



Engineering and Related Services Downing Pines Rd: Roundabout at Mane St

Entity Contract No. 4400032380
State Project No. H.016019.5
Federal Aid Project No. H016019

September 10, 2025

Submitted by:
Waggoner Engineering, Inc.

waggonereng.com



September 10, 2025

Louisiana Department of Transportation and Development
1201 Capital Access Road
Baton Rouge, LA 70802



**RE: Entity Contract No. 4400032380, State Project No. H.016019.5, Federal Project No. H016019
Request for Qualifications for Engineering and Related Services for Downing Pines Road: Roundabout at Mane Street**

Dear Members of the Selection Committee:

Waggoner Engineering, Inc. (Waggoner) is excited for the opportunity to work with the Louisiana Department of Transportation and Development (LADOTD) and the City of West Monroe on the Downing Pines Road: Roundabout at Mane Street project. We formally acknowledge Addendum No. 1 for this project issued on August 12, 2025. Our team is fully prepared to bring our expertise and proven project delivery track record to support this contract.

FIRM EXPERIENCE AND PAST PERFORMANCE: Waggoner, a leader in water resources engineering in the Gulf Coast region, expanded its footprint and technical practice expertise by joining forces with Sigma Consulting Group, Inc. (Sigma) in November 2022. Sigma's 35 years of transportation engineering expertise with the LADOTD now serves as Waggoner's transportation division headquarters. **While legacy Sigma now operates under the Waggoner name, the day-to-day management and operational structure remain unchanged.** The former owners and managing partners of Sigma are active leaders in Waggoner's management and operations, **ensuring that the firm's experience and exemplary past performance provided by Sigma over our 30 plus years of service to the LADOTD remains intact** while offering the broader resources and capabilities of Waggoner.

LADOTD ROAD AND BRIDGE DESIGN EXPERIENCE: Waggoner (formerly Sigma) has an extensive track record of providing engineering design and related services for roundabout projects. Our team has successfully delivered multiple LADOTD roundabout projects comparable in scale and complexity to the Downing Pines project, including the LA 347: Roundabout at Melancon Road and the I-10 at Henderson Interchange (LA 347/I-10 Interchange on and off ramps) project. This valuable experience has positioned us to effectively manage and deliver a quality product to LADOTD and the City of West Monroe. Our project manager, Alex Farr, PE has 13 years of experience in roadway design on LADOTD projects. Our staff experience is founded on LADOTD project delivery processes and will be committed to this contract.

We have strategically partnered with Ardaman & Associates, Inc. (Ardaman) to provide the necessary geotechnical investigation services and foundation design for the proposed structure services. Also, we have added the expertise of Vectura Consulting Services, LLC (Vectura), a certified Disadvantaged Business Enterprise (DBE) firm, to provide professional traffic engineering.

PROJECT UNDERSTANDING: Waggoner understands that this project involves providing engineering and related services to design a roundabout at the intersection of Downing Pines Road, Mane Street, and Short Constitution Drive in West Monroe. It is anticipated that the Consultant shall make appropriate design considerations for an asphalt roundabout and ensure the maintenance of traffic during all phases of construction. As part of our approach, we will ensure that all services and documents will comply with AASHTO and LADOTD guidelines and standards.

APPROACH AND METHODOLOGY: Our approach and methodology as outlined in Section 18 is grounded in a deep understanding of the LADOTD Bridge and Roadway Design requirements, paired with innovative methodologies that ensure each project meets the highest standards of safety, efficiency, and sustainability. We plan to leverage our past experience in LADOTD project delivery, effective communication, rigorous QA/QC process, and commitment to partnership with LADOTD and the City of West Monroe to fulfill your needs and expectations for this project.

Thank you for considering Waggoner for this opportunity. We are committed to delivering a project that benefits the residents and those traveling through West Monroe. If you require any additional information or have questions, please do not hesitate to contact me at 225.298.0800 or via email at robert.lear@waggonereng.com.

Sincerely,

Robert Lear, PE, LSI
Vice President, Senior Project Manager
Waggoner Engineering, Inc.

Section 1-11

I-10 at Henderson Interchange: LA 347 / I-10 Ramp Roundabout (St. Martin Parish)
H.009456

Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)

Completed roundabout at the eastbound on and off ramp at the I-10/LA 347
interchange as part of LADOTD Project H.009456
(construction plans prepared by Waggoner (formerly Sigma)).



DOTD FORM: 24-102

(Revised August 11, 2025)

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.

1. Contract Name as shown in the advertisement	Engineering and Related Services Downing Pines Rd: Roundabout at Mane St Ouachita Parish
2. Contract Number(s) as shown in advertisement	LADOTD Contract No. 4400032380
3. State Project Number(s) , if shown in the advertisement	State Project No. H.016019.5 Federal Aid Project No. H016019
4. Prime Consultant Name (name must match <u>exactly</u> as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; <u>include</u> screenshot from SOS at the end of Section 20)	Waggoner Engineering, Inc. (formerly 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.0002553 VF.0000457
6. Prime Consultant Mailing Address	10305 Airline Highway Baton Rouge, LA 70816
7. Prime Consultant Physical Address (existing or to be established, if location is used as an evaluation criteria)	10305 Airline Highway Baton Rouge, LA 70816
8. Name, Title, Phone Number, and Email Address of Prime Consultant's Contract Point of Contact	Robert J. Lear, Jr., PE, LSI Vice President robert.lear@waggonereng.com 225.298.0800
9. Name, Title, Phone Number, and Email Address of the Official with Signing Authority for this Proposal	Robert J. Lear, Jr., PE, LSI Vice President robert.lear@waggonereng.com 225.298.0800

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

Date: September 10, 2025

Pursuant to Act No. 581 of the 2024 Louisiana Legislature Regular Session, proposer further certifies that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association based solely on the entity's or association's status as a firearm entity or firearm trade association. In addition, proposer certifies it will not discriminate against a firearm entity or firearm trade association during the term of the contract based solely on the entity's or association's status as a firearm entity or firearm trade association.

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 Percent
Vectura Consulting Services, LLC	5%
Total DBE Participation	5%

Sections 12-15

LA 342: Roundabout on LA 347 at LA 742
H.002163

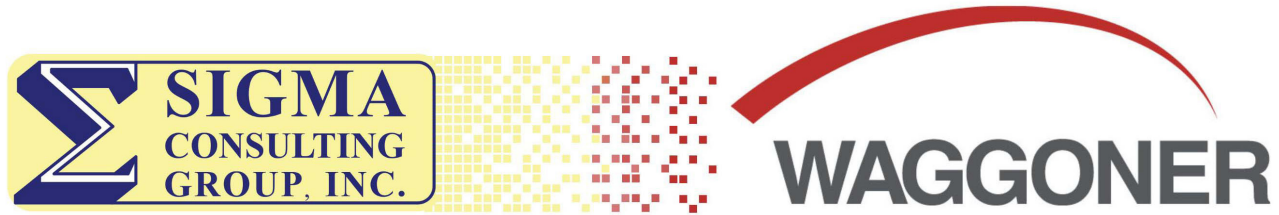
Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)
Lead Road Design Firm

Completed roundabout at the intersection of LA 724 and LA 342 as part of
LADOTD Project H.002163
(construction plans prepared by Waggoner (formerly Sigma).





12. PAST PERFORMANCE EVALUATION DISCIPLINE TABLE:

Discipline(s)	% of Overall Contract	Waggoner (formerly Sigma)	Ardaman	Vectura (DBE)	Each Discipline must total to 100%
Road	65%	100%	-	-	100%
Bridge	10%	100%	-	-	100%
Survey	10%	100%	-	-	100%
Right-of-Way	5%	100%	-	-	100%
Traffic	5%	-	-	100%	100%
Geotech	5%	-	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	100.0%	90.0%	5.0%	5.0%	100.0%



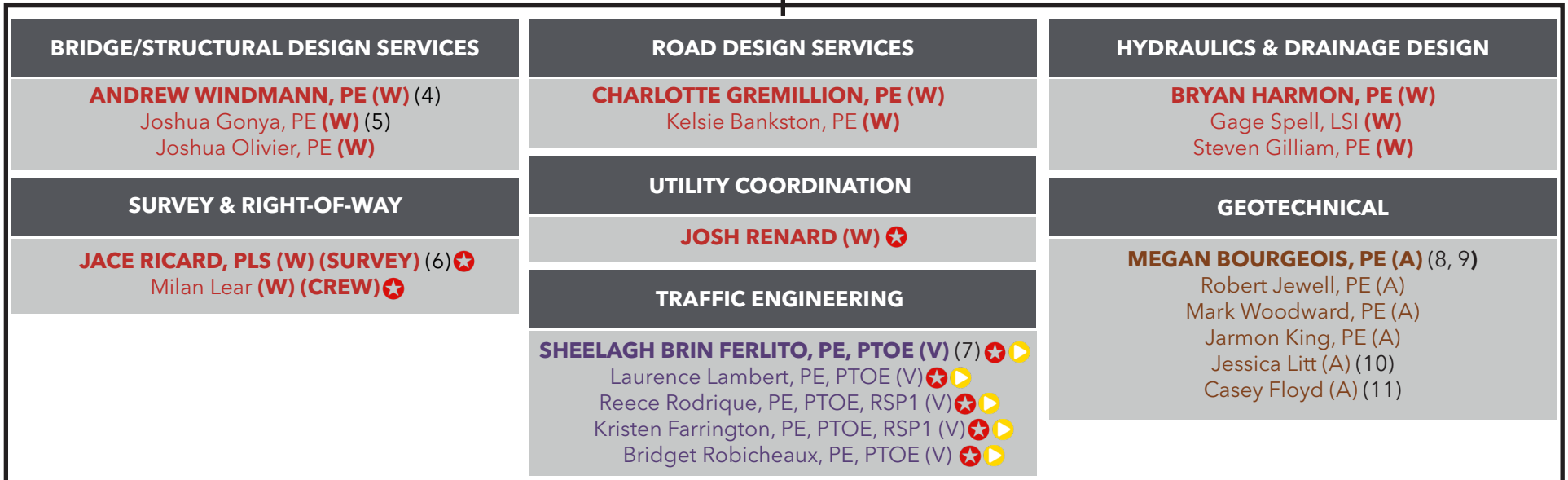
SIGMA IS NOW WAGGONER... GREATER CAPACITY TO TRANSFORM COMMUNITIES

13. TEAM SIZE:

Firm Name	LADOTD Job Classification	Number of Personnel Committed to this Contract	Total Number of Personnel Available in this LADOTD Job Classification (if needed)
 <p>WAGGONER FORMERLY SIGMA CONSULTING GROUP</p>	Principal	1	2
	Supervisor - Engineer	5	6
	Engineer	5	9
	Engineer Intern	4	5
	CADD Technician	2	4
	Senior Technician	2	5
	Instrument Man	1	1
	Surveyor	1	2
	Party Chief	1	2
	Clerical	1	2
 <p>Ardaman & Associates, Inc.</p>	Administrative	1	1
	CADD Technician	2	2
	Clerical	1	2
	Engineer	1	6
	Engineer Intern	3	6
	Principal	2	3
	Senior Technician	4	9
	Supervisor - Engineer	2	3
	Supervisor - Other	3	4
	Technician	6	15
 <p>VECTURA CONSULTING SERVICES, LLC</p>	Supervisor Engineer	2	2
	Engineer	3	3
	Engineer Intern	2	2
	Inspector	0	2
	Supervisor - Other	1	1
	Clerical	1	1

14. ORGANIZATIONAL CHART:

KEY	
W	Waggoner (formerly Sigma)
A	Ardaman
V	Vectura
(#)	Meets MPR Criteria
★	Meets Work Zone Training Requirements
▶	Meets Traffic Engineering Process & Report Training Requirements
DISCIPLINE LEAD (CAPS & BOLD)	



15. MINIMUM PERSONNEL REQUIREMENTS:

MPR # 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 (Ex: PE # - Civil)	State of license	License/ certification expiration date
1	Miles Williams, PE	Waggoner