRACT FOR DESIGN SERVICES DISTRICT 03**
2. Contract number(s) as shown in the advertisement	**4400027093**
3. State Project Number(s), if shown in the advertisement	**N/A**
4. Prime consultant name (name must match as registered with the Louisiana Secretary of State where such registration is required by law)	**SIGMA CONSULTING GROUP SOUTHEAST, INC.** **(dba 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. A WAGGONER COMPANY
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 Lear, Jr., 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 above shall be the same person listed in Section 9: **June 20, 2023** Date:
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)' %: **Civil Design & Construction, Inc. — 6%** **Vectura Consulting Services, LLC — 5%**

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

Past Performance Evaluation Disciplines	% of Overall Contract	**Sigma Consulting Group, Inc.**	Waggoner	CDC (DBE)	Vectura (DBE)		Each Discipline must total to 100%
Road	89%	**95%**	5%				100%
Traffic	5%				100%		100%
Survey	6%			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%**	**85%**	4%	6%	5%	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.	Principal	1	1
	Supervisor - Eng.	2	4
	Engineer	2	5
	Engineer Intern	1	5
	CADD Operator	0	3
	CADD Technician	0	3
	Surveyor	0	1
	Instrument Man	0	1
	Rodman	0	2
	Sr. Technician	0	1
	Clerical	1	4

Our team size allows DOTD a focused, efficient workflow while also meeting and exceeding project timelines.

By having the same proposed team as our current IDIQ Roadway Contract, DOTD essentially has the trust of one team across multiple IDIQ contracts

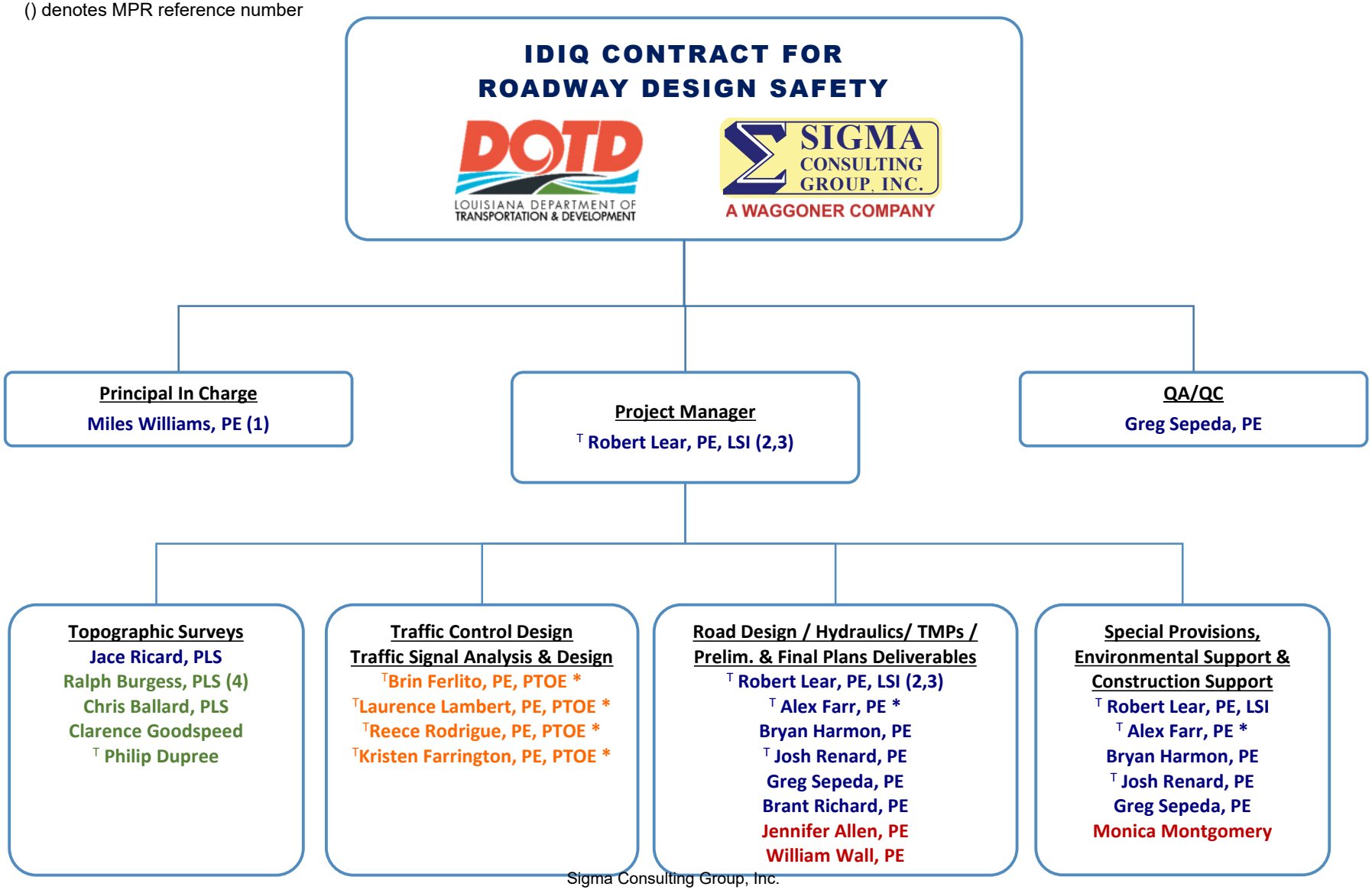
13. **Firm Size** (cont.)

Firm Name	DOTD Job Classification	Number of Personnel Committed to this Contract	Total Number of Personnel Available in this DOTD Job Classification (if needed)
Civil Design & Construction, Inc.	Principal	1	1
	Surveyor	1	3
	Party Chief	2	5
	Instrument Man	2	3
	Rodman	2	2
	CADD Operator	1	1
	Senior Technician	2	6
	Supervisor - Other (SUE)	1	1
Vectura Consulting Services, LLC	Supervisor Engineer	2	2
	Engineer	4	4
	Engineer Intern	1	1
	Inspector	2	2
Waggoner Engineering, Inc.	Engineer	1	3

14. Organizational Chart:

Sigma Consulting Group, Inc.
Vectura, LLC
CD&C, Inc.
Waggoner

Legend
[T] Work Zone Training / TCS
* TEPR Training
() 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 and discipline meeting MPR/ certification & Number	State of license	License / Certification Expiration Date
1	**Miles Williams, PE** 	**Sigma Consulting Group, Inc.**	**PE # 23094 - Civil**	**LA**	**Exp. 3/31/2024**
2 3	**Robert Lear, PE, LSI** **(20+ yrs experience in Road Design)** 	**Sigma Consulting Group, Inc.**	**PE # 29394 - Civil**	**LA**	**Exp. 3/31/2025**
4	**Ralph Burgess, PLS** **(20+ yrs experience in topo surveys)** 	**Civil Design & Construction, Inc.**	**PLS # 5040**	**LA**	**Exp. 9/30/2024**

16. **Staff Experience:**

See Resume Sheets on subsequent pages.

Name	Project Responsibilities	Firm
Robert Lear, Jr., PE, LSI	Contract Manager / Road Design	SIGMA CONSULTING GROUP, INC. A WAGGONER COMPANY
Bryan Harmon, PE	Road Design / Drainage Design	
Greg Sepeda, PE	QC/QA Manager / Bridge Design	
Alex Farr, PE	Road Design / Maintenance of Traffic	
Joshua Renard, PE	Road Design / Utility Coordination	
Jace Ricard, PLS	Survey Coordination	
Brant Richard, PE	Road Design / QC	
Miles B. Williams, PE	Principal-in-Charge	
Jennifer Johnson Allen, PE	Road Design	WAGGONER
William Wall, PE	Road Design	
Monica Montgomery	Road Design	
Brin Ferlito, PE, PTOE	Traffic Design	VECTURA CONSULTING SERVICES, LLC
Laurence Lambert, PE, PTOE, PTP	Traffic Design	
Reece Rodrigue, PE, PTOE, RSP1	Traffic Design	
Kristen Farrington, PE, PTOE, RSP1	Traffic Design	
Karla E. Weston, PE	Survey Principal	C&C INCORPORATED
Ralph Burgess, PLS	QC/QA Manager / Survey	
Chris Ballard, PLS	Survey	
Clarence Goodspeed	SUE	
Philip Dupree	Survey (Field)	

Firm employed by: **SIGMA CONSULTING GROUP, INC.**				**Meets MPR 1, 2, & 3**
Name	**ROBERT LEAR, JR., PE, LSI**	Years of relevant experience with this employer	**24**	
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		**PE.0029394 / LA / 3-31-2025 & LSI.0000508 / LA / 9-30-2023**		
Year registered	**2001 / 2005**	Discipline	**Civil / Land Surveyor Intern**	
Contract role(s) / brief description of responsibilities		**Project Manager / Road Design (MPR 2 & 3) 20+ yrs experience in responsible charge of Road Design projects for 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 years of experience specified in the applicable MPR(s).
2005 2021	**NEPA and Transportation Decision Making Seminar** **ATSSA Traffic Control Supervisor Certification #337850 (TCT/TCS)**
01/14 – 07/16	**LA342: Roundabout @ LA 724, Lafayette Parish, LA (H.002163)** Mr. Lear served as the project manager and road design engineer for a 4-legged single lane roundabout in Lafayette Parish. He was responsible for the horizontal and vertical geometric design, typical sections, suggested sequencing, permanent pavement markings, permanent signing, quantities and opinion of probable costs for this project. He also supervised all survey and SUE efforts. Utility locates included QL-D and QL-C locates. Mr. Lear coordinated with District 03 for utility relocation requirements and needs.
01/14 - 12/16	**LA 347: Roundabout @ Melancon Rd, St. Martin Parish, LA (H.009456)** Mr. Lear was the project manager, engineer of record and survey task manager for the design of a new 4-legged single lane roundabout. He was responsible for the horizontal and vertical geometric design, typical sections, suggested sequencing, permanent pavement markings, permanent signing, quantities and opinion of probable costs for this project. He also was responsible for establishing design required right of way lines, utility coordination and R/W map preparation. All deliverables were prepared using InRoads Survey, CadConform and Microstation software. Utility locates included QL-D and QL-C locates.
05/21 – 03/23	**LA 352 Drainage Improvement, St. Martin Parish, LA (H.014415)** Mr. Lear is the project manager and design engineer of record for drainage improvements along LA 352 in Henderson, LA. The project includes removing several undersized side drains and side road cross drains with a 10x6 RCB to alleviate regional flooding problems near the I-10 Henderson exit. The design also incorporates a drainage bypass system to balance flows near the interchange. Mr. Lear is responsible for coordinating the project with the District 03 administrator, DTOE, area engineer, and utility coordinator, design of the drainage systems, maintenance of traffic plans, and construction plans.

Robert Lear, Jr. (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			**Meets MPR 1, 2, & 3**
Name	**ROBERT LEAR, JR., PE, LSI**	Years of relevant experience with this employer	**24**
Title	**Vice-President / Sr. Project Manager**	Years of relevant experience with other employer(s)	**3**

10/2020 – Present	**I-10: LA 415 to Essen Lane, West and East Baton Rouge Parish, LA (H.004100.5)** Mr. Lear is a road design engineer for the replacement of I-10, interchange improvements, and surface street improvements through Baton Rouge. His responsibilities include road and drainage design, complex interchange geometric design, maintenance of traffic / sequencing plans, road plan preparation, coordinating with the CMAR contractor, design and constructability reviews, proposed right of way and control-of-access limit determination and utility coordination.
04/19 – 2022	**I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA** The project includes adding ramps to the existing I-20/I-220 Interchange and providing full access to the Barksdale Air Force Base via a new 4-lane rural arterial roadway. Mr. Lear is the Roadway Design Engineer for this LaDOTD Design-Build Project. He is responsible for preparing the geometric design criteria reports, design exceptions, horizontal and vertical geometrics for the interstate, diagonal and loop ramps, C-D road, and rural arterial; superelevation transitions, typical sections, plan profile sheets, geometric control, geometric layout, geometric details, cross sections, drainage design including cross drains, storm drains, side drains, roadside ditches, existing and design drainage maps, clearing and grubbing plans, and construction support. Mr. Lear also was responsible for QA/QC reviews and/or independent reviews of the Stormwater Pollution Prevention Plan, Interchange Modification Report re-evaluation, traffic control plans, signing and striping plans, and transportation management plan. He also participated in partnering and coordination with the contractor throughout the RFQ, RFP, design and construction phases of the project. As key personnel for the DB process, he participated in all of the required pre-construction project meetings as well as design-build team constructability reviews.
2013 - 2023	**I-10: East Jct. I-49 to LA 328, Lafayette & St. Martin Parishes (H.003003)** **I-10: LA 328 to LA 347, St. Martin Parish (H.010601)** **I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish (H.003014)** Mr. Lear was the project manager and lead roadway engineer for replacing and upgrading 16.6 miles of I-10 and intersection safety improvements from Lafayette to near Henderson, LA, including and a new overpass on Melvin Dupuis Rd over I-10. He was responsible for all roadway design components of the project including typical sections, plan profiles, geometric details, sequencing, level 4 TMP, and cross sections. The project scope also included two roundabouts at the ramp termini points and intersection improvements to LA352/LA347 based on traffic data and access management. Mr. Lear was the road design engineer for these one-lane roundabouts and intersection improvements and attended public meetings for DOTD environmental clearance. Mr. Lear also coordinated the roadway lighting and utility conflicts with subconsultants, and bridge design with DOTD Bridge section, and assembled the multi-discipline construction plan set. **He just completed providing construction support for the project which included partnering, value engineering proposal reviews and plan changes.**

Firm employed by: **SIGMA CONSULTING GROUP, INC.**				**Meets MPR 1, 2, & 3**
Name	**BRYAN K. HARMON, PE**	Years of relevant experience with this employer	**8**	
Title	**Vice-President / Special Projects Engineer**	Years of relevant experience with other employer(s)	**33**	
Degree(s) / Years / Specialization		**BS / 1981 / Agricultural Engineering** **BS / 1982 / Civil Engineering**		
Active registration number / state / expiration date		**22595 / LA / 3-31-2025**		
Year registered	**1987/1994**	Discipline	**Civil / Environmental**	
Contract role(s) / brief description of responsibilities		**Hydraulics / Road 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 years of experience specified in the applicable MPR(s).
2008 2010	**NEPA and Transportation Decision Making Seminar** **Principles of Writing Hwy Construction Specifications**
05/21 – 03/23	**LA 352 Drainage Improvement, St. Martin Parish, LA (H.014415)** Mr. Harmon is the lead hydraulic engineer for drainage improvements along LA 352 in Henderson, LA. The project includes removing several undersized side drains and side road cross drains with a 10x6 RCB to alleviate regional flooding problems near the I-10 Henderson exit. The design also incorporates a drainage bypass system to balance flows near the interchange. Mr. Harmon is responsible for performing HEC-RAS modeling and HYDRO-WIN calculations on the main outfall channel, developing drainage alternatives and associated costs, and QA/QC on the construction plans.
01/22 – Present	**Hooper Road (LA 408) Improvements, East Baton Rouge Parish, LA (H.002316/CP No. 12-CS-HC-0017)** Mr. Harmon is the lead hydraulics engineer for the widening of an existing 2-lane roadway to a 4-lane boulevard to increase capacity. His responsibilities include development of the existing and design drainage maps, cross drain design, storm drain system design, open ditch design, and evaluation of impacts for open ditch vs storm drain system alternatives along the project corridor.
10/20 - Present	**I-10: LA 415 to Essen Lane, West and East Baton Rouge Parish, LA (H.004100.5)** Mr. Harmon is the lead hydraulics design engineer for the replacement of I-10, interchange improvements, and surface street improvements through Metro Baton Rouge. He is responsible for developing the existing and design drainage maps, hydraulic calculations, and drainage outfall assessments. Drainage is being designed for both final conditions and interim construction phases consistent with limits defined for each GMP. In addition, he is coordinating with the CMAR contractor, DOTD, and East Baton Rouge DTD to orchestrate future improvements to Dawson's creek at the Acadian Thruway underpass at KCS RR
2016 – 2020	**I-10: Highland to LA 73 Design-Build Project, E. Baton Rouge and Ascension Parish, LA (H.009250)** Mr. Harmon served as the project Design & Construction Liaison and lead drainage engineer for the project. He was responsible for coordinating design and construction efforts for the D-B team to ensure a cost effective and efficient delivery process. His drainage design responsibilities included open ditch and subsurface drainage systems, box culvert and cross drain extension design along the corridor.

Bryan Harmon (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			**Meets MPR 1, 2, & 3**
Name	**BRYAN K. HARMON, PE**	Years of relevant experience with this employer	**8**
Title	**Vice-President / Special Projects Engineer**	Years of relevant experience with other employer(s)	**33**

10/18 – 03/20	**I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA** Mr. Harmon served as a drainage design engineer and was responsible for the evaluation and design of both the existing and proposed drainage systems for this new 4-lane rural arterial and roadway and urban freeway interchange. In addition to the standard DOTD drainage evaluations for storm drain systems (inlets, pipes, box culverts, and bridges) consideration of impacts to the surrounding floodplain storage basins and wetlands had to be considered. The floodplain area along the southern limits of the project is also bisected by the KCSRR and is subject to significant backwater and overbank flooding from Red Chute Bayou. Due to the floodplain complexities associated with this lateral overflow storage area, coordination with the Bossier Levee District was required which included utilizing elements of thier 2-D Unsteadey Flow Hec Ras Model for this region. Due to the lateral overflows and interchange of flows, consideration of bridge scour was evaluated for the KCSRR Overpass utilizing the HEC -RAS computer model.
04/18 – Present	**Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project, Plaquemines and Jefferson Parish, LA (H.004791)** Sigma is providing the drainage design for this major highway improvement that is being designed and constructed under this alternative delivery method. Mr. Harmon is serving as the lead drainage engineer and is responsible for the coordination and proper consideration of the impacts that the large multi-jurisdictional pumped drainage outfall systems have on the project drainage system performance. Project drainage considerations include bridge deck scupper design conforming to FHWA HEC-21 requirements, and standard storm drainage piping and inlet design for associated local roadway improvements. The drainage system design must account for the final full build conditions but must also function during the various construction sequences with the addition of temporary systems.
	Prior to joining Sigma, Mr. Harmon spent the previous year serving as the Interim Director of the Department of Public Works for the City of Baton Rouge and Parish of East Baton. Prior to his tenure as the Director, he served 9.5 years as the DPW Deputy Director/Chief Engineer and 15 years as the Assistant Chief and Drainage Engineer. As Deputy Director/Chief Engineer, one of his primary responsibilities included the over sight of all engineering functions and project construction for the Department. Specific duties included the administration of flood plain and storm water regulations, right of way acquisitions, standard plans and specifications, engineering studies and plan development, cost estimates, funding pursuits, bid phase services, and construction administration for several types of municipal infrastructure projects throughout East Baton Rouge Parish. As an owner's representative for EBR parish, he coordinated with contractors for construction projects, participated in project partnering, performed design and constructability reviews, evaluated value engineering proposals, and prepared independent cost estimates for project.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**				**Meets MPR 1, 2, & 3**
Name	**GREGORY P. SEPEDA, PE**		Years of relevant experience with this employer	**26**
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			**QC / Bridge 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 years of experience specified in the applicable MPR(s).
2012 2016	**NEPA and Transportation Decision Making Seminar** **Maintenance and Rehabilitation of Historic Bridges Course**
04/21 – Present	**Rural Bridge Replacement Initiative Phase II (South), LA (Contract 440001338, Multiple State Project Nos.)** Mr. Sepeda is the principal-in-charge for this contract of 16 state projects including 29 bridge replacements throughout south Louisiana. As PM he has developed an efficient process/sequence of collecting field data (survey) and bringing it into the office (plan development), staggering the various projects so that there is a continuous flow of data from phase to phase. Mr. Sepeda is also the lead bridge designer, overseeing the structure type recommendation from the hydraulic engineers and the LaDOTD standards selection from the bridge design team. Last, Mr. Sepeda is responsible for all progress reporting and invoicing with the LaDOTD Project Manager.
12/14 – 04/19	**S. Acadian Thruway (Perkins Rd - LA 73), East Baton Rouge Parish, LA (H.011261)** Mr. Sepeda was the project manager 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. Sepeda is responsible for all project management, coordinating the design effort and quality control.
09/13 – 10/15	**US 171: J-Turns @ N. Perkins Ferry Road, Calcasieu Parishes (H.010197)** Mr. Sepeda was the project manager for the design of J-Turns and turn lanes at a 3-leg intersection north of Lake Charles, LA. He is responsible for the road design, drainage design, and plan production. All work for this project is being performed using CADConform and LA DOTD electronic plan delivery requirements.
2014 – Present	**Ambassador Caffery & US 90 I/C (Future I-49), Lafayette, LA (H.002868)** Mr. Sepeda is the lead bridge engineer for the final design and plan development of a new bridge structure over Ambassador Caffery Boulevard for future I-49. The proposed structure was designed according to the AASHTO L.R.F.D. design guide and utilized the newly developed "LG" prestressed concrete girders. Mr. Sepeda served in the checking and QC role on the project, while supervising the development of the construction plans and cost estimate. He will be performing construction support services and shop drawing reviews.

Gregory Sepeda (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			**Meets MPR 1, 2, & 3**
Name	**GREGORY P. SEPEDA, PE**	Years of relevant experience with this employer	**26**
Title	**Vice President / Chief Engineer**	Years of relevant experience with other employer(s)	**5**

08/12 – Present	**Hooper Road (LA 408) Improvements, East Baton Rouge Parish, LA (H.002316/CP No. 12-CS-HC-0017)** Mr. Sepeda is the project manager for the widening of an existing 2-lane roadway to a 4-lane boulevard to increase capacity. The project began with an Environmental Assessment (E.A.) and NEPA environmental documentation. Mr. Sepeda worked with all technical team members and successfully obtained a FONSI. As the project continues into plan development, Mr. Sepeda is coordinating the topographic survey to identify major topography and existing utilities, as well as developing geometry consistent with MOVEBR and DOTD guidelines. With the route being a state highway, coordinating with LA DOTD is a necessity. Sigma is facilitating the development of a traffic study with a subconsultant, following criteria established by LA DOTD. Multiple roadway sections and intersection arrangements are being evaluated through a tiered approach.
07/12 – 10/18	**I-10 Widening, LA30 - LA22, Ascension Parish, LA (H.009276)** Mr. Sepeda served as project manager and lead bridge engineer for the widening of a 5 mile segment of I-10. He was responsible for the overall project management and coordination with the subconsultant team, road bridge design, and plan production. Sigma is also responsible for the design of a concrete slab span bridge, and the deck design of four girder-supported bridge structures. Under a contract supplement, Mr. Sepeda lead the design for a replacement of the LA 941 structure over the mainline interstate. LA 941 is a rural 2-lane roadway.
10/16 – 06/20	**I-10: Highland to LA 73 Design-Build Project, E. Baton Rouge and Ascension Parish, LA (H.009250)** Mr. Sepeda served 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.
06/13 - 2021	**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.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**				**Meets MPR 3**
Name	**ALEX D. FARR, PE**	Years of relevant experience with this employer	**9**	
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		**Road Design / Maintenance of Traffic**		

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 years of experience specified in the applicable MPR(s).
2019 2018	**Traffic Control Supervisor (TCS) course** **Traffic Engineering Analysis Process and Report Course (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 and quantity/pay item computations for this project. Mr. Farr also assisted in the design of the suggested sequence of construction.
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 plans, suggested sequence of construction development, Level 2 TMP, and quantity/pay item computation for a single lane roundabout near Breaux Bridge, LA.
2021 – Present	**Rural Bridge Replacement Initiative Phase II (South), LA (440001338) (2021 – Present)** Mr. Farr is responsible for the plan development of this project, which is for 16 state projects including 29 bridge replacement sites throughout south Louisiana. This includes preparing the Project Design Report (PDR) as well as the horizontal and vertical geometry. As some bridge sites are allowed to be closed for construction while others must remain open, Mr. Farr is also responsible in designing a detour route or diversion road, which includes a suggested sequence of construction. Mr. Farr is also responsible for the guardrail design at each bridge site. Along with plan development, Mr. Farr will be assisting the Project Manager in subconsultant coordination as well as invoicing and progress reporting to the LADOTD Project Manager.
2016 – Present	**I-10: LA 328 to LA 347, St. Martin Parish (H.010601)** Mr. Farr was responsible for producing the Transportation Management Plan (TMP) for the I-10 widening project from LA 328 to LA 347. The TMPs 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 2017 specifications, permanent signing and roadway plan preparation. **He is currently providing construction support for the project which includes partnering, contractor coordination and plan changes.**

Alex Farr (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			**Meets MPR 3**
Name	**ALEX D. FARR, PE**	Years of relevant experience with this employer	**9**
Title	**Project Engineer**	Years of relevant experience with other employer(s)	**2**

2014 – Present	**I-10: East Jct. I-49 to LA 328, Lafayette & St. Martin Parishes (H.003003)** Mr. Farr was responsible for producing the Level 4 Transportation Management Plan (TMP) for the I-10 widening project from I-49 to the LA 328. The TMPs 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 design, temporary signing design, quantity/pay item computations, and roadway plans
01/14 – 08/16	**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.
10/2020 – Present	**I-10: LA 415 to Essen Lane, West and East Baton Rouge Parish, LA (H.004100.5)** Mr. Farr was responsible for developing the proposed vertical profiles along the I-10 mainline corridor, service roads, surface streets, entrance, and exit ramps. This included determining existing vertical clearance along the corridor and adjusting the profile to meet the minimum vertical clearance per LA DOTD minimum design guidelines. This was performed along this corridor by using as-builts pertaining to their respective locations. Mr. Farr was also responsible for calculating the roadway and bridge construction costs for the Project Opinion of Probable Costs for the I-10 Corridor Environmental Assessment.
02/17 - 06/20	**I-10: Highland Rd to LA73 Design-Build Project, East Baton Rouge/Ascension Parishes. H.009250** Mr. Farr was responsible for preparing the Transportation Management Plan (TMP) and Safety Analysis for this project. The safety analysis was prepared to determine what safety concerns related to the construction and maintenance of traffic phasing. Mr. Farr was also responsible for designing and preparing the suggested sequence of construction, guardrail design, and the quantity estimate for the above-mentioned project.
04/19 - 2022	**I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA** Mr. Farr was responsible for performing the design of the interchange ramp profiles, super elevation calculations, and graphical grades. Mr. Farr was also responsible for the permanent striping plans, clearing and grubbing plans, and the quantity estimates.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**				**Meets MPR 3**
Name	**JOSH K. RENARD, PE**	Years of relevant experience with this employer	**17**	
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		**PE.0036015/ LA/ 3-31-2025**		
Year registered	**2010**	Discipline	**Civil**	
Contract role(s) / brief description of responsibilities		**Road Design / Utility Coordination**		

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 years of experience specified in the applicable MPR(s).
2021	**Traffic Control Supervisor (TCS) course**
08/19 – Present	**MOVEBR Infrastructure Enhancement and Traffic Mitigation Program** **East Baton Rouge Parish, LA - Lead Utility Coordinator, EBR Parish, LA (**08/19 - Present**)** 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.
01/14 – 07/16	**LA342: Roundabout @ LA 724, Lafayette Parish, LA (H.002163)** Mr. Renard served as a project engineer for the design of a single lane roundabout in Lafayette Parish. He designed the typical sections and graphical grades for the approach legs, the splitter islands, and the transition to the existing roadways. He also prepared quantities for the project.
01/14 – 12/16	**LA347: Roundabout @ Melancon Road, St. Martin Parish, LA (H.009456)** Mr. Renard served as a project engineer for the design of a single lane roundabout in St. Martin Parish. He designed the typical sections and graphical grades for the approach legs, the splitter islands, and the transition to the existing roadways. He also prepared quantities for the project.
10/16 – 06/20	**I-10: Highland Rd to LA73 Design-Build Project, East Baton Rouge/Ascension Parishes. H.009250** Mr. Renard served as the utility coordinator for this interstate design build project. He communicated with and gathered information from utility owners to ensure that the road was designed with minimal utility conflicts. Mr. Renard coordinated efforts to have telecommunications, water, and gas lines marked in the field and then led efforts to have Level A test holes performed to ensure a successful no-conflict design.

Josh Renard (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			**Meets MPR 3**
Name	**JOSH K. RENARD, PE**	Years of relevant experience with this employer	**17**
Title	**Project Manager**	Years of relevant experience with other employer(s)	**0**

08/19 – 10/19	**I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA** This project will extend I-220 south at the I-220/I20 interchange with new roadway and bridges connecting and creating access to the Barksdale Air Force Base. Mr. Renard was responsible for all Subsurface Utility Engineering for this project, including utility conflict matrix development, utility coordination, utility relocation, Level D through A locates and test holes.
04/18 – Present	**Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project, Plaquemines and Jefferson Parish, LA (H.004791)** Mr. Renard served as the drainage design Quality Control checker for this road design project. His efforts ensure that the project's drainage meets the requirements of the owner, parish and project specifications. This included technical checking for the existing and design drainage maps, HydroWIN calculation checks, drainage plan profile checking, and hydraulic computation book checking.
10/2020 – Present	**I-10: LA 415 to Essen Lane, West and East Baton Rouge Parish, LA (H.004100.5)** Mr. Renard is a roadway and utility engineer for the replacement of I-10, interchange improvements, and surface street improvements through Metro Baton Rouge. He prepared a utility conflict matrix for the project and designed a utility duct bank to expedite utility relocations with minimal construction conflicts. The duct bank design was an independent GMP for CMAR delivery. He is also designing drainage and roadway plans for surface streets between Washington Street and Acadian Blvd.
2017 - 2018	**LA 675 & LA 87 Improvements - SUE, Iberia Parish, LA (H.011781)** Mr. Renard served as the office SUE 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.
2019 - 2020	**Jacock Road Bridge Replacement at Barrow Fork Creek, West Feliciana Parish** Mr. Renard served as the construction manager for this concrete slab span bridge replacement project. His responsibilities included reviewing shop drawings, RFI's, contractor's invoices, resolving construction related problems, and utility coordination. This bridge removal and installation project followed DOTD 2016 specifications.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**				
Name	**JACE M. RICARD, PLS**		Years of relevant experience with this employer	**0**
Title	**Survey Department Manager**		Years of relevant experience with other employer(s)	**10**
Degree(s) / Years / Specialization		**BS / 2014 / Geomatics**		
Active registration number / state / expiration date		**26669 / LA / 9-30-2024**		
Year registered	**2019**	Discipline	**Land Surveying**	
Contract role(s) / brief description of responsibilities		**Survey Coordinator**		

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 years of experience specified in the applicable MPR(s).
11/21 – 06/23	**Louisiana Watershed Initiative Region 7** Mr. Ricard served as the lead survey project manager for the data collection within Region 7 of the Louisiana Watershed Initiative. Survey was performed on 1,000+ drainage structures and bridges in the region for the purpose of hydraulic modeling throughout Louisiana. Mr. Ricard was responsible for the stakeholder outreach to the parishes within the scope of study. Mr. Ricard was responsible for scheduling, supervising the data collection, QC of the data, and submittal of the data. Mr. Ricard was also responsible for managing portions of survey in Region 1 and Region 6.
05/19 – 12/21	**East Baton Rouge Stormwater Masterplan** Mr. Ricard served as the lead survey project manager for the data collection for the HUC8 watersheds with East Baton Rouge Parish. For Hydraulic modeling purposes, survey was performed on miles of streams including data collection for: channel cross sections, channel centerline profiles, drainage structures, bridges, etc. Mr. Ricard was responsible for scheduling, supervising the data collection, QC of the data, and submittal of the data.
2018 – 2020	**Loyola Drive at I-10 Interchange Improvements (SP H.011670)** Mr. Ricard served as the lead technician for the topographic survey prior to construction. The $125.6 million project will modify existing Loyola ramps and will add two elevated flyover ramps for access to and from New Orleans. The project also adds auxiliary lanes along I-10 between Loyola Drive and Williams Boulevard. On the ground level, Loyola Drive adjacent to I-10 will be modified to become the state's first Diverging Diamond Interchange (DDI) to be opened to traffic. Mr. Ricard was responsible for processing data and QC of data.
01/18 – 06/19	**I-10: LA 415 to Essen Lane on I-10 and I-12 Survey** Mr. Ricard served as the lead technician for the topographic survey of the I-10 corridor from approximately 500' East of Perkins Rd. to Essen Ln., and the I-12 corridor from the I-10/I-12 Merge to Essen Ln. The topographic survey was performed to LADOTD Standards. Control targets were established along the entire corridor to tie in mobile LIDAR to the overall control. Horizontal position and vertical elevation were established at each of the control points in order to calibrate the mobile LIDAR to the overall control network. Mr. Ricard was responsible for processing data and QC of data.

Firm employed by: **SIGMA CONSULTING GROUP, INC. Meets**				**MPR 3**
Name	**BRANT B. RICHARD, PE**	Years of relevant experience with this employer	**1**	
Title	**Senior Transportation Engineer**	Years of relevant experience with other employer(s)	**34**	
Degree(s) / Years / Specialization		**BS / 1988 / Civil Engineering**		
Active registration number / state / expiration date		**28567 / LA / 9-30-2023**		
Year registered	**1999**	Discipline	**Civil**	
Contract role(s) / brief description of responsibilities		**Project Manager / QC**		

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 years of experience specified in the applicable MPR(s).
2006	**NEPA and Transportation Decision Making Seminar**
01/23 – 4/23	**Hooper Road (LA 408) Improvements, East Baton Rouge Parish, LA (H.002316 / C.P. No. 12-CS-HC-0017)** Brant provided QA/QC for 90% design set which includes minimum construction signing and suggested sequence of construction and the permanent striping and signing. All geometrics are consistent with MOVEBR and are in accordance with LADOTD guidelines. The project scope includes the widening of an existing 2-lane roadway to a 4-lane boulevard to increase capacity from Blackwater Road to Joor Road.
Prior to joining Sigma, Mr. Richard acquired 34 years of experience with other local firms	
11/16 - 3/17	**LADOTD LA 675 & LA 87 Improvements, Iberia Parish, New Iberia, LA (H.011781.5)** Responsible for the roadway rehabilitation design and plan preparation for approximately 2.3 miles of urban roadways under a task order from the LADOTD Pavement Preservation Retainer Contract. The project scope of work includes pavement widening, milling, asphaltic concrete (AC) overlay of composite pavement, AC overlay of AC pavement, AC patching, sawing and sealing of AC overlay lifts over composite pavement, roadway striping, ADA ramps, and the installation of access control safety improvements.
09/14 – 12/15	**LADOTD LA 64 & LA 1209 Overlay, East Baton Rouge Parish, Zachary, LA (H.011703.5)** Responsible for the roadway rehabilitation design and plan preparation for approximately 6.7 miles of urban roadways under a task order from the LADOTD Pavement Preservation Retainer Contract. The scope of work includes milling, AC overlay of AC pavement, AC patching, Portland Cement Concrete Pavement (PCCP) patching, guardrail design and replacement, superelevation design, roadway striping, and ADA ramps.
07/16 – 6/17	**LADOTD I-12 Widening (LA 21 to US 190) Rouge I-12 St. Tammany Parish (H.011137.5)** Brant had overall responsibility for QA/QC for the submittal of 30% preliminary plans. Duties included design oversight for the plan and profile sheets, typical sections, and existing drainage. The project limits begin at LA 21 and end at US 90, which is approximately 3.5 miles and includes the bridge crossing over the Tchefuncte River.

Brant Richard (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC. Meets**			**MPR 3**
Name	**BRANT B. RICHARD, PE**	Years of relevant experience with this employer	**1**
Title	**Senior Transportation Engineer**	Years of relevant experience with other employer(s)	**34**

03/13 – 8/13	**LADOTD / LA 520, Jct. US 79 Widening / Claiborne Parish, LA (H.010297.5)** Brant had overall responsibility for the roadway rehabilitation design and plan preparation for approximately 6 miles of rural roadways. The scope of work included roadway super elevation design and correction, bridge guardrail design, asphaltic concrete (ac) overlay, ac patching, milling and overlay of the bridges, and roadway striping.
6/11 – 10/12	**LADOTD/Paths to Progress Program – Groups 21, 24, 29 and 33, New Orleans, LA (H.009718 and H.009695)** Brant was responsible for the roadway rehabilitation design and plan preparation for 10.8 miles of urban roadways in Jefferson and Orleans Parishes. Scope included cold plane overlay, curb repairs, the installation of Type A and Type B handicapped (ADA) ramps, Asphaltic Concrete Pavement Widening, Portland Cement Concrete Pavement patching, Superpave Asphaltic Concrete Overlays, pavement base course patching, and roadway striping. Additional tasks included drainage design, bus pad repair, horticultural landscaping enhancements, and sidewalk repairs.
06/08 – 9/09	**LADOTD Submerged Roads Program – Groups 6 and 11, New Orleans, LA (704-36- 0032 and 704-36-0042)** Responsible for the overall management of the team providing roadway rehabilitation design and plan preparation for 12.7 miles of urban roadway. Responsible for the verification of damage inspection reports and the preparation of the design quality control plans. Tasks included overlay design, roadway rehabilitation, milling, asphalt overlay, asphalt patching, concrete repairs, installation of Type A and Type B handicapped (ADA) ramps, sidewalk repairs, curb replacement, manhole and catch basin repairs, and minor utility repairs.
03/07 – 10/07	**The City of Baton Rouge, Parish of East Baton Rouge Highland Road Improvements, Baton Rouge, LA** Responsible for the overall management of the team, providing design and oversight of the design team for the subsurface drainage to Highland Road. The roadway is an existing two-lane open ditch roadway being reconstructed into a four-lane divided roadway with subsurface drainage. Overall responsibilities included the design of subsurface drainage and preparing the existing drainage maps and proposed drainage maps in accordance with LADOTD standards. Tasks included laying out the roadway side inlets, calculating the subsurface culvert sizes, and incorporating the existing drainage systems into the roadway design. In addition, work included providing a scour analysis for the two bridges located on the proposed roadway along with a hydraulic analysis of the canal to determine the high-water elevation and flow through the bridge.
04/22 – 4/23	**US 51 Bridge Replacement, Plan and Profile of Proposed State Highway, State Project No. STP-2901-00 (036), Bridge No. 237.5 Yocona River, Yalobusha County, MS** Brant had overall responsibility for the QA/QC process of final plans submitted to MDOT. Duties included plan and profile sheets, roadway sequence of construction, typical sections, summary of quantities, erosion control, and pavement marking and signing plan.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**				**Meets MPR 1, 2, & 3**
Name	**MILES B. WILLIAMS, PE**	Years of relevant experience with this employer	**33**	
Title	**President / Principal-in-Charge**	Years of relevant experience with other employer(s)	**8**	
Degree(s) / Years / Specialization		**BS / 1983 / Civil Engineering**		
Active registration number / state / expiration date		**23094 / LA / 3-31-2024**		
Year registered	**1988**	Discipline	**Civil**	
Contract role(s) / brief description of responsibilities		**Principal-in-Charge / design reviews (MPR 1)**		

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 years of experience specified in the applicable MPR(s).
2004 1988 - Present	**NEPA and Transportation Decision Making Seminar** **34+ Years responsible charge for designing DOTD roadway projects**
2014-2015	**LA 342: Roundabout @ LA 724, Lafayette Parish, LA (H.002163)** Mr. Williams was the principal-in-charge for the LA 42: Roundabout @ LA 724 Route LA 42. This project is a safety project issued as a task order under our Safety Retainer contract with LA DOTD. The project included full topographic surveying and road design for a new single lane roundabout in Lafayette, LA.
2012-Present	**I-49 South: US 90 & Ambassador Caffery Interchange, Lafayette Parish, LA (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.
10/20 – Present	**I-10: LA 415 to Essen Lane, West and East Baton Rouge Parish, LA (H.004100.5)** Mr. Williams is the Road Design Lead Professional for the replacement of I-10, interchange improvements, and surface street improvements through Metro Baton Rouge. His responsibilities include road and drainage design, complex interchange geometric design, maintenance of traffic / sequencing plans, coordinating with the CMAR contractor, design and constructability reviews, value engineering assessments, cost estimating, project phasing for GMP limit determination, proposed right of way and control-of-access limit determination, utility coordination, and public involvement.
2016-2020	**I-10: Highland to LA 73 Design-Build Project, E. Baton Rouge and Ascension Parish, LA (H.009250)** Mr. Williams served as the Project Design Manager for all design efforts for this urban freeway design-build project. He was 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. The project included coordinating with the D-B contractor and DOTD, partnering, design and constructability reviews, and cost estimating.

Miles Williams (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			**Meets MPR 1, 2, & 3**
Name	**MILES B. WILLIAMS, PE**	Years of relevant experience with this employer	**33**
Title	**President / Principal-in-Charge**	Years of relevant experience with other employer(s)	**8**

04/18 – Present	**Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project, Plaquemines and Jefferson Parish, LA (H.004791)** Sigma is a design subconsultant providing drainage design for this alternative delivery project. Mr. Williams is serving as project principal and hydraulic design engineer. His work entails liaison with the prime consultant, builder, concessionaire and LADOTD. He is also assisting in the design of the drainage system for the roadways throughout the project including storm sewer design, drainage plans preparation and generation of quantities.
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.
03/13 – 10/20	**I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish (H.003014)** Mr. Williams was the principal in charge for the roadway design for the three laning of the westbound lanes and rehabilitation of the two lanes eastbound for 2.7 miles of I-10 and intersection safety improvements near Henderson, LA. He supervised the plan preparation for all roadway design components of the project including typical sections, plan profiles, geometric details, sequencing, level 4 TMP, and cross sections. The project scope also included two roundabouts at the ramp termini points and intersection improvements to LA352/LA347. Sigma also provided construction support which included partnering, value engineering proposal reviews, and plan changes.
03/13 – 09/20	**I-10: East Jct. I-49 to LA 328, Lafayette & St. Martin Parishes (H.003003)** Mr. Williams 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 urban interstate with superelevation, bridge replacement and widening, and local road pier protection. Sigma also provided construction support which included partnering, value engineering proposal reviews, and plan changes.

Firm employed by: **WAGGONERING ENGINEERING, INC.**					
Name	**JENNIFER M. JOHNSON ALLEN, PE**		Years of relevant experience with this employer	**2**	
Title	**Sr. Project Engineer**		Years of relevant experience with other employer(s)	**11**	
Degree(s) / Years / Specialization			**BS / 2007 / Civil Engineering**		
Active registration number / state / expiration date			**46840 / LA / 09-30-2024**		
Year registered	**2022**	Discipline	**Civil**		
Contract role(s) / brief description of responsibilities			**Roadway 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 years of experience specified in the applicable MPR(s).
	Jennifer M. Johnson Allen, PE, has over 13 years of experience in project management for roadway, runway, and drainage design. Her responsibilities have included preparing construction documents, cross sections, cost estimates, and plan sheet development.
01/10-02/10	**LA 92 Roundabout, Youngsville, LA** (while employed with another firm) Engineer Intern. Project included to construction of roundabout intersection at Bonin Road and LA 92 which included approach geometry improvements and associated drainage.
06/09-01/10	**Deferred Maintenance Program, LSU Caffey Rice Research Center, Rayne, LA** (while employed with another firm) Engineer Intern. Project included developing an improvement plan for the research center of inventoried qualified maintenance repairs.
06/09-01/10	**AMR Project, ARRA- Green, City of Carencro, LA** (while employed with another firm) Engineer Intern. Project included developing a plan to retrofit existing water and sewer appurtenance within the City's service area to ultimately capture the losses, inflow and infiltration across the system.
06/20-07/21	**Amazon Transportation Improvements, DeSoto County, MS** Project Engineer. Project includes new construction of 1,100 feet of urban roadway with sidewalks and associated drainage improvements. Responsibilities include preparing construction documents, cross sections, cost estimates and plan sheet development.
1/18-10/18	**DeWitt Spain Runway Pavement Rehabilitation, Shelby County, TN** (while employed with another firm) Project Engineer. Project includes Runway restoration of the Runway with night work only. Responsible for survey coordination, surface modeling, coordination with subconsultants for the compilation of construction documents, cross sections, and plan sheet development.

Jennifer Allen (continued)

Firm employed by: **WAGGONERING ENGINEERING, INC.**			
Name	**JENNIFER M. JOHNSON ALLEN, PE**	Years of relevant experience with this employer	**2**
Title	**Sr. Project Engineer**	Years of relevant experience with other employer(s)	**11**

10/17-1/18	**TVA Combined Cycle Plant Perimeter Road Improvements, Shelby County, TN** (while employed with another firm) Project Engineer. Project includes base repairs, overlay, minor drainage improvements and reconfiguration of traffic flow of a four-lane divided roadway to accommodate dedicated routes for TVA and City of Memphis Wastewater Treatment Plant operations.
1/17-7/17	**Signage and Striping Plans, City of Memphis, TN** (while employed with another firm) Project Engineer. Project includes striping and signage of various sections of City streets to include bicycle and pedestrian facilities.
01/18-10/18	**Lenow Greenline, Shelby County, TN** (while employed with another firm) Project Engineer. Project includes approximately two miles of paved multiuse pathways, at grade crossings, striping, signage, and grading. Specific tasks include survey coordination, 3D surface modeling, and construction documents.

Firm employed by: **WAGGONER ENGINEERING, INC.**			
Name	**WILLIAM H. WALL, PE**	Years of relevant experience with this employer	**1**
Title	**Senior Transportation Engineer**	Years of relevant experience with other employer(s)	**37**

Degree(s) / Years / Specialization			**BS / 1986 / Civil Engineering**
Active registration number / state / expiration date			**29947 / LA / 3-31-2024**
Year registered	**2002**	Discipline	**Civil**
Contract role(s) / brief description of responsibilities			**Road 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 years of experience specified in the applicable MPR(s).
3/23 – Present	**Jones Creek Road Improvements, East Baton Rouge Parish, LA (H.007137)** Mr. Wall assisted in the quality control / quality assurance for the design of a 5-lane urban roadway from Tiger Bend Road to Airline Highway.
3/23-Present	**Groom Road (LA 19 to Plank Rd), East Baton Rouge Parish, LA** Mr. Wall is the MOVEBR Project Manager for the corridor project which proposes to enhance pedestrian and potentially bicycle mobility for users traveling to the schools and other public facilities along the route. Reconfiguring excessively wide travel lanes is one of the main considerations to provide a multi-modal Complete Streets concept. Drainage will be analyzed and improved along the corridor to alleviate known occurrences of flooding in localized areas. High visibility crosswalks at all intersections and pedestrian countdown signals at signalized intersections will also be considered.
3/23-Present	**Terrace Ave. (Highland Rd. to Perkins Rd.), East Baton Rouge Parish, LA** Mr. Wall is the MOVEBR Project Manager for the corridor project that will provide access management, signalization, and turning movement improvements along Terrace Ave. This project will also enhance pedestrian and bicycle mobility as well as transit accommodations.
3/23-Present	**MacHost (LA 64 To Pride-Port Hudson), East Baton Rouge Parish, LA** Mr. Wall is an engineer working on a clearing and grubbing set of plans for the project. The project will improve existing conditions along MacHost Rd. including alignment, sight distance, shoulders and drainage.
6/23 – Present	**East Brandon Bypass from Louis Wilson Drive to US Highway 80, Rankin County, MS** Mr. Wall is the Senior Engineer to provide all necessary professional services required to: conduct a pre-design meeting, preform a comprehensive traffic study, complete hydraulic and limited topographic surveying, determine required right-of-way limits, develop centerline soil profile, perform geotechnical investigation, perform roadway hydraulic design, perform bridge hydraulic design for a maximum of two bridge sites. The project location will start at the intersection of Louis Wilson and MS 18 and continue across Shiloh Road. The project consist of a 2.5 mile corridor that will cross Interstate 20 with a grade separation, and ties into US Highway 80.

Firm employed by: **WAGGONERING ENGINEERING, INC.**				
Name	**MONICA MONTGOMERY**		Years of relevant experience with this employer	**16**
Title	**Sr. Project Manager**		Years of relevant experience with other employer(s)	**1**
Degree(s) / Years / Specialization		**BS / 2005 / Civil Engineering**		
Active registration number / state / expiration date				
Year registered		Discipline		
Contract role(s) / brief description of responsibilities		**Roadway Design / Construction Support**		

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 years of experience specified in the applicable MPR(s).
	Milan-Touro Recovery Road Repairs, City of New Orleans, New Orleans, LA Design Engineer. The City of New Orleans implemented a multi-million-dollar, multi-year comprehensive infrastructure improvement program to repair Hurricane Katrina related subsurface and road damages. Types of repairs deemed eligible for improvement by FEMA include utilities, sidewalks, American with Disabilities Act compliant ramps, driveway aprons, curbs, and road paving.
	Hollygrove, Leonidas Group A, City of New Orleans, New Orleans, LA Project Manager and Project Engineer. The objective of this project was to support the City of New Orleans in their efforts to restore their Hurricane Katrina related damaged infrastructure in the Hollygrove and Leonidas neighborhoods. The design of this project included full depth asphalt and concrete road replacement, patch asphalt, patch concrete, patch composite, and mill/overlay road reconstruction. Also, included were design incidentals such as water line repairs, manhole adjustments, ADA handicap ramp construction, sidewalk replacement, and driveway aprons replacement.
	Hollygrove Group C, City of New Orleans, New Orleans, LA Project Manager. The objective of this project is to aid the City of New Orleans and the Sewerage and Water Board of New Orleans in doing a full depth subsurface and utility reconstruction for 19 blocks in the Hollygrove neighborhood. The construction value of the project is estimated to be 10 million dollars and it will consist of the design and construction of roadways, utility lines (water and sewer), and drainage (grey and green) infrastructure. Additionally, the project will include incidentals such as ADA compliant handicap ramps, sidewalk replacement, and driveway apron replacement.
	St. Claude Drainage Improvements, City of New Orleans, New Orleans, LA The project consists of design services for street repairs including roadway and sidewalk replacements, drainage, and water main improvements, as well as parking and landscaping located in the 1200 & 1100 block of Montegut, 1200 & 1100 block of Feliciana, the 2900 block of Marais and the 2900 block of Urquhart St.

16. Staff Experience:

Firm employed by Vectura Consulting Services, LLC				
Name	Sheelagh Brin Ferlito, PE, PTOE		Years of relevant experience with this employer	7
Title	Principal		Years of relevant experience with other employer(s)	27
Degree(s) / Years / Specialization			B.S. / 1988 / Civil Engineering	
Active registration number / state / expiration date			PE.0025383 / LA 9/30/2023	
Year registered	1993	Discipline	Civil	
Contract role(s) / brief description of responsibilities			Traffic Control Design, Traffic Signal Analysis and Design / TMPs / Peer Reviews	

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 years of experience specified in the applicable MPR(s).
07/21 - current	**H.007160 - EBR Computerized Traffic Signal, Phase VB (Baton Rouge, LA)** Brin is the task leader for Vectura for the **Construction Engineering and Inspection of 24 traffic signals**. Brin oversaw the review of signal mast arm shop drawings to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Brin and Reece, with the DOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.
07/19 – current	**MOVEBR New Capacity Projects Program Management (Baton Rouge, LA)** Brin is the lead traffic engineer for entire the New Capacity Projects program management team. **All traffic engineering scope of services, traffic / speed data collection, traffic design studies, safety studies, and traffic signal design plans are reviewed by Brin.** She is in constant communication with the Traffic Engineering staff of DOTD and EBR Traffic Engineering Department. She understands the current requirements for all aspects of traffic engineering projects.
07/19 – current	**H.004791 DOTD Belle Chasse Bridge & Tunnel Replacement PPP (Belle Chasse, LA)** Brin is the project manager for the **temporary and permanent traffic signal plans** for the intersections of LA 23 at Burmaster St and at Engineers Rd. She based her traffic signal plans on **design year volumes** that were developed using growth rates from the New Orleans Regional Planning Commission Travel Demand Model. This project is the first ever Public-Private-Partnership performed by Louisiana DOTD.
09/20 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger I-10 (Ascension Parish, LA)** Brin is the project manager for the design of temporary traffic signal plans that will be implemented during the roundabout construction along LA 30 in Gonzales, LA. The project involves replacing three existing signalized intersections with multilane roundabouts along LA 30 at I-10 Interchange ramps and at the Tanger Boulevard. Vectura also developed **signal timing plans** for each phase of the construction to maintain progression along LA 30.
07/18 – 04/19	**LA 1 Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Design West Baton Rouge Parish, Addis, LA** Brin developed a Pedestrian Crosswalk Study and **Traffic Signal Construction Plans** for the intersection of LA 1 at LA 990 in Addis, LA. The study was based on DOTD Traffic Engineering Manual Crosswalk Guidelines followed by traffic signal design plans based on DOTD requirements. The study included **traffic and pedestrian traffic data collection, a speed study, crash analyses, intersection analyses and progression analyses**. The signal plans included pedestrian signal equipment, signal timing parameter calculations, crosswalk striping, signs, DOTD pay items, estimated quantities, and construction cost. Brin also assisted with the Parish with the DOTD Permit Request for Intersection Control Devices on a State Right of Way.
09/17-04/18	**US 11 at US 190 Bus. (Fremaux Ave.) Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Equipment Design Slidell, LA** Brin developed a formal traffic study for a proposed crosswalk with pedestrian **traffic signal equipment and pedestrian clearance timings** based on DOTD requirements. Brin assisted with **vehicle and pedestrian data collection, spot speed study, analyzed 3-year intersection crash data and developed signal timing for pedestrians to cross the street**. From the design study, a set of **Traffic Signal Modification Plans** were developed to implement the recommended alternative.
04/14 – 12/14	**H.002301 Signal Design for N. Sherwood Forest Dr. Widening Project (Baton Rouge, LA)** As the project engineer, Brin was in responsible charge for **data collection and design for three signalized intersections** as part of a road widening project as per EBR DPW and DOTD requirements. Ms. Ferlito developed the traffic signal equipment, signal timing and communication construction plans, special provision specifications, quantities, and cost estimate. She also performed tasks to develop the striping plans and sequence of construction plans which included temporary signal equipment placement due to lane shifts during construction.
07/12-03/14	**EBR 03-TS-CI-0026 CE&I for EBR Traffic Signal Systems Jefferson Highway Construction (Baton Rouge, LA)** Brin was the Project Resident Engineer on behalf of EBR for performing **CE&I services for the construction of 11 traffic signals**. She maintained records of the contractor's daily operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted monthly

	progress meetings, recorded daily installed quantities, developed change orders and monthly contractor pay estimates. She also coordinated with DOTD ITS division for fiber splicing into interstate I-12 fiber backbone and ATM / EOC building. She processed all monthly tasks in EBR formats as well as well as all items on the EBR project closeout checklist.
07/08-09/09	**SPN 013-05-0043 CE&I for EBR Traffic Signal Systems Phase IV Construction (Baton Rouge, LA)** Brin was the Project Resident Engineer for DOTD and EBR to perform **CE&I services for the construction of 21 traffic signals**. She developed the project Sample Plan, maintained records of the contractor's daily operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted monthly progress meetings, recorded daily installed quantities, coordinated concrete sampling for DOTD Materials Lab, developed change orders and monthly contractor pay estimates. She also coordinated with DOTD ITS division for fiber splicing into Airline Highway fiber backbone and ATM / EOC building. She processed all monthly tasks electronically in DOTD Site Manager and in EBR required formats as well as all items on the DOTD Project Closeout Checklist including the 2059 Report.
09/13 – 04/14	**S.P. 700-99-0477 Jefferson Hwy. Signal Design (Baton Rouge, LA)** Ms. Ferlito designed traffic signal plans for 11 intersections along Jefferson Highway between College Drive and the I-12 On Ramp in Baton Rouge. Design included **traffic data collection, traffic signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout**. Design also included **traffic signal synchronization signal timing** and pedestrian signal timing. She prepared estimated quantities, preliminary and final signal construction plans, and specifications.
03/05 – 11/05	**Airline Hwy Widening SPN 700-99-0332 (Baton Rouge, LA)** Brin designed 8 traffic signals as part of the Airline Hwy. widening project in Baton Rouge. Her design included **traffic data collection, traffic signal equipment, signal synchronization timing, fiber communication, storage length calculations based on queues analyses, special provision specifications, quantities, and cost estimate**. This project included fiber design to be the first Baton Rouge project to connect video surveillance images and traffic controller information to the ATM / EOC.
02/03 – 01/04	**EBR Traffic Signal Systems Phases IV and V SPN 700-17-0172 (Baton Rouge, LA)** Brin was the project engineer for the **design of 66 signalized intersections** on eight arterials in Baton Rouge which included traffic data collection, traffic signal equipment, pedestrian crosswalk equipment, emergency vehicle and railroad preemption equipment, fiber interconnect equipment as well as traffic signal synchronization. Brin prepared traffic signal construction plans, estimated quantities, and specifications.

16. Staff Experience:

Firm employed by Vectura Consulting Services, LLC				
Name	Laurence Lucius Lambert, II, PE, PTOE, PTP		Years of relevant experience with this employer	7
Title	Principal		Years of relevant experience with other employer(s)	18
Degree(s) / Years / Specialization			B.S./1997/Civil Engr. M.S./2006/Civil Engr. (Transportation focus) M.B.A./2010	
Active registration number / state / expiration date			PE.0029901 / LA / 3/31/2024	
Year registered	2001	Discipline	Civil	
Contract role(s) / brief description of responsibilities			Traffic Control Design, Traffic Signal Analysis and Design / TMPs / Peer Reviews	

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 years of experience specified in the applicable MPR(s).
12/21 – current	**H.012030.5 US 371 KCS RR Overpasses HBI (Webster Parish, LA)** Laurence was the project manager for the design of permanent pavement marking and signing sheets for the construction plans in MicroStation. He will also participate in the QC of the sequence of construction and detour route.
06/21 – 02/22	**H.013267 Capital Area Pathways Project (Baton Rouge, LA)** Laurence was project manager for a traffic study to evaluate trail crossings at three state routes that required DOTD approval. The traffic study included **traffic data collection, safety analysis, existing conditions analysis and alternative analysis**. Laurence used the DOTD Traffic Engineering Manual, MUTCD, and FHWA guidance to develop the most effective trail crossing alternatives.
07/19 – current	**MOVEBR New Capacity Projects Program Management (Baton Rouge, LA)** At the beginning of the program, Laurence worked with the Capital Region Planning Commission to produce measures of effectiveness from the **travel demand model** to prioritize the MOVEBR project list. Laurence and Pong Wu developed a list of vehicle miles traveled, V/C ratios and vehicles hours of delay. Laurence also provided **peer review** for the traffic studies for Ben Hur Road and Lee Drive.
04/18 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger & I-10 Gonzales (Ascension, LA)** Laurence provided a Quality Control review of the **temporary construction and sequence of construction plans**. Vectura also provided Quality Control review of **signing and striping plans** at 30% and 60% plan sets to ensure the **roundabouts** conformed to the Pavement Markings Details Sheet PM-09 and the MUTCD details on roundabouts.
04/18 – 12/21	**H.011909.5-4 Roundabout: US 171 at Boone St. (Vernon Parish, LA)** Laurence provided a Quality Control review of the **temporary construction and sequence of construction plans**. Vectura also provided Quality Control review of **signing and striping plans** at 30% and 60% plan sets to ensure the **roundabouts** conformed to the Pavement Markings Details Sheet PM-09 and the Manual on Uniform Traffic Control Devices (MUTCD) details on roundabouts.
02/20 – 09/21	**College Drive Corridor Enhancement from Perkins Road to I-10 (Baton Rouge, LA)** Laurence was the **project manager to develop Chapter 1 (Data Collection), Appendix A (Initial Data Collection), and Appendix B (Final Data Collection)** for proposed improvements College Drive. Since the I-10 interchange was included in the study, **approval from DOTD was required**. Vectura collected, turning movement counts, 85% speed data, travel time runs, queue measurements, field observations, verification of Traffic Signal Inventories, and bicycle / pedestrian / transit observations.
09/17-04/18	**US 11 at US 190 Bus. (Fremaux Ave.) Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Equipment Design Slidell, LA** Brin developed a formal traffic study for a proposed crosswalk with pedestrian **traffic signal equipment and pedestrian clearance timings** based on DOTD requirements. Brin assisted with **vehicle and pedestrian data collection, spot speed study, analyzed 3-year intersection crash data and developed signal timing for pedestrians to cross the street**. From the design study, a set of **Traffic Signal Modification Plans** were developed to implement the recommended alternative.
10/17 - 10/18	**H.013025 LA 182 (University Avenue) Corridor Planning Study (Lafayette, LA)** Laurence was the lead transportation engineer for a **Corridor Planning Study** for LA 182. The scope focused on improving safety and mobility for pedestrian, bicycle, and transit users. Laurence collected AM & PM peak vehicle turning movement counts as well as pedestrian and bicycle counts. Laurence coordinated with the Acadiana Planning Commission to **develop growth rates and design year volumes**. Laurence then performed Highway Capacity Manual analysis for 5 intersections along the intersection analyses for the signalized and roundabout controlled alternatives. Included in the study was a **safety analyses** of five intersections and the intermediate segments. Based on the results of the safety analysis, Laurence provided design criteria to the design team for improving safety of pedestrians, bicycles, and vehicles.
09/16 - 04/17	**H.004957.5 I-12 To Bush - LA 3241 (I-12 – LA 36) Corridor Study (St. Tammany Parish, LA)** Laurence was the lead traffic engineer for a **DOTD traffic study** for the new LA 3241 alignment with the purpose of obtaining both existing and projected future traffic variables in accordance with standard

	operating procedures typically performed in these types of analyses. Laurence worked closely with the NORPC and District 62 to develop design year volumes using data the TransCAD model. The traffic study examined concepts that improved the safety and efficiency of the roadway consistent with the latest DOTD policies related to access management. Laurence, along with Brin, **collected 7-day, 24-hour counts** w/ classification on mainlines, turning movement counts for morning and evening peak periods and speed data for mainlines. Laurence also developed a VISSIM **traffic simulation model** of the preferred alternative.
07/14 - 01/17	**FHWA Intersection & Interchange Geometrics: Innovative Design Considerations for All Users (Multiple States)** FHWA funded workshops for state Departments of Transportation that were interested in learning more about innovative intersection & interchange design. Laurence presented either part or all the one-day or two-day workshops that included modules on the overall policy and goals of FHWA for these types of innovations, roundabouts, roundabout interchanges, DLTs, DDIs, J-turns / Superstreets, MUT, Thru-turns, quadrant, and the assessment tools (CAP-X) available to compare the measures of effectiveness of each innovation. Each module includes sections on design, traffic operations, safety and multi-modal accommodation Laurence has presented for the Alabama, Kentucky, Ohio, Oklahoma, Massachusetts, Tennessee, and Texas Departments of Transportation under this contract.
06/16 - 09/17	**H.004490 Stage 0 Roundabout Studies, (Lafayette Parish, LA)** Laurence performed a **Stage 0 Feasibility Study** for roundabouts at ten intersections in the Lafayette area. The scope was developed based on EDSMs VI.1.1.1 / VI.1.1.5 and DOTD Traffic Engineering Manual Section 20.2. Laurence, along with Brin, **collected 7-day, 24-hour counts w/ classification, turning movement counts for peak periods and speed data for mainlines**. Once the traffic data was collected, Laurence performed **traffic signal warrants analyses**, performed a Sidra unsignalized, signalized and roundabout analyses. After the analyses were completed, Laurence developed a report that captured the results.
03/10 - 11/11	**S.P. No. 700-09-0171 Stage 0 and 1 Study I-49 Inner City Connector (Shreveport, LA)** This 3.5-mile route will connect existing I-49 / I-20 interchange to the proposed I-49 / I-220 interchange. After completing the **Stage 0**, Laurence was the project manager for the traffic analyses for the EA phase. The total traffic analyses effort included over 30 TransCAD Models, 20 interchanges and 70 intersections. Analyses included signalized and unsignalized intersections, basic freeway segments, freeway merge / diverge segments and freeway weaving segments at the studied intersections and interchanges. This project included performing both Interchange Modifications Reports (IMRs) and Interchange Justification Reports (IJRs).
09/06 - 09/07	**EBR 06-CS-HC-00012 Downtown Baton Rouge Signal Project (Baton Rouge)** Laurence was the Project Manager to develop **construction plans to upgrade 29 signals** in downtown Baton Rouge as part of the EBR Green Light Plan. Laurence developed a design study that included **traffic data collection**, handicap ramp recommendations, countdown pedestrian signals and internally illuminated street name signs.
04/04 - 09/06	**Stage 0 I-10 at Pecue Lane Interchange Justification Study (Baton Rouge, LA)** Laurence was the lead traffic engineer for a **Stage 0** traffic study analyzing the proposed interchange at I-10 and Pecue Lane. Laurence developed current and future traffic volumes based on the CRPC **TransCAD model** growth rates. Using HCS, Laurence **analyzed signalized and unsignalized intersections**, basic freeway segments, freeway merge / diverge segments and freeway weaving segments. Laurence also developed a micro-simulation model in both VISSIM and TSIS.

16. Staff Experience:

Firm employed by Vectura Consulting Services, LLC			
Name	Reece Rodrigue, PE, PTOE, RSP1	Years of relevant experience with this employer	3
Title	Project Traffic Engineer	Years of relevant experience with other employer(s)	7
Degree(s) / Years / Specialization		B.S. / 2013 / Civil Engineering	
Active registration number / state / expiration date		PE. 0042074 / LA / 3/31/2024	
Year registered	2017	Discipline	Civil
Contract role(s) / brief description of responsibilities		Project Engineer for Traffic Control Design, Traffic Signal Analysis and Design / TMPs / Peer Reviews	

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 years of experience specified in the applicable MPR(s).
04/21 - current	**MOVEBR Direct Select for Traffic Signal Design, Baton Rouge, LA** Reece is a project engineer for the design of traffic signal upgrades at 10 intersections. This projected included a traffic design report, preliminary and final plans for traffic signals that included traffic signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout. The design also included traffic signal synchronization signal timing and pedestrian signal timing.
07/21 – current	**H.007160 - EBR Computerized Traffic Signal, Phase VB (Baton Rouge)** Reece is part of the team responsible for **Construction Engineering and Inspection**. Reece has reviewed the signal mast arm shop drawings to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Reece, with the DOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.
01/21 – 05/21	**H.013256 - I-10 ITS Scott to Lake Charles (Lafayette, Acadia, and Jefferson Davis Parishes)** Reece was a member of the subconsultant team who was tasked with reviewing the ITS plans for 15 sites along I-10 where CCTV cameras were being installed. Reece was responsible for measuring anticipated construction quantities and producing a cost estimate for said quantities by using **DOTD's Bid Tabulation and Cost Estimating Tool**.
09/20 – 12/21	**H.011909.5-4 Roundabout: US 171 at Boone St. (Vernon Parish)** Reece was a project engineer, who participated in the production of the temporary **signal design** associated with the **sequence of construction** for the roundabout at US 171 at Boone St. He conducted a thorough analysis of the US 171 corridor's existing allowable movements and identified the movements that would be restricted during the proposed construction process and how it would impact the typical traffic patterns.
09/20 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger I-10 (Ascension Parish)** Reece was a project engineer, who assisted in the production of the temporary **signal design** associated with the **sequence of construction** for the roundabouts on LA 30 in Gonzales, LA. This project consists of eight proposed construction phases. He assisted in calculating the temporary pole heights, determining the placement location for the temporary poles for each phase, measuring and calculating clearance intervals. Reece conducted a thorough analysis of the LA 30 corridor's existing allowable movements and identified the movements that would be restricted during the proposed construction process and how it would impact the typical traffic patterns.
04/20 - current	**H.004791 DOTD Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project (Belle Chasse)** Reece is the project engineer who **designed the temporary traffic signal** for the intersection of LA 23 at Engineers Rd. The design of the temporary signals is set for eight phases of construction per the anticipated sequence of construction. Temporary pole location and heights were recommended for placement for use for all construction phases. Vehicle clearance interval calculations were conducted for each phase in accordance with DOTD and ITE guidance. Reece is responsible for producing the traffic impact analysis portion of the Traffic Management Plan, which was also used in planning for the permanent and temporary signal timing plans. Reece also produced permanent signal plans for the LA 23 intersections at Engineers Road and at Burmaster Street. He evaluated STOP bar locations, calculated vehicle, and pedestrian clearance intervals, designed the railroad preemption sequence for both at-grade crossings, designed the wiring layout, and developed the interconnect plan. Reece maintains correspondence with the fellow design engineering team for product consistency. In addition, Reece reviewed and approved shop drawings that were submitted by the contractor.
04/21 - current	**MOVEBR Direct Select for Traffic Signal Design, Baton Rouge, LA** Reece is a project engineer for the design of traffic signal upgrades at 10 intersections. This project included a traffic design report, preliminary and final plans for traffic signals that included traffic signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout. The design also included traffic signal synchronization signal timing and pedestrian signal timing.

02/20 – 09/21	**College Drive Corridor Enhancement from Perkins Road to I-10 (Baton Rouge, LA)** Reece was the task leader for organizing and formatting the **data collection** of the College Drive project limits. Tasks included in data collection were 7-day tube counts, intersection turning movement counts, approach tube counts, unmet demand observations, driveway counts, travel time runs, pedestrian / bicycle counts, and weaving counts.
07/19 – 12/19	**Burgess Avenue at Duff Road Traffic Signal Design, Walker, LA** Reece was responsible for the design of a fully actuated signalized intersection in the city of Walker, LA. The traffic signal was determined to meet signal warrants upon completion of the Foxglove subdivision in Livingston Parish, LA. Plans included road widening, signal face indication schedule, signal sequence chart, sign schedule, detector schedule, controller timing, wiring diagram, and free operation phasing diagram. Reece met with city officials to discuss the feasibility of constructing a traffic signal as opposed to other alternative measures for improving the intersection.
02/16 - 12/16	**H.005733.5 US 190 Superstreet Task Order (St. Tammany Parish)** Reece was a team member responsible for the layouts for the US 190 Superstreet signal designs. He created the **preliminary plans using CAD** software program MicroStation V8i. He aided in the technical design of each intersection. He conducted field inspections to verify locations of existing equipment as well as observing the area for feasible proposed utility locations. He attended project team meetings to discuss the project details as well as the plan-in-hand walk-through.
01/16 – 11/17	**Ochsner Main Campus Traffic Signals (Jefferson Parish)** Reece served as a design engineer for the **traffic signal plans** for the two Ochsner Main Campus access traffic signals with US 90 (Jefferson Hwy). The goal of the design was to implement updated pedestrian timings as well as optimize progression through the US 90 corridor. He reviewed traffic data and assigned time of day coordination timing parameters for the two intersections so that they may be included in the coordinated system west of the intersections. He used TruTraffic to determine the appropriate offset parameters so that vehicles may progress efficiently through the coordinated system. Plans for the two intersections were drafted in the form of DOTD's latest version of the TSI format. He was responsible for estimating construction quantities using DOTD's 2016 Spec Item list.
10/16 – 05/17	**Loyola Interchange Modification Request, Kenner, LA** Reece was a team member in the production of an Interchange Modification Report (IMR) for the I-10 at Loyola Dr. Interchange. He was an active member in collecting vehicle travel time data and processing the data. He also aided in collecting vehicle queues at the study intersections. He also assisted in the Vissim model calibration.
02/15 – 12/15	**H.011646 Retainer Contract for DOTD District 02 Traffic Signal Inventories - Nola 3** Reece served as the lead engineer in the production of the traffic study for the District 02 Traffic Signal Inventories. The objective was to effectively correct the progression of traffic through the US 90 (Broad St) corridor. He reviewed vehicle crash data at all intersections in the study scope. He conducted travel time runs. He created a model with existing traffic signal timing information using Synchro 8 Software. He recommended traffic signal pedestrian clearance times and yellow and red clearance times for each intersection. He used MicroStation V8i when designing traffic signal plans in DOTD's TSI format.

16. Staff Experience:

Firm employed by Vectura Consulting Services, LLC			
Name	Kristen Gahagan Farrington, PE, PTOE, RSP1	Years of relevant experience with this employer	2
Title	Project Traffic Engineer	Years of relevant experience with other employer(s)	7
Degree(s) / Years / Specialization		B.S. / 2013 / Civil Engineering	
Active registration number / state / expiration date		PE. 0042785 / LA / 3/31/2025	
Year registered	2016	Discipline	Civil
Contract role(s) / brief description of responsibilities		Project Engineer for Traffic Control Design, Traffic Signal Analysis and Design / TMPs / Peer Reviews	

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 years of experience specified in the applicable MPR(s).
12/21 – current	**H.012030.5 US 371 KCS RR Overpasses HBI (Webster Parish, LA)** Kristen was the project engineer to design permanent pavement marking and signing sheets for the construction plans in MicroStation. She will also participate in the QC of the sequence of construction and detour route.
04/21 - current	**CP No. 16 CI-US-0032 Bus Rapid Transit (BRT) Improvement Project (Baton Rouge, LA)** Kristen a project engineer for a **traffic design study and traffic signal design of 19 signals** along three corridors: Plank Road, 22nd Street and US 190 (Florida Street). Kristen assisted the prime consultant with the safety analysis as well.
08/21 – 04/22	**H.013267 Downtown to Scotlandville Parkway Trail Safety Enhancement Study (Baton Rouge, LA)** Kristen was a project engineer for a design study to evaluate the recommended street crossing treatments of the trail at eight locations. The project consisted of collecting **vehicular speed and volume data** at the proposed trail crossings. Geometric field checks were also performed to determine if any hazards to pedestrians or cyclists existed. Once the field data was collected and analyzed, appropriate crossing treatments utilizing the *FHWA STEP Guide for Improving Pedestrian Safety at Unsignalized Locations* were developed that included Rectangular Rapid-Flashing Beacons (RRFB) and Pedestrian Hybrid Beacons (PHB's). Currently, Vectura is developing plans for the PHB's at four locations which will be the first implementation of PHB's in the Baton Rouge area.
02/20 – 09/21	**MOVEBR College Drive Enhancement Project (Baton Rouge, LA)** Kristen assisted with the **data collection** task of the College Drive project limits. Tasks included in data collection were 7-day tube counts, intersection turning movement counts, approach tube counts, unmet demand observations, driveway counts, travel time runs, pedestrian / bicycle counts, and weaving counts.
6/19 - 2/21	**H.013459 US 167 Improvements Stage 0 Elsie Street to Gilbert Street (St. Landry Parish, LA)** Kristen served as project manager for a **Stage 0** study to evaluate the addition of a third lane to US 167 from Elsie Street south to a point past Gilbert Drive. Environmental impacts and cost estimates were prepared, as well as a benefit-cost analysis of all improvements considered. Civil Engineer responsible for safety analysis including crash rate number method, over-representation, CATScan quality assurance, HSM existing safety analysis, and No-Build Analysis. Designed high-level concept exhibits and comparison matrix to determine best preliminary alternatives moving forward to meet the purpose and need of the project. Compiled meeting agenda materials and minutes.
6/19 - 2/21	**H.013460 US 167 Improvements Stage 0 Enola Street to Ross Road (Evangeline Parish, LA)** Kristen served as project manager for a **Stage 0** study of a two-lane road to remove a curvilinear section of US 167 from Enola Street near LA 748, southeast for approximately 1.2 miles. The study compared connecting existing property owners to a new roadway with driveways or intersection of old roadway. Environmental impacts and cost estimates were prepared. Civil Engineer responsible for safety analysis including crash rate number method, over-representation, CATScan quality assurance, HSM existing safety analysis, and No-Build Analysis, as well as a benefit-cost analysis. Designed high-level concept exhibits and a comparison matrix to determine best preliminary alternatives moving forward to meet the purpose and need of the project. Compiled meeting agenda materials and minutes.
04/19 – 6/21	**H.013817.1 LA 117 Improvements Stage 0 (Vernon and Natchitoches Parishes, LA)** Kristen served as project engineer responsible for a **Stage 0** study for 18 miles of two-lane LA 117 from LA 8 to LA 118. The study evaluated the impacts of correcting deficient vertical and horizontal geometry along the corridor, widening for the addition of shoulders, and adding passing lanes and turn lanes at strategic locations along the corridor. Kristen was responsible for performing the safety analysis including crash rate number method, over-representation, CAT Scan quality assurance, HSM existing safety analysis, and No-Build Analysis. Kristen designed high-level concept exhibits, evaluated environmental impacts, and prepared high level cost estimates and comparison matrices to determine which preliminary alternatives best meet the purpose and need of the project. Kristen compiled all findings in the **Stage 0** report and coordinated with stakeholders and local agencies to ensure the purpose and need of project is met.

03/19 – 11/19	**H.012311 LA 429 Connector Stage 0 (Ascension Parish, LA)** Kristen was the task leader for the preparation of a **Stage 0** study to evaluate alignments for a limited-access corridor (LA 429) near I-10, between LA 30, LA 73, and US 61. Two alternatives for the widening and reconstruction of LA 429 were evaluated. The scope consisted of stakeholder and public meetings, site visits and data collection, phasing of alternative development for the corridor, scope and budget checklists, and an opinion of probable cost to prepare the **Stage 0** Report. Kristen served as the civil engineer responsible for designing high level concept exhibits and comparison matrix to determine best preliminary alternatives moving forward to meet the purpose and need of the project. Compiled meeting agenda materials and minutes, coordinated with interchange study consultants for a cohesive project, and wrote report.
11/18 - 3/21	**H.013322 LA 3040 Feasibility / Safety Study Stage 0 (Houma, LA)** Kristen served as project engineer for a study to identify safety and operational issues along 2.5 miles of Martin Luther King Boulevard (LA 3040) in Houma, LA to evaluate reasonable alternatives to address any deficiencies discovered. Kristen was responsible for compiling a data collection plan for submittal to DOTD, including count locations, determined peak periods, and peak hours. Kristen performed peak period observations in the field and geometric field checks, as well as **unmet demand observations and calculations**. Kristen prepared TMC figures, as well as performed existing analysis in Vistro. Compiled all data collected into Appendices A and B per the DOTD Traffic Process and Report and wrote Chapter 1 of report. Kristen represented the project at stakeholder meetings to discuss project status.
04/18 – 04/19	**H.011243.1 I-49 at US 190 and LA 31 Interchange Improvements Stage 0 (St. Landry Parish, LA)** Kristen was the project engineer responsible for crash and safety analysis, report writing, planning, and designing for this **Stage 0** Study to evaluate alternatives to improve traffic operations and safety at the I-49 interchanges with US 190 and LA 31. Crash and safety analysis was performed using the LADOTD CAT Scan tool and IHSDM, and line and grade was prepared to DOTD Design Standards for various corridors, including arterial collectors and freeway ramps. Close coordination with traffic engineer ensured maximum improvement of safety and operations given limited right-of-way and utility conflicts along the corridors.
09/17 – 09/18	**H.011160 LA 73 Corridor Study Stage 0 LA 74 to LA 621 (Ascension Parish, LA)** Kristen was the designer responsible for concept development, report writing, and impact analysis for a **Stage 0** study. The purpose of the study was to evaluate conceptual alternatives to improve capacity and operations along the LA 73 corridor and its connecting transportation network. The scope included the evaluation of three interchange configurations for the interchange of I-10 at LA 73 in conjunction with two corridor alternatives for LA 73, resulting in six different alternatives for which line and grade, impacts, and high-level cost estimates were prepared.
11/16 – 07/17	**H.001271 Cane River Bridge Church Street Route LA 1-X Environmental Assessment** Kristen was the project engineer responsible for assisting with the site visits, data organization, **analysis of permanent alternatives and traffic control alternatives**, and traffic report to aid in the delivery of an environmental assessment for the Cane River Bridge Replacement

16. Staff Experience:

Firm employed by **Civil Design & Construction, Inc. (CD&C)**					
Name	Karla E. Weston, PE		Years of relevant experience with this employer	17	
Title	President		Years of relevant experience with other employer(s)	6	
Degree(s) / Years / Specialization			Bachelor of Science / 1999 / Civil Engineering		
Active registration number / state / expiration date			31010 / Louisiana / March 31, 2024		
Year registered	2004	Discipline	Civil Engineer		
Contract role(s) / brief description of responsibilities			Mrs. Weston will oversee the firms' role as a sub-consultant and make sure the work is completed to LADOTD standards.		

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 years of experience specified in the applicable MPR(s).
02/16-09/19	**H.003047 Pecue Lane/I-10 Interchange, Baton Rouge, LA**: Mrs. Weston's served as Principal-in-Charge for the firm's role as a sub-consult for the engineering design services of the West Bound on Ramp to I-10, the West Bound Off Ramp from I-10, the extension to Rieger Road and Pecue Lane Extension. She has worked to oversee the firms design, coordinate with the prime consultant and government agencies.
12/13 – 10/19	**H.02960 Gramercy Bridge, St. James Parish, LA**: Mrs. Weston served as Principal-in-Charge for the firm's role as a subconsultant for the engineering design elements of the plans including Hydraulic Analysis and Design, Typical Sections, and Graphical Grades for the project
02/14 - 02/15	**H.010620 I-49 Design Build, Lafayette, LA**: Mrs. Weston provided QA/QC review for the Roadway Design Plans on this Design-Build Project for part of the I-49 South Corridor.
05/13 – 05/14	**H.009288.5 LA 1 Railroad Bridge at DOW, WBR Parish, LA**: Mrs. Weston served as Principal-in-Charge for the firm's role as a sub-consult for the engineering design elements of the plans including Hydraulic Analysis and Design, Typical Sections, and Graphical Grades for the project. She has worked to oversee the firms design, coordinate with the prime consultant and government agencies.
01/06 – 12/12	**EBR City/parish Project No. 06-CS-HC-0018, Fairchild-Badley Roadway, EBR Parish, LA**: Mrs. Weston served as Principal in Charge for this project that was approx. 1.25 miles in length along Fairchild-Badley Road and also included approximately 600 linear feet of Elm Grove Garden Dr. CD&C designed the upgrade to the existing narrow roadway to a typical section of 2-11' lands with a 2' barrier curb and gutter, and a 6' adjacent sidewalk. This included the design of a new sub-surface drainage system throughout the length of the project as well.
03/12 – 07/12	**H.009104.5 - Sunshine Bridge Phase 2:** Ms. Weston served as Project Manager and Engineer for CD&C's portion of this Bridge Rehab Retainer Contract project which included the Traffic Management plans for the project. CD&C provided the Traffic Control design plans including detour maps of local road network for the repairs and widening to the Sunshine Bridge.
05/11 – 04/12	**Red River – Jackson Street Bridge, Alexandria, LA:** Ms. Weston served as Project Manager and Engineer for CD&C's portion of this Bridge Rehab Retainer Contract project which included the Traffic Management plans for the project. CD&C provided the Traffic Control design plans including detour maps of local road network for the replacement of the Jackson Street Bridge over the Red River.

06/12 – 10/12	**H.009986 – Paths 2 Progress. Jefferson, Orleans, Plaquemines, St. Bernard and St. Tammany Parishes – Group 33** Ms. Weston served as the Principal-in-charge/Project Manager for this roadway rehabilitation project of roads in Jefferson Parish. This included field reconnaissance to determine severity of inundated roadways due to Hurricane Katrina, preparation and detailing of roadway rehabilitation plans, typical sections, providing quantity calculations, etc.
12/11 – 4/12	**H.005902.5 - Consulting Services for the Permanent Repair to Federal Aid Eligible Roads as a Result of Damage due to Hurricane Katrina in 2005. Jefferson, Orleans, Plaquemines, St. Bernard and St. Tammany Parishes – Group 29** Ms. Weston served as the Principal-in-charge/Project Manager for this project which included survey, field reconnaissance to determine severity of inundated roadways due to Hurricane Katrina in the City of New Orleans, preparation and detailing of roadway rehabilitation plans, typical sections, providing quantity calculations, etc.
01/06 – 07/06	**Picardy Avenue Extension–City/Parish of East Baton Rouge:** Mrs. Weston served as Principal-in-Charge for this extension of Picardy Avenue, connecting Bluebonnet Blvd. with I-10 West. Duties included project layout and design as wells as subsurface drainage design for approximately ½ mile.

16. Staff Experience:

Firm employed by	**Civil Design & Construction, Inc. (CD&C)**				
Name	Ralph Burgess, PLS		Years of relevant experience with this employer	12	
Title	Principal Land Surveyor		Years of relevant experience with other employer(s)	12	
Degree(s) / Years / Specialization			BS / 2004 / Industrial Design & Supervision, Southeastern LA University		
Active registration number / state / expiration date			5040 / Louisiana – September 30, 2024		
Year registered	2010	Discipline	Land Surveyor		
Contract role(s) / brief description of responsibilities.			Mr. Burgess serves as the Survey Manager for this project. He will work to oversee the project progress stays on schedule, aide in both crew coordination and office production, and provide final QC on the firms' deliverable to the Prime Consultant. Mr. Burgess has an extensive background in providing topographic surveys for LADOTD in accordance with Location and Survey policies and procedures. He has overseen projects utilizing traditional means and methods of collecting data as well as those that include the use of 3D Terrestrial Scanning.		

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 years of specified in the applicable MPR(s).
02/22-11/22	**H.02728.5 LWI Region 5 – Task Order #2** Mr. Burgess was the Survey Manager for this project. CD&C as a sub-consultant on this project was responsible for topographic survey of various structures in Lafayette Parish, Vermillion Parish, and St. Mary Parish to help fill in data for the watershed model. The topographic data for this project was collected both traditionally and utilizing 3D Scanning. Mr. Burgess worked with sub-consultant, HDR as well as CD&C crews to obtain and incorporate all utility data as well.
02/22-11/22	**H.02728.5 LWI Region 5 – Task Order #3** Mr. Burgess was the Survey Manager for this project. CD&C as a sub-consultant on this project was responsible for topographic survey of various structures in Lafayette Parish, Vermillion Parish, and St. Mary Parish to help fill in data for the watershed model. The topographic data for this project was collected both traditionally and utilizing 3D Scanning. Mr. Burgess worked with sub-consultant, HDR as well as CD&C crews to obtain and incorporate all utility data as well.
10/20 – 01/21	**H014302 US 165 Lighting, Monroe, LA:** Mr. Burgess served as the Survey Manager on this project. CD&C was a sub-consultant on this project and was responsible for topographic surveying of US 165 south of Monroe for a highway lighting improvement. The topographic data for this project was collected both traditionally and with the use of 3D Terrestrial Scanning.
09/21 – 03/22	**H.014747 Southern University Ravine Protection, East Baton Rouge Parish**:Mr. Burgess was the Survey Manager for this project. CD&C as a sub-consultant on this project was responsible for topographic survey of the sites at Southern University The topographic data for this project was collected both traditionally and utilizing 3D Scanning. Mr. Burgess worked with SUE sub-consultant, TBS, as well as CD&C crews to obtain and incorporate all utility data as well.
08/21 – On-Going	**H.011833.5 St. Mary Street Sidewalks; Scott, LA**:Mr. Burgess was the Survey Manager for this project. CD&C completed a topographic along this route. The survey utilized 3D Terrestrial Scanning of all hard surfaces and traditional methods for all other features. CD&C SUE personnel worked to coordinate the collection for all the utility information and location such that survey crews could collect data and incorporate for the submittal up to QLD Level B however an official SUE submittal was not required of this project. Final submittal will be in accordance with latest LADOTD Location and Survey standards.
7/17-12/18	**H.010960.5-2, LA 30 Roundabout at Tanger I-10, Ascension Parish, LA**: Mr. Burgess served as Survey Manager for the project. Duties included meeting with LADOTD & Cardno, Inc for utility locations, coordination of crews and 3D terrestrial scanning crew along with

	office personnel, coordination. Special duties were merging of two state projects with project survey for final submittal to combine all projects together.
03/22 – 09/22	**H.010960.5-2 Roundabouts at LA 182, Lafayette, LA**: Mr. Burgess served as Survey Manager for the project. CD&C completed a topographic along this route. The survey utilized 3D Terrestrial Scanning of all hard surfaces and traditional methods for all other features. CD&C SUE personnel worked to coordinate the collection for all the utility information and location such that survey crews could collect data and incorporate for the submittal up to QLD Level B however an official SUE submittal was not required of this project. Final submittal was in accordance with latest LADOTD Location and Survey standards.
07/20 – 04/21	**H.001352.5 and H.002273.5 Comite River Diversion Bridge at LA 67, LA 19 and LA 19 Railroad Bridge, East Baton Rouge Parish**: Mr. Burgess was the Survey Manager for this project. CD&C as a sub-consultant on this project was responsible for topographic surveying the LA 67 and LA 19 sites of the Comite River Diversion project. This included merging of data from a previous survey on one portion of the site and field verifications of that data. The topographic data for this project was collected traditionally.
01/18-01/20	**H.004100 I-10: LA 415 to Essen Lane on I-10 and I-12, West and East Baton Rouge, LA**: . Burgess was the surveying Manager for this project. CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415 including work on Tributaries of the Intercoastal Canal. This work included using 3D Scanning for the bridge at I-10 bridge @ LA 415 as well as scanning every 500' for control verification and incorporation of the Mobile Lidar for the I-10 pavement.
7/17-12/18	**H.010960.5-2, LA 30 Roundabout at Tanger I-10, Ascension Parish, LA**: Mr. Burgess served as Survey Manager for the project. Duties included meeting with LADOTD & Cardno, Inc for utility locations, coordination of crews and 3D terrestrial scanning crew along with office personnel, coordination. Special duties were merging of two state projects with project survey for final submittal to combine all projects together.
01/16-08/16	**H.005733.5 US 190 Superstreet, St. Tammany Parish, LA**: Mr. Burgess served as Survey Manager for the project. Duties included complete topographic survey and drainage map for this project including all utility coordination. The survey began at the intersection of US 190 and Holiday Square Frontage Road. From this point, the survey proceeded in a northerly direction along US 190 for approximately 2.9 miles to a point that is 700 feet South of Intersection of US 190 and E. Boston St. in Covington, LA. This project also included work in the Abita River and utilized 3D Terrestrial Scanning for the main route.
10/15-12/18	**H.003184.5 I-10 Texas State Line –East of Coone Gully, Calcasieu Parish, LA**: Mr. Burgess served as Survey Manager for the project. Duties included meeting with LADOTD, coordination of traditional crews and 3D terrestrial scanning crew, coordination of utility companies on the project, review and verification of drainage crossing I10, merging of existing topographic survey of bridges from LADOTD and final review of all survey data for submittals
08/16- On-Going	**H.011235 I-49 South at Verot School Road, Lafayette, LA**: Mr. Burgess served as the Survey Manager for the project. Duties included meeting with LADOTD, and all consultants on the team, coordination of both traditional crews and 3D terrestrial scanning crew, coordination of survey crews with Cardno, Inc, utility locations on the project, met and review right of entry with landowners for project, review of drainage map, merging of existing topographic survey of the I-49 Connector project from LADOTD with current survey of project, review of apparent right of way mapping for prime consultant, and final review of all survey data. **He is also now overseeing Final ROW Mapping for this project.**

16. Staff Experience:

Firm employed by	**Civil Design & Construction, Inc. (CD&C)**				
Name	Chris Ballard, PLS		Years of relevant experience with this employer	8	
Title	Survey Project Manager		Years of relevant experience with other employer(s)	19	
Degree(s) / Years / Specialization			BS / 2004 / Biological Science / Southeastern LA University		
Active registration number / state / expiration date			5033 / Louisiana – September 30, 2022		
Year registered	2010	Discipline	Land Surveyor		
Contract role(s) / brief description of responsibilities.			Mr. Ballard serve as the Survey Project Manager for this project. He will work to oversee the project progress stays on schedule, aide in both crew coordination and office production, and provide final QC on the firms' deliverable to the Prime Consultant. Mr. Burgess has an extensive background in providing topographic surveys for LADOTD in accordance with Location and Survey policies and procedures. He has overseen projects utilizing traditional means and methods of collecting data as well as those that include the use of 3D Terrestrial Scanning.		

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 years of specified in the applicable MPR(s).
09/01/18-01/20	**H.004100 I-10: LA 415 to Essen Lane on I-10 and I-12, West and East Baton Rouge, LA**: Mr. Ballard is the Surveying Project Manager for this project. CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415 including work on Tributaries of the Intercoastal Canal. This work included using 3D Scanning for the bridge at I-10 bridge @ LA 415 as well as scanning every 500' for control verification and incorporation of the Mobile Lidar for the I-10 pavement.
04/17-07/17	**H.010006.5-3 LA 58 Petit Caillou Bridge Rehabilitation (Sarah Bridge), Terrebonne Parish, LA**: Mr. Ballard served as the firms Survey Project Manager on this project which included a complete topographic survey, utility coordination, channel cross sections, and the scanning of the existing vertical lift bridge for the design of its repairs/replacement. Project included data collection of the topography via traditional means and methods along with 3D terrestrial scanning and hydrographic surveying.
02/19-09/19	**Bridge Replacements in East Feliciana Parish, Rural East Feliciana Parish, LA**: Mr. Ballard is serving Survey Project Manager for this project for East Feliciana Parish Police Jury. It includes the replacement of 2 bridges which were damaged from flooding and the repairs to many rural roadways throughout the parish. These projects are being funded thru FEMA and all documentation has to be in accordance with FEMA's policies and procedures.
01/17-12/17	**East Baton Rouge Parish Bridges, East Baton Rouge Parish, LA:** In 2017, CD&C has performed topographic surveys for at least 4 Bridge Replacement Projects throughout East Baton Rouge Parish. Mr. Ballard served as Survey Project Manager on each of these projects which included cross-sectioning and tracing the channel at each location. These included bridges over Dawson Creek, Claycut Bayou, Copper Mill Bayou, and Cypress Bayou.
10/16 - 11/16	**H.012728.5 LA 443: Tangi River Bridge Replacement, Tangipahoa Parish, LA**: Mr. Ballard served as the Project Manager for this Project. Among the duties performed for the project were review of the crew work conditions, review & processing of the survey data, verification, and review of final submittal. CD&C completed a topographic survey which included all utilities with depths, all drainage, all building information including finish floor elevations, and all super/substructure of the bridge over the Tangipahoa River. Additional information regarding the river was located by traditional means upstream and downstream for the engineer's design of the new bridge. To

	utilize data collection of the failed bridge, **3D Terrestrial Scanning** was incorporated in conjunction with traditional means to complete the topographic survey. Due to the nature of the project being an Emergency Bridge replacement all staff worked on this project non-stop until field work was completed in less than 3 weeks.
09/17 -09/17	**H.012650.5-1 District 62 Bridges, Livingston and Tangipahoa Parishes, LA**: Mr. Ballard served as a Survey Project Manager for this project which included 5 bridge sites in District 62. In addition to all of the existing data for the bridge and roadway at each site, each channel was cross-sectioned both upstream and downstream of the bridge. These included bridges over the US 190 Bridge over Gray's creek, 2 bridges on LA 442 both crossing East Hog Branch, LA 1063 over the Natalbany River, and US 51 over Ponchatoula Creek. Several of these bridges including the US190 one was surveyed utilizing **3D Terrestrial Scanning**.
10/15 - 12/18	**H.003184.5 I-10 Texas State Line – East of Coone Gully, Calcasieu Parish, LA**: Mr. Ballard served as the Survey Project Manager on this project which is a 6-lane widening of I-10. Duties performed on this project included the review of the survey information from crew, verification of project delivery schedule, processing of data and final review of submittal of project. 3D Terrestrial Scanning was used in conjunction with traditional means and methods for the completion of this project.
01/16 - 08/16	**H.005733.5 US 190 Superstreet, St. Tammany Parish, LA**: Mr. Ballard served as the Survey Project Manager on this project. CD&C provided a complete topo survey & drainage map along with utility coordination for the project. Project duties included processing of data, review of field notes and weeklies, & performing final punch list. This project also included work in the Abita River utilized 3D Terrestrial Scanning for the main route.
10/15 - 01/16	**H.011773 Hanks Dr/Landis Drive Pedestrian Improvements, East Baton Rouge Parish, LA**: Mr. Ballard served as the Survey Project Manager on this project that included a topographic survey and establishment of the ROW for Hanks Dr. for installation of new sidewalk.
06/11 - 09/13	**260-01-0028, H.002372 LA 42 Widening and Improvements, Ascension Parish, LA**: Mr. Ballard worked as a PLS on this project which included boundary and topography, establishing the existing ROW and acquisition of additional ROW.
07/17 - 12/18	**H.010960.5-2, LA 30 Roundabout at Tanger I-10, Ascension Parish, LA**: Mr. Ballard served as the Survey Project Manager on this project that includes a complete topo survey, utility coordination and drainage, along with finish floor elevations of all buildings that fall within the survey limits. Project included data collection of the topography via traditional means and methods along with **3D terrestrial scanning.**

16. Staff Experience:

Firm employed by Civil Design & Construction, Inc. (CD&C)			
Name	Clarence J. Goodspeed	Years of relevant experience with this employer	> 1 yr.
Title	Utility Coordinator	Years of relevant experience with other employer(s)	30 years
Degree(s) / Years / Specialization			
Active registration number / state / expiration date			
Year registered	Discipline		
Contract role(s) / brief description of responsibilities * Dates not included as work was done at previous Employer		*Mr. Goodspeed has 30 years' experience in underground utilities. Mr. Goodspeed has been involved in almost every aspect of underground utilities and His knowledge of reading multiple utility companies prints and understand how their systems are installed makes him a great asset to managing CD&C Sue department.	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
09/22 – On-Going	**(Proj# Not Available) BRMA Northwest Aviation Development**: Mr. Goodspeed serves as the firms SUE PM for the project. He is overseeing and working with CD&C SUE personnel to coordinate the collection for all the utility information and location such that survey crews could collect data and incorporate for the submittal up to QLD Level B however an official SUE submittal was not required of this project. Final submittal was in accordance with standards set forth by City/Parish government for East Baton Rouge.
03/22 – On-Going	**H.011833.5 St. Mary Street Sidewalks; Scott, LA**: Mr. Goodspeed serves as the firms SUE PM for the project. He is overseeing and working with CD&C SUE personnel to coordinate the collection for all the utility information and location such that survey crews could collect data and incorporate for the submittal up to QLD Level B however an official SUE submittal was not required of this project. Final submittal was in accordance with latest LADOTD Location and Survey standards.
03/22 – 09/22	**H.010960.5-2 Roundabouts at LA 182, Lafayette, LA**: Mr. Goodspeed serves as the firms SUE PM for the project. He is overseeing and working with CD&C SUE personnel to coordinate the collection for all the utility information and location such that survey crews could collect data and incorporate for the submittal up to QLD Level B however an official SUE submittal was not required of this project. Final submittal was in accordance with latest LADOTD Location and Survey standards.
01/99 – 1/2000; 01/01 – 12/03; 01/12-04/12; 01/13 – 03/22	**BHA Engineering** Damage prevention tech (Underground Locator) contracted to Demco Electric to locate their underground facilities.
04/12-12/12	**Fibore** Filled in as supervisor for burying Charter Communication service drop crews, installation of main and service drops with directional boring rig, assisted in settling property damage claims, and assisted in pointy of contact with Charter Construction personal.
07/06-12/06	**Bron Construction** Assisted in maintenance, and new construction of Entergy Electric underground and some overhead lines.
12/03 – 07/06	**UtiliQuest LLC** Supervisor, Damage Investigator, State Claims Manager, and Operations Manager. Also, took part in negation of contracts.

16. Staff Experience:

Firm employed by	**Civil Design & Construction, Inc. (CD&C)**			
Name	Philip Dupree	Years of relevant experience with this employer		11
Title	Survey Party Chief	Years of relevant experience with other employer(s)		30
Degree(s) / Years / Specialization				
Active registration number / state / expiration date		NSPS Certified Survey Technician, Level III, Boundary Cert. No. 0799-1106 Nationwide; ATSSA Certified as Registered Flagger ATSSA Certified Traffic Control Tech & Traffic Control Supervisor		
Year registered		Discipline		
Contract role(s) / brief description of responsibilities		Mr. Dupree is the Senior Survey Party chief who will work to oversee a crew as well as aide in coordinating all crews with Survey PM to ensure field work is being completed timely and accurately.		

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).
02/22 - 11/22	**H.02728.5 LWI Region 5 – Task Order #2** Mr. Dupree is the Survey Party Chief for this project. CD&C as a sub-consultant on this project was responsible for topographic survey of various structures in Lafayette Parish, Vermillion Parish, and St. Mary Parish to help fill in data for the watershed model. The topographic data for this project was collected both traditionally and utilizing 3D Scanning.
02/22 - 11/22	**H.02728.5 LWI Region 5 – Task Order #3** Mr. Dupree is the Survey Party Chief for this project. CD&C as a sub-consultant on this project was responsible for topographic survey of various structures in Lafayette Parish, Vermillion Parish, and St. Mary Parish to help fill in data for the watershed model. The topographic data for this project was collected both traditionally and utilizing 3D Scanning.
09/21 – 03/22	**H.014747 Southern University Ravine Protection, East Baton Rouge Parish**: Mr. Dupree is the Survey Party Chief for this project. CD&C as a sub-consultant on this project was responsible for topographic survey of the sites at Southern University. The topographic data for this project was collected both traditionally and utilizing 3D Scanning.
01/18-02/2020	**H.004100 I-10: LA 415 to Essen Lane on I-10 and I-12, West and East Baton Rouge, LA:** Mr. Dupree is the Survey Party Chief for this project. CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415.
07/17-12/2018	**H.010960.5-2, LA 30 Roundabout at Tanger I-10, Ascension Parish, LA:** Mr. Dupree is serving as Field coordinator on this project by working specifically to set the control on the job and overseeing field crews as they work to complete the topography.
10/15-12/2018	**H.011235 I-49 South at Verot School Road, Lafayette, LA:** Mr. Dupree served as Field coordinator on this project. He resurrected the original control set on the project and oversaw the checking of it. Mr. Dupree was the field coordinator with the R/R and also the SUE contractor on the project. He oversaw all field crews and ensured that the project was completed accurately and timely.
01/16-08/2016	**H.005733.5 US 190 Superstreet, St. Tammany Parish, LA:** Mr. Dupree served as Field coordinator on this urban roadway topography project that included 3D scanning in addition to traditional topography. He oversaw the daily progress of both traditional field crews and scan crews and completed the project accurately and on schedule.
10/16-11/2016	**H.012728.5 LA 443: Tangi River Bridge Replacement, Tangipahoa Parish, LA**: Mr. Dupree served as Field coordinator on this project. CD&C completed a topographic survey which included all utilities with depths, all drainage, all building information including finish floor elevations, and all super/substructure of the bridge over the Tangipahoa River. Additional information regarding the river

	was located by traditional means upstream and downstream for the engineer's design of the new bridge. To utilize data collection of the failed bridge**,** 3D Terrestrial Scanning was incorporated in conjunction with traditional means to complete the topographic survey.
07/14/10/2015	**H.010319.5 I-110 North St. to Plank Road, Baton Rouge, LA:** Mr. Dupree served as Field coordinator on this heavily traveled Interstate project that included 3D scanning in addition to traditional topography. He oversaw the daily progress of both traditional field crews and scan crews and completed the project accurately and on schedule. He also coordinated with the district and state police to oversee the rolling lane closure that was required to obtain the drainage invert data.
05/13-07/13	**H.009288 LA 1 Railroad Bridge at DOW, West Baton Rouge, LA**: Mr. Dupree served as Senior Party Chief for this project located in West Baton Rouge Parish. The intent is to create a grade separation at the intersection of LA 1 and the R/R spur for DOW. CD&C is performing all of the topographic survey for this project including utility coordination and R/R coordination and permits so that CD&C can survey the spur and parallel line.
10/14-12/14	**H.011088.5 West Prien Lake, Lake Charles, LA**: Mr. Dupree served as the Senior Party Chief for this project working to collect all field data as required by the project. This project was to provide topographic survey for a new route to be constructed. Topographic survey and DTM was required along the proposed alignment including all utilities and all drainage with the survey limits.
02/14-03/17	**H.010620 I-49 Design Build**: Mr. Dupree served as the Senior Party Chief for this project working to collect all field data as required by the project. CD&C also produced ROW maps for the project. Mr. Dupree also was the lead Party Chief for the property surveys on this project.

17. Firm Experience:

See Project Sheets on subsequent pages.

Project Name	Project Relevance
LA 342: Roundabout @ LA724	Road, Survey
I-10: LA 347 to Atchafalaya Fldwy Bridge	Road, Survey
LA347: Roundabout @ Melancon Rd	Road, Survey
I-20: Exit Lane Extensions Exits 3 & 5 Route I-20	Road
US 171 : J-Turns @ N. Perkins Ferry Road	Road
I-12 to Bush – LA 3241 Corridor Study	Traffic
East Baton Rouge Parish MOVEBR Program Mngt.	Traffic
LA 1 at LA 990 Crosswalk Study & Traffic Signal Design	Traffic
I-10 : TX State Line East of Coone Gully	Survey
I-10: LA 415 to Essen Lane on I-10 and I-12	Survey
Verot School Road	Survey

17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Survey, Road**	
Project name	**LA 342: Roundabout @ LA 724 Route LA 342**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**H.002163**	Owner's name	**LA DOTD**		
Project location	**Lafayette Parish**	Owner's Project Manager	**Tim Nickel, PE**		
Owner's address, phone, email	**P.O. Box 94245, Baton Rouge, LA 70806, 225-379-1110, Timothy.Nickel@la.gov**				
Services commenced by this firm (mm/yy)	**01/14**	Total consultant contract cost ($1,000's)		**$282.8**	
Services completed by this firm (mm/yy)	**07/16**	Cost of consultant services provided by this firm ($1,000's)		**$282.8**	

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

This project included full topographic surveying, right of way mapping, and road design for a new single lane roundabout in Lafayette, LA.

Sigma designed a roundabout at the intersection of Ridge Road and Fieldspan Road. The intersection geometry includes an urban two-lane highway to the east (LA 342), a local two lane road to the west (Ridge Rd.), and an urban two lane highway to the north (LA 724) and south (LA 342 / LA 724). The design of the project is in conformance with EDSM VI.1.1.6, along with all recommendations from the project roundabout study. The project included subsurface and open ditch drainage through and area with minor historic flooding and very little hydraulic fall.

The topo survey included topography of the existing roadway, drainage features, existing utilities and roadside features. Sigma coordinated with the DOTD District 03 Utility Coordinator and utility owners for utility impacts to the project. Right of way maps were also prepared by Sigma in accordance with DOTD Location & Survey requirements.

Sigma Firm Members Involved:

In Charge: Robbie Lear
Josh Renard
Greg Sepeda
Alex Farr
Miles Williams
Lance Amedee
Donnie Thymes

Topographic / Property Survey & R/W Maps

- GPS Control Sketch
- Field Topography
- Property Survey
- Title Research Reports
- Right of Way Maps
- Utility Coordination: QL-D and QL-C
- Topographic Mapping with INROADS Survey

Road Design (Preliminary & Final Plans)

- Horizontal & Vertical Geometry
- Design Report
- Typical Sections
- Geometric Details
- Plan / Profiles
- Drainage Design
- Cross Sections
- Permanent Signing & Striping
- Construction Sequencing
- Engineer's Construction Cost Estimate & Quantities
- Microstation / CadConform Plan Delivery

17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Road**	
Project name	**I-10: LA 347 to Atchafalaya Floodway Bridge**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**H.003014**	Owner's name	**LA DOTD**		
Project location	**St. Martin Parish**	Owner's Project Manager	**Nick Olivier, PE**		
Owner's address, phone, email	**P. O. Box 94245, Baton Rouge, LA 70806, (225) 379-1133, Nicholas.Olivier@LA.GOV**				
Services commenced by this firm(mm/yy)	**06/13**	Total consultant contract cost ($1,000's)		**$852.7**	
Services completed by this firm (mm/yy)	**Ongoing**	Cost of consultant services provided by this firm ($1,000's)		**$852.7**	

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

Sigma is the prime consultant for this project which includes topographic and control surveying, interstate highway design, diamond interchange design with roundabouts at the ramp termini, and roadway improvements to LA 347.

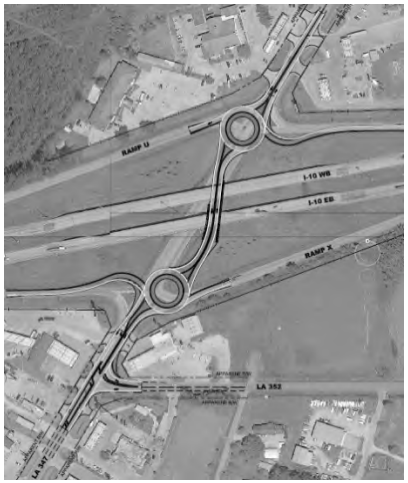
Sigma performed the topographic survey which includes four bridges, a wooded median, drainage structures and outfalls, interchanges, roadways along LA347 and LA352, and utility crossings. LA DOTD survey and linework codes were used in the field. Sigma used Inroads Survey, CadConform, and LA DOTD codes to prepare the topographic map and required .fwd, .dtm, and .alg files for this project.

The interstate design includes 3 lanes in the WB direction and 2 lanes in the EB direction separated by either a median barrier or a wooded median. A complex sequence of construction was developed to allow for construction of new ramp termini at LA 347 with roundabouts and to handle traffic at the Atchafalaya Basin Bridge for approach slab construction. Sigma coordinated closely with DOTD Bridge Design section, which was responsible for bridge widening at two locations. Detailed hydraulic analysis of the outfall channel adjacent to LA352 including HEC-RAS modeling was conducted by Sigma to alleviate flooding problems at the interchange.

Sigma assembled the multi-discipline plan set, quantities, pay items and worked with DOTD Project Management to develop the estimated construction costs. Sigma is currently providing construction support.

Road Design (Preliminary & Final Plans)

- Expedited Schedule
- Interstate Highway Design
- Interchange Design - Roundabout Design
- Typical Sections – PCC and Asphalt Alternates
- Open Ditch and Subsurface Drainage Design
- Plan Profiles
- Geometric Details
- Complex Sequence of Construction
- Level 4 Traffic Management Plan
- Cross Sections
- Permit Sketches
- Coordinated Roadway Lighting with Sub
- Utility Conflict Matrix & Coordination with District Utility Engineer
- Construction Support
- Multi-Discipline Plan, Pay Item, Cost Estimate Assembly
- QA/QC Checklist



Sigma Firm Members Involved:

In Charge: Robbie Lear

Greg Sepeda	Miles Williams
Alex Farr	Bryan Harmon
Derek Wheat	Josh Renard

17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Survey, Road**	
Project name	**LA 347: Roundabout @ Melancon Rd. Route LA 347**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**H.009456**	Owner's name	**LA DOTD**		
Project location	**St. Martin Parish**	Owner's Project Manager	**Christina Brignac, PE**		
Owner's address, phone, email	**P.O. Box 94245, Baton Rouge, LA 70806, 225-379-1445, Christina.Brignac@la.gov**				
Services commenced by this firm (mm/yy)	**01/14**	Total consultant contract cost ($1,000's)		**$297.9**	
Services completed by this firm (mm/yy)	**12/16**	Cost of consultant services provided by this firm ($1,000's)		**$297.9**	

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

This project included full topographic surveying, right-of-way mapping, and road design for a new single lane roundabout in Breaux Bridge, LA.

Sigma designed a single-lane 4-legged roundabout at the intersection of LA 347 and Doyle Melancon Rd. / Extension. The design of the project is in conformance with EDSM VI.1.1.6, along with all recommendations from the project roundabout study. The project included relocation of a large drainage ditch and 72" CMPA subsurface drainage. The geometrics were designed to eliminate impacts to a significant oak tree at the southeast quadrant of the intersection.

The topo survey included topography of the existing roadway, drainage features, existing utilities and roadside features. Sigma coordinated with the DOTD District 03 Utility Coordinator and utility owners for utility impacts to the project. Right of way maps were also prepared by Sigma.

Sigma Firm Members Involved:

In Charge: Robbie Lear
Josh Renard
Greg Sepeda
Alex Farr
Miles Williams
Lance Amedee
Donnie Thymes

Topographic / Property Survey & R/W Maps

- GPS Control Sketch
- Field Topography
- Property Survey
- Title Research Reports
- Right of Way Maps
- Utility Coordination: QL-D and QL-C
- Topographic Mapping with INROADS Survey

Road Design (Preliminary & Final Plans)

- Horizontal & Vertical Geometry / Design Report
- Typical Sections
- Geometric Details
- Plan / Profiles
- Drainage Design
- Cross Sections
- Permanent Signing & Striping
- Construction Sequencing
- Engineer's Construction Cost Estimate & Quantities
- Microstation / CadConform Plan Delivery

17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Road**	
Project name	**I-20: Exit Lane Extensions Exits 3 & 5 Route I-20**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**H.010202**	Owner's name	**LA DOTD**		
Project location	**Caddo Parish**	Owner's Project Manager	**Trey Jesclard, PE**		
Owner's address, phone, email	**P.O. Box 94245, Baton Rouge, LA 70806, 225-379-1445, trey.jesclard@la.gov**				
Services commenced by this firm(mm/yy)	**08/13**	Total consultant contract cost ($1,000's)		**$152.1**	
Services completed by this firm (mm/yy)	**08/15**	Cost of consultant services provided by this firm ($1,000's)		**$107.2**	

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

This project is a safety project issued as a task order under our Safety Retainer contract with LA DOTD. The project included road design to extend three deceleration lanes at two exits on I-20 west of Shreveport, LA. These locations include I-20 Eastbound at US 79 (Exit 3), I-20 Eastbound at US 80 (Exit 5) and I-20 Westbound at US 80 (Exit 5). The exits are near truck stops that serve many trucks on a daily basis. The extension of the deceleration lanes allow for trucks exiting the interstate to decelerate outside of the through lanes and not disrupt the normal flow of traffic. The design included replacement of the inside 4' shoulder with full depth asphalt pavement to accommodate temporary traffic shifts necessary for construction. Also, the ramp exit gore area was redesigned to include escape tapers in accordance with SC-01.

All work was performed inside the existing right of way.

Sigma Firm Members Involved:
In Charge: Josh Renard
Greg Sepeda
Robbie Lear
Miles Williams
Lance Amedee
Donnie Thymes

Road Design (Preliminary & Final Plans)

- Horizontal & Vertical Geometry / Design Report
- Typical Sections
- Geometric Details
- Plan / Profiles
- Drainage Design
- Graphical Grades for Superelevated Exit Curves and Transitions
- Cross Sections
- Permanent Striping
- Construction Sequencing
- DOTD Electronic Plans Deliverables and CadConform
- Level 4 Transportation Management Plan (TMP)
- Engineer's Construction Cost Estimate & Quantities

17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Survey, Road**	
Project name	**US171: J-Turns @ N. Perkins Ferry Road**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**H.010197**	Owner's name	**LA DOTD**		
Project location	**Calcasieu Parish**	Owner's Project Manager	**Trey Jesclard, PE**		
Owner's address, phone, email	**P.O. Box 94245, Baton Rouge, LA 70806, 225-379-1445, Trey.Jesclard@la.gov**				
Services commenced by this firm (mm/yy)	**09/13**	Total consultant contract cost ($1,000's)		**$145.4**	
Services completed by this firm (mm/yy)	**10/15**	Cost of consultant services provided by this firm ($1,000's)		**$145.4**	

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

This project is a safety project issued as a task order under our Safety Retainer contract with LA DOTD. The project included full topographic surveying and road design to install new J-Turns and associated turn lanes at the intersection of N. Perkins Ferry Road and US Highway 171 north of Lake Charles, LA.

The project included the following features:

- Addition of a right turn lane on N. Perkins Ferry Road EB to US 171.
- Modifications to the existing median opening to only allow left turn movements from US 171 NB onto N. Perkins Ferry Road WB.
- Addition of a left turn lane on US 171 SB and median opening 1450' south of the intersection for the J-Turn, and shoulder improvements to US 171 NB to accommodate the U-turn turning movement.
- Addition of a turn lane on US 171 SB 1500' north of the intersection and a single lane ramp to tie back into N. Perkins Ferry Road WB.

Sigma coordinated with the DOTD District 07 Utility Coordinator and utility owners to ensure proper depiction of existing utilities.

Sigma Firm Members Involved:
In Charge: Greg Sepeda
Robbie Lear
Miles Williams
Lance Amedee
Donnie Thymes

Topographic Survey / Property Survey & Right-of-Way Maps

- GPS Control Sketch
- Utility Coordination: QL-D and QL-C
- Topo Mapping with INROADS Survey
- Property Survey
- Title Research Reports
- Right-of-Way Maps

Road Design (Preliminary & Final Plans)

- Horizontal & Vertical Geometry
- Typical Sections
- Geometric Details
- Plan/Profiles
- Drainage Design
- Cross Sections
- Permanent Pavement Markings
- Construction Sequencing
- DOTD Electronic Plans Deliverables and CadConform

17. Firm Experience:

Firm name	Vectura Consulting Services, LLC		Past Performance Evaluation Category(ies)*	Traffic	
Project name	I-12 To Bush - LA 3241 (I-12 – LA 36) Corridor Study		Firm responsibility (prime or sub?)	sub	
Project number	H.004957.5	Owner's name	DOTD		
Project location	Lacombe, LA		Owner's Project Manager	Joachim C Umeozulu, P.E	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1386, Joachim.Umeozulu@la.gov				
Services commenced by this firm	09/16	Total consultant contract cost ($1,000's)		$1,895	
Services completed by this firm	05/17	Cost of consultant services provided by this firm ($1,000's)		$84	

As part of the DOTD TIMED program, Vectura prepared a formal traffic study for the new alignment of LA 3241. The traffic study examined concepts that improved the safety and efficiency of the roadway consistent with the latest DOTD policies related to access management and complete streets. The study included analyses for intersection and corridor improvements such as median openings, spacing of openings, signalized, unsignalized and roundabout intersections.

Task 1 Data Collection

Vectura collected the following traffic data for 10 intersections:

- 7-day (mainlines) and 2-day (side streets) 24-hour tube counts with vehicle classification
- Turning movement counts for morning and evening peak periods
- 15-minute driveway counts
- Traffic Signal warrants, radar speed studies and sight distance evaluation
- Developed growth rate methodology and AM and PM peak forecast traffic volumes

Task 2 Traffic Study

This task included a roundabout study as defined in EDSM VI.1.1.5, VI.1.1.1 and DOTD Traffic Engineering Manual Section 20.2. This task included the following elements:

- Performed Vistro and Sidra analyses for existing conditions
- Performed Vistro and Sidra analyses for Implementation and Design Years.
- Intersection alternatives included restricted median openings, signalized and unsignalized intersections, median U-turns at existing signal locations, restricted crossing U-turn (RCUT) intersections, and roundabouts
- Developed Vissim model of the preferred corridor layout
- Developed Draft Traffic Study Report (3 copies)

Task 3 Safety Analyses

- Developed 3-year crash analyses report as per DOTD standards

Personnel Utilized on this project: Brin Ferlito, Bridget Robicheaux, and Laurence Lambert (100% performed in Louisiana)

17. Firm Experience:

Firm name	Vectura Consulting Services, LLC		Past Performance Evaluation Category(ies)*	Traffic	
Project name	East Baton Rouge Parish MOVEBR ($912 Million Dollar) Program		Firm responsibility (prime or sub?)	sub	
Project number	CP No. 19-CS-HC-0001	Owner's name	East Baton Rouge Parish		
Project location	Baton Rouge, LA		Owner's Project Manager	Tom Stephens, PE	
Owner's address, phone, email	1100 Laurel Street Baton Rouge, LA 70802, (225) 389-3186 ext 5634, TStephens@brla.gov				
Services commenced by this firm	07/19	Total consultant contract cost ($1,000's)	unknown		
Services completed by this firm	12/22	Cost of consultant services provided by this firm ($1,000's)	$873		

As part of the East Baton Rouge Parish MOVEBR ($912 Million Dollar) Program, Vectura currently provides traffic engineering services for all Capacity Projects. Vectura routinely collaborated with EBR Parish and DOTD Stakeholder such as Section 27, Safety Section, and DOTD District 61. The primary task was to peer review all traffic-related deliverables from consultants for 25 capacity projects to date. Submittal review in various stages included but not limited to the following:

Scope
- Purpose and need, contract scopes, manhours and fees

Data Collection
- Raw tube counts, peak period determination, signalized / unsignalized intersection turning movement counts, unmet demand, explanation for any count discrepancies, speed data, peak period observations, geometric field documentation, sight distance, warrants analyses

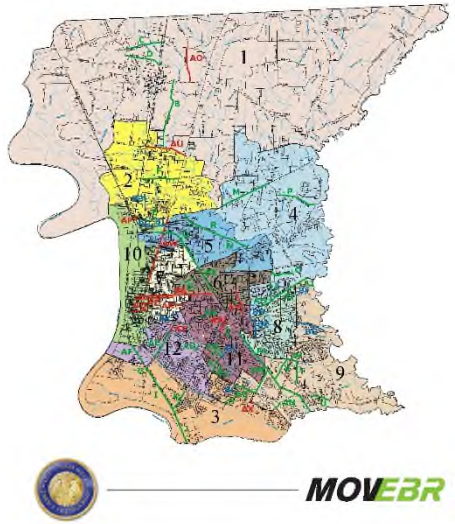
Design Year Volume Development
- Travel Demand Model data, Growth rate methodologies in accordance with NCHRP 765, design year volume development

Existing and No Build Analyses
- HCS, Synchro, SIDRA, VISSIM, analyses for existing and No Build conditions based on traffic volumes, lane usage, truck percent, required SIDRA roundabout settings, speed, and Traffic Signal Inventory form information
- CATScan, collision diagrams, conflict points, crash analyses report as per DOTD standards
- Defined problems

Tier 1
- Preliminary high-level list of alternatives based on defined problems and established comparison criteria.

Build Year Alternative Analyses
- Reviewed traffic volume redistribution, alternative conceptual layouts included access management, restricted median openings, signalized /unsignalized intersections, median U-turns at existing signal locations, RCUT intersections, and roundabouts
- Turn lane calculations, AutoTURN, construction cost estimates

Design
- Confirmed design plans matched recommendations in the Traffic and Design Studies
- Reviewed construction plans including geometric layout, striping, signs, roundabout and traffic signal design
- Plan in Hand, coordinated with EBR TED, DOTD, utilities, consultant team



Personnel Utilized on this project: Brin Ferlito, Laurence Lambert, Bridget Robicheaux, Reece Rodrigue, Kristen Farrington and Clara Foshee (100% performed in Louisiana)

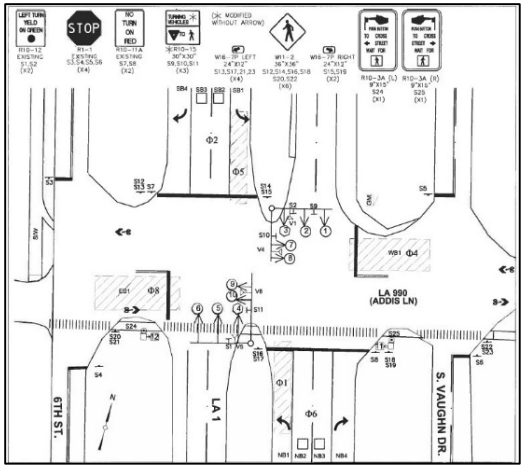
17. Firm Experience:

Firm name	Vectura Consulting Services, LLC		Past Performance Evaluation Category(ies)*	TM	
Project name	LA 1 at LA 990 Crosswalk Study and Traffic Signal Design		Firm responsibility (prime or sub?)	Prime	
Project number	H.011558	Owner's name	West Baton Rouge Parish Government		
Project location	Addis, LA		Owner's Project Manager	Kevin Durbin, PE, AICP	
Owner's address, phone, email	880 N. Alexander Avenue Port Allen, LA 70767 (225) 336-2434 Kevin.Durbin@wbrcouncil.org				
Services commenced by this firm		11/20	Total consultant contract cost ($1,000's)	$22.000	
Services completed by this firm		12/21	Cost of consultant services provided by this firm ($1,000's)	$22.000	

Vectura was hired by West Baton Rouge Parish to perform a Crosswalk Traffic Engineering study and to develop Traffic Signal Design plans for the intersection of LA 1 and LA 990 (Addis Lane) in Addis, LA. The crosswalk was first conceptualized as part of a trail that connects the Mississippi River Trail to points west of LA 1 in the West Baton Rouge Parish Comprehensive Plan (PlanWEST) dated 9/22/11 as well as included in a Stage 0 report titled CMAQ Proposal WBR-2 dated 04/30/14.

A Crosswalk Traffic Engineering Study was performed based on the Traffic Engineering Manual (TEM) Section 3B.2.9, Section 20.2 & EDSM VI.3.1.6 Section 5 and included the following elements:

- Collected 24-hour traffic approach volumes, speed data, crash history and sight distance
- Collected AM and PM peak hour vehicle and pedestrian turning movement counts
- Developed **safety analyses** using 3-year crash data from Crash1 as per DOTD standards
- Performed pedestrian crosswalk warrants as per TEM Section 3B.2.9
- Performed AM and PM Peak **signal timing and progression** for existing conditions
- Performed AM and PM Peak **signal timing and progression** for future conditions



Traffic Signal Construction Plans was performed for LA 1 at LA 990 based on the latest DOTD Traffic Signal Inventory v3.2, DOTD Signal Design Manual, MUTCD & EDSM VI.3.1.6 Section 5. This task included signal timing parameter calculations, signal equipment layout, wiring diagram, DOTD pay items, estimated quantities and construction cost.

Vectura also assisted with the DOTD **Permit** Request for Intersection Control Devices on a State Right of Way

Personnel Utilized on this project: Brin Ferlito, Reece Rodrigue, Laurence Lambert and Bridget Robicheaux (100% performed in Louisiana)

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	**Civil Design & Construction, Inc.**		Past Performance Evaluation Discipline(s)*	Survey	
Project name	I-10 TX State Line East of Coone Gully		Firm responsibility (prime or sub?)	Sub	
Project number	H.003184.5	Owner's name	LADOTD / Stanley Ard, PLS		
Project location	Calcasieu Parish, LA		Owner's Project Manager	Stanley Ard, PLS	
Owner's address, phone, email	1201 Capital Access Rd., Baton Rouge, LA70802/225-379-1232/Stanley.ard@la.gov				
Services commenced by this firm (mm/yy)	10/15	Total consultant contract cost ($1,000's)	N/A		
Services completed by this firm (mm/yy)	12/18	Cost of consultant services provided by this firm ($1,000's)	$443		

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

Project Description: This was a 6-lane widening project on I-10 in Calcasieu Parish. The project limits extended from the foot of the Sabine River Bridge (approximately 0.5 miles east of the state line) to a point approximately 2000 feet east of the beginning of the existing 6-lane section (located East of Coone Gully). The survey width of the project was from apparent right of way to apparent right of way and 500 feet past the gore along each of the on and exit ramps.

In 2018, CD&C was supplemented to extend the original limits of this survey approximately 1500' and to pick up several other areas of additional topographic updates.

CD&C's Role: CD&C performed a complete topographic survey in accordance with the Location and Survey Manual and all current accepted Location and Survey Automation Procedures for this project. A topographic survey was already completed at all bridge sites located within the limits. The survey included all utilities with depths and information, all drainage structures, and all survey DTM and improvement features that fell inside the survey limits. Due to traffic concerns **3D Terrestrial Scanning was utilized for the location of roadways and traditional means and methods were used to complete the topographic survey on this project.** The final submittal of the survey was a combination of the supplied data from LADOTD for the bridges with the current survey that was completed for this project.

Members Involved: CD&C employees involved in the project included Karla E. Weston, P.E.; Ralph Burgess, PLS, Survey Manager; Chris Ballard, PLS Survey Project Manager; Phil Dupree, Party Chief; Jacob Stoehr, Party Chief; Trent Norris, 3D Scanning Technician; John Ewing, Survey Technician, Scott Benton, 3D Scanning Technician.

Performed in LA: 100%

17. Firm Experience:

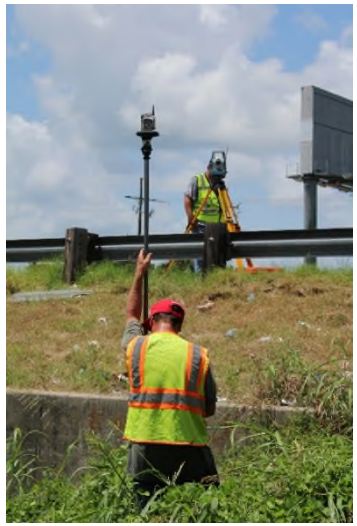
Identify the team's project experience **most relevant** to the scope in the advertisement. The projects should be limited to a total of 20, with no more than 5 projects being represented by the prime consultant and with no more than 3 projects represented by each sub-consultant on the team. If more 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	**Civil Design & Construction, Inc.**		Past Performance Evaluation Discipline(s)*	Survey	
Project name	I-10: LA 415 to Essen Lane on I-10 and I-12		Firm responsibility (prime or sub?)	Sub	
Project number	H.004100	Owner's name	LADOTD		
Project location	West and East Baton Rouge, LA		Owner's Project Manager	Nicholas Olivier	
Owner's address, phone, email	1201 Capital Access Rd, Baton Rouge, LA 70802 / 225-379-1232 / Nicholas.olivier@la.gov				
Services commenced by this firm (mm/yy)	01/18	Total consultant contract cost ($1,000's)		N/A	
Services completed by this firm (mm/yy)	on-going	Cost of consultant services provided by this firm ($1,000's)		$296	

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

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

Project Description: This project located in West Baton Rouge and East Baton Rouge Parishes in the cities of Port Allen and Baton Rouge, LA. A complete Topographic survey including all utilities (ASCE 38-02, QL "B") with depths and all drainage is required, along with Finish floor elevations of all buildings that fall within the survey limits. The survey begins 1,500 feet West of the western most entrance/exit ramps of the LA 415 and I-10 Interchange. From the I-10, I-12 split the survey shall proceed in southerly and easterly directions along the existing main alignment of I-10 for approximately 1.5 miles & I-12 for approximately 1.5 miles to end the route limits.



CD&C's Role:

CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415. **This work included using 3D Scanning for the bridge at I-10 bridge @ LA 415 as well as scanning every 500' for control verification and incorporation of the Mobile Lidar for the I-10 pavement.**

Members Involved: Karla E. Weston, P.E.; Ralph Burgess, PLS, Christopher Ballard, PLS; Phil Dupree, Party Chief; Jacob Stoehr, Party Chief; Trent Norris, 3D scanning technician; John Ewing, Survey Tech;

Performed in LA: 100%

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	**Civil Design & Construction, Inc.**		Past Performance Evaluation Discipline(s)*	Survey	
Project name	Verot School Road			Firm responsibility (prime or sub?)	Sub
Project number	H.011235	Owner's name	LADOTD		
Project location	Lafayette, LA		Owner's Project Manager	Thomas Gattle (Huval & Assoc.	
Owner's address, phone, email	922 W. Point Des Mouton Rd., Lafayette, LA 70507/337-234-3798/tgattle@huvalassoc.com				
Services commenced by this firm (mm/yy)		08/16	Total consultant contract cost ($1,000's)		N/A
Services completed by this firm (mm/yy)		On-going	Cost of consultant services provided by this firm ($1,000's)		$1,078

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

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

Project Description: This project is located in Lafayette Parish between Lafayette Regional Airport and Broussard, LA. The project is for the proposed widening of US 90/I-49 South and realignment of Verot School Road. A topographic survey was performed along the entire proposed route as well as an existing drainage map.

CD&C's Role: CD&C performed a complete topographic survey of the project site by using **3D Terrestrial Scanning in conjunction with traditional means to complete the survey. Control was set for the scanning throughout the project limits.** Coordination with Cardno, Inc. (Team member) was necessary for the location of all utilities in the project area. CD&C also coordinated with all the property owners for access to the properties and also meet with safety advisors for the industrial business that were impacted. The survey included coordination with the ongoing I-49 Connector project and merging of that survey to the CD&C survey in order to make a complete project for the area**. CD&C also researched and compiled an existing right of way linework for the prime consultant to use for exhibits for the project and is currently tasked to complete Final ROW Maps**. In order to complete the survey CD&C also had to coordinate with BNSF railroad for access to BNSF's rail.

Members Involved: Karla Weston, PE; Ralph Burgess, PLS Survey Manager; Christopher Ballard, PLS Survey PM; Trent Norris, 3D Scan Tech; Phil Dupree, Party Chief; Jacob Stoehr, Party Chief; Jason Stoehr, Party Chief, Alex Wells, Party Chief

Performed in LA: 100%

18. Approach and Methodology:

Sigma has served as the prime consultant on multiple roadway and intersection projects, including IDIQ contracts, for DOTD and understands the delivery and production processes for these types of projects. 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.

Most projects arise because there is an identifiable capacity or safety deficiency that includes risk to the motoring public. As such, we appreciate DOTD's urgency for getting these projects to delivery quickly. Our team was assembled to make sure we have experienced team members and adequate resources to reach this goal. Please refer to Section 16 for additional information. The following is our approach to each component of a typical task order:

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 safety concerns will also be discussed and documented. Any DOTD provided services such as as-builts, geotechnical data, pavement design, 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 / Property Survey

Civil Design & Construction will perform the surveying services needed to design the proposed project. With multiple survey crews, we will always have the resources to quickly mobilize and collect data necessary for design. We also plan to use existing R/W maps and/or perform title take-offs during the topographic survey phase to assist with locating property corners and to set the apparent R/W. This will allow DOTD to expedite the property survey phases if necessary and eliminate multiple visits to the same site. DOTD Location & Survey standards will be followed for all surveying services. The use of scanning technology will be incorporated where possible 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.

All utilities within the project limits, above and below ground, shall be located. Establishment of utility ownership shall also be included. Utility locates will be to Quality Level D or C services as defined by CI/ASCE Standard 38-22. Both Sigma and CD&C have SUE capabilities and experience, and can assist DOTD in this discipline of work as needed.

Preliminary & Final Plan Preparation

With the goal of streamlining plan delivery, Sigma will meet with DOTD to assess the complexity of the project and designate appropriate submittals. Sigma will prepare design reports, design waivers and exceptions when necessary, plans, opinions of probable costs, pay item quantities, TMP's, constructability and biddability reviews and QA/QC forms for all projects. The preliminary and final plan development process will typically follow the ***Road Design Tasks for Completion Milestones*** chart shown as Figure 1-03 in the DOTD Road Design Manual.

Our engineers will evaluate the site for general constructability and maintenance of traffic. Conceptual detour routes and/or diversion applications will be evaluated. We approach each project with constructability as a primary attribute in the design process. Also, by integrating planning, engineering and construction together in the project delivery process, we find that overall project success increases.

- ✓ **NEPA Training** - While our professional engineers possess the knowledge and expertise in DOTD standard specifications and design requirements, we want them to be familiar with environmental constraints and processes. Therefore, we encourage most of our project managers to attend the NHI Course #142005 for NEPA and Transportation Decision Making Processes.

Sigma is complimented by Vectura, who will provide any traffic analysis and traffic studies required to further identify the project need and scope a solution. All traffic analyses will follow DOTD's Traffic Engineering processing and Report guidelines (TEPR). The study scope will be developed based on the preliminary site visit to study area, coordination with District Traffic Operation Engineer and local agencies for additional information on study area characteristics. Scope, schedule and tools to be used for the study will be discussed in detail during kick-off meeting. All the data collection tasks required for traffic analysis will be performed as per DOTD's TEPR guidelines and the project manager will be updated for consent before proceeding to next task.

- ✓ **TEPR Training** - All traffic engineers with Vectura have taken the DOTD Traffic Engineering Process and Report course. To help understand the process and make sure the necessary data is coordinated with the design team, Sigma has assigned one professional engineer, Alex Farr, to work with Vectura. Alex has also taken the TEPR course as well as highway safety training.

The preparation of opinions of probable construction costs (OPCC) will be prepared, beginning at the 90% Preliminary Plan and updates with every subsequent submittal. The 90% Preliminary Plan submittal will include a draft of the Transportation Management Plan (TMP) for review by all stakeholders.

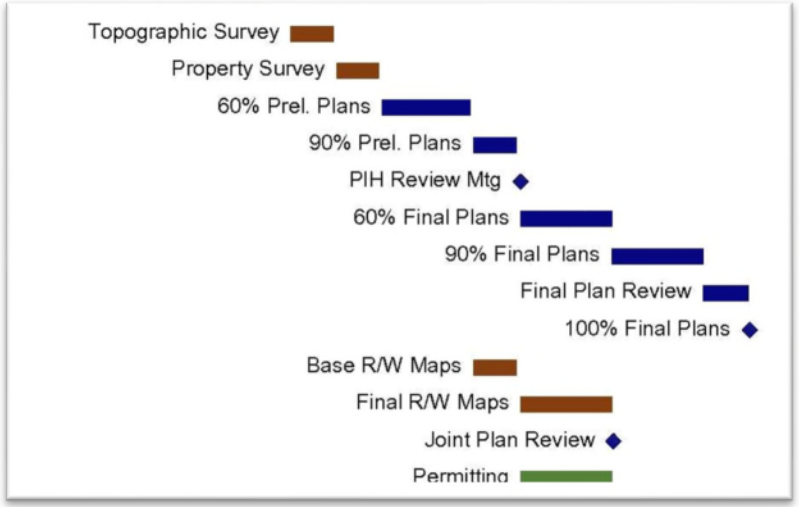
- ✓ **Traffic Control Plans** –The project team will develop the TMP as applicable to each task order in accordance with EDSM VI.1.1.8. The level of TMP will be determined based on the project's location and impact to the roadway network. Determining the TMP level prior to project scoping is imperative to ensuring that all TMP requirements are included in the scope and that all necessary traffic data is collected to support any required analysis. The project team will coordinate closely with the project team, DOTD, and District Traffic Operations Engineer (DTOE) to ensure a mutual understanding of local needs and that proposed mitigation measures are appropriate for the area. Key team members have received Traffic Control Supervisor (TCS) training to facilitate preparing the temporary traffic control plans. QA/QC will be provided by Greg Sepeda who has also received TCS training. All have experience in developing multi-phased sequencing for road construction.

Permitting Services

Concurrent with final plan development, Sigma will prepare draft applications and/or permit figures for the Coastal Use Permits and/or the USACE Permits for DOTD review. These will be submitted with the 60% final plan submittal. With all project managers having NEPA training, we will be able to identify any other environmental constraints or permitting requirements. The DOTD Environmental Checklist will be prepared when necessary to identify if a Categorical Exclusion is appropriate for the project. Categorical Exclusions are anticipated for most projects.

Schedule

Sigma has worked on numerous roadway capacity and safety projects for LADOTD and understands the delivery and production processes for these types of projects. This allows us to "hit the ground running" and accelerates the project initiation phase, which we have learned is a large part of the work effort. We also have a past working relationship with each of our subconsultants with successful partnering and positive project results. We have prepared a schedule of typical phases and major milestones that would be submitted for each task order. The schedule to the right represents an accelerated project delivery with some of the standard milestones eliminated.



Construction Support

We plan to keep the project managers involved on the project into the construction stage. This includes working with the District and CE&I consultants to address RFI's, assisting with solutions to unforeseen field conditions, and preparing plan changes when necessary. Sigma has provided construction support for several projects including design-bid-build and design-build projects.

Project Management

Robbie Lear will be the overall contract manager for the IDIQ contract. Robbie, along with Alex Farr and Bryan Harmon will serve as project managers depending on the type and amount of task orders issued. 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. All three have experience managing local projects and have both the technical experience and management skills to efficiently deliver projects on time and within budget.

Sigma offers a longstanding staff with a strong background in intersection, safety and road design projects. 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 also serve as a Project Manager. He has over 24 years of road design experience with DOTD projects, with an emphasis on roundabouts, intersections and interchanges. He is a Certified Traffic Control Supervisor and has designed several complex maintenance of traffic plans and detours for DOTD project. He also has experience in surveying and SUE services for DOTD.

- ✓ **Bryan Harmon, PE** will serve as a Project Manager. He brings over 34 years of experience in the transportation and drainage, with an emphasis on urban projects. As the former Chief Engineer and DPW Director for East Baton Rouge Parish, Bryan has worked hand-in-hand with DOTD and FHWA on a multitude of Urban System projects and brings an invaluable knowledge bank to the table.

- ✓ **Greg Sepeda, PE** is Sigma's chief engineer and will oversee the QC/QA of Sigma's design efforts. With an emphasis on linear projects, Greg sees the "big picture" on delivery. He will also assist with contract management, invoicing and scheduling.

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.

Disadvantaged Business Enterprise Requirement

Sigma exceeds the 5% DBE requirement for this project by teaming with Civil Design & Construction, Inc. and with Vectura Consulting Services, LLC. Both are woman-owned businesses and will perform more than 10% of this contract.

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.

SIGMA CONSULTING GROUP, INC.
A WAGGONER COMPANY

Conclusion

The Sigma Team has experience providing all the elements described in the Scope of Services to DOTD. With our knowledge of DOTD procedures and practices, Sigma can provide the DOTD a staff with an unparalleled depth of hands-on experience, knowledge and desire to serve LADOTD, and perform the services needed within budget and on time.

19. **Workload:**

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Past Performance Evaluation Disciplines(s)*	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
SIGMA CONSULTING GROUP, INC. ENGINEERING & SURVEYING	Road	unavail., H.004791	Belle Chasse Bridge & Tunnel Replacement	$5,307
		4400018646, H.004100	I-10: LA 415 to Essen Lane on I-10 and I-12	$295,050
		4400019379, H.013797	LA 30: EBR PL - I-10 (Environmental Assessment)	$88,345
		4400019010, H.010652	LA 73: US 61 (Airline) – Essen Lane	$1,533
		4400019010, H.010116	LA 1088: Soult and Trinity Roundabouts	$87,933
		4400024084, H.009300	CMAR Contract for Hooper Road Widening (LA 3034 - LA 37)	$7,883
	Bridge	4400019338	Rural Bridge Replacement Initiative Phase II (South)	
		H.012061	LA 1	$8,366
		H.012565	LA 963	$49,152
		H.012891	LA 300	$29,426
		H.014213	LA 700	$51,883
		H.014215	LA 20	$88,126
		H.014216	LA 682	$84,215
		H.014241	LA 10	$40,043
		H.014251	LA 422	$42,642
		H.014252	LA 1054	$16,346
		H.014253	LA 421	$23,288
		H.014254	LA 955	$119,574
		H.014256	LA 952	$79,192
		H.014257	LA 68	$78,944
		H.014276	LA 975	$20,738
		H.014278	LA 85	$39,638
		H.014279	LA 35	$47,859
		4400025041	IIJA Off-System Bridge Program, District 62	
		H.015429	Carroll Avenue Over Colyell Creek	$194,835
		H.015430	Hood Road Over Colyell Creek	$197,050
		H.015431	Sawmill Road Over Creek	$200,000
		H.015432	M. Williams Road Over Spring Creek	$200,000
		H.015433	George Jenkins Road Over Barrys Creek	$200,000
		H.015434	Mitch Road Over Peters Creek	$200,000
	CE&I / OV	4400004666, H.002868	Ambassador Caffery & US 90 Interchange Construction Support	$59,986
		4400019680, H.013897	Owner Verification Services For College Drive Flyover Ramp I-10/I-12 West	$43,517
	Survey	4400023782, H.013429	Entity Contract for Downtown Thibodaux Sidewalks	$1,355
	Environmental	4400008711, H.004526	Leeville - Golden Meadow (Ph. 2 Permits)	$209,235

19. **Workload:**

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Past Performance Evaluation Disciplines(s)*	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
Waggoner Engineering	n/a	(no current work)		$0
Vectura Consulting Services, LLC	Traffic	4400017293 / H.01616	I-20: LA 544 Overpass Replacement	$74,429
		4400005484 / H.005168	New Orleans Rail Gateway Jefferson Highway EA	$14,200
		4400005484 / H.005168	New Orleans Rail Gateway Avondale EA	$123,988
		unavail., H.004791	Belle Chasse Bridge & Tunnel Replacement	$14,740
		4400021519 / H.012030	KCS RR Overpasses HBI	$2,002
	ITS	4400016364 / H.011504	Alexandria ITS Phase 2	$14,305
	CE&I/OV	4400020018 / H.007160	EBR Computerized Traffic Signal, Ph VB	$49,600
Civil Design & Construction, Inc.	Survey	4400017091 / TO-3	LWI Statewide Modeling R5 – Task Order #3	$89,482
		4400020019 / H.011833.5	St. Mary Street Sidewalks	$3,236
		4400005673 / H.011235.5	I-49 South @ Verot School Rd	$155,840
		4400017262 / H.011235.5	I-10: UPRR Overpass	$317,022
		4400024831 / H.015056	LA 685	$62,272
		4400024831 / H.015058	LA 14 Business	$53,364

20. Certifications/Licenses:

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

Alex Farr, PE	Traffic Engineering Analysis Process & Report Modules 1, 2, & 3
Brin Ferlito, PE, PTOE	Traffic Engineering Analysis Process & Report Modules 1, 2, & 3
Laurence Lambert, PE, PTOE	Traffic Engineering Analysis Process & Report Modules 1, 2, & 3
Reece Rodrigue, PE, PTOE	Traffic Engineering Analysis Process & Report Modules 1, 2, & 3
Kristen Farrington, PE, PTOE	Traffic Engineering Analysis Process & Report Modules 1, 2, & 3

Robert Lear, PE, LSI	ATSSA Traffic Control Supervisor
Alex Farr, PE	ATSSA Traffic Control Supervisor
Josh Renard, PE	ATSSA Traffic Control Supervisor
Brin Ferlito, PE, PTOE	ATSSA Traffic Control Supervisor
Laurence Lambert, PE, PTOE	ATSSA Traffic Control Supervisor
Reece Rodrigue, PE, PTOE	ATSSA Traffic Control Supervisor
Kristen Farrington, PE, PTOE	ATSSA Traffic Control Supervisor
Philip Dupree	ATSSA Traffic Control Supervisor

(Certificates available upon request)

Certificate of Completion

presented to

Alex Farr

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor

Authorized Instructor

Authorized instructor

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Alex Farr

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor

Authorized Instructor

Authorized instructor

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Alex Farr

for completing the

Traffic Engineering Analysis Process & Report
Module 3

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report Module 1

Date: June 4, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 4

Authorized Instructor

Authorized Instructor

Authorized instructor

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date: June 11, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 4

Authorized Instructor

Authorized Instructor

Authorized instructor

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: September 10, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor

Authorized Instructor

Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor

Authorized Instructor

Authorized instructor

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report Module 3

Date: October 15, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: November 5, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date: November 26, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: December 3, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 30, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor

Authorized Instructor

Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date: August 6, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 29, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor

Authorized Instructor

Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Sigma Consulting Group, Inc.

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

If the advertisement requires submission of a QA/QC plan, include it here. **Otherwise, leave this section blank. If a QA/QC plan is included in this section and was not required by the advertisement, it will be redacted.**

22. **Sub-consultant information:**

Firm Name (Name must match as registered with Louisiana's Secretary of State)	Address	Point of Contact and email address	Phone Number
Civil Design & Construction, Inc.	3251 Southern Pacific Road Port Allen, LA 70767	Karla Weston kweston@cdcbr.com	(225) 765-1802
Vectura Consulting Services, LLC	4467 Bluebonnet Blvd., Suite A Baton Rouge, LA 70809	Sheelagh Brin Ferlito bferlito@vecturacs.com	(225) 223-6685
Waggoner Engineering, Inc.	10305 Airline Highway Baton Rouge, LA 70816	Matt Butler matthew.butler@waggonereng.com	(225) 298-0800

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. Any Information included in this section will be redacted if not required by the advertisement.**

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

Name:	Public Address:
Sigma Consulting Group, Inc.	Mr. Miles B. Williams10305 Airline Highway Baton Rouge, Louisiana 70816

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0001410	Active	08/21/1987	09/30/2023	Mr. Miles Bonner Williams # PE.0023094

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

Name:

Sigma Consulting Group, Inc.

Public Address:

Mr. Miles B. Williams10305 Airline Highway

Baton Rouge, Louisiana 70816

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
VF.0000302	Active	08/21/1987	09/30/2023	

LOUISIANA UNIFIED CERTIFICATION PROGRAM

Disadvantaged Business Enterprise Program (DBE)

Small Business Element (SBE)

This is to certify that under Title 49, Part 26 of the Code of Federal Regulations & under the State of Louisiana United Certification Program (LAUCP)

Vectura Consulting Services, LLC

Is a Certified Disadvantaged Business Enterprise (DBE) & Small Business Element (SBE) in the following specialties:

NC488490, NC541330, NC541340

NOTE: There may be other approved NAICS Codes. The online DBE Directory includes a complete list of approved codes.

Certificate Eligibility: June 2022 to June 2023

This certificate is valid through the above date provided. This firm meets the on-going programmatic standard and fulfills the annual update requirement to remain in good standing as a DBE. This certification is subject to annual verification and suspension or revocation based upon reasonable cause to believe that the firm is ineligible.

Rhonda Wallace

Rhonda Wallace, DBE/SBE Programs Manager

Louisiana Department of Transportation & Development

RTA

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

LOUISIANA UNIFIED CERTIFICATION PROGRAM

Disadvantaged Business Enterprise Program (DBE)

Small Business Element (SBE)

This is to certify that under Title 49, Part 26 of the Code of Federal Regulations & under the State of Louisiana United Certification Program (LAUCP)

Civil Design & Construction, Inc.

Is a Certified Disadvantaged Business Enterprise (DBE) & Small Business Element (SBE) in the following specialties:

NC541330, NC541340, NC541350, NC541370

NOTE: There may be other approved NAICS Codes. The online DBE Directory includes a complete list of approved codes.

Certificate Eligibility: March 2023 to March 2024

This certificate is valid through the above date provided. This firm meets the on-going programmatic standard and fulfills the annual update requirement to remain in good standing as a DBE. This certification is subject to annual verification and suspension or revocation based upon reasonable cause to believe that the firm is ineligible.

Rhonda Wallace

Rhonda Wallace, DBE/SBE Programs Manager

Louisiana Department of Transportation & Development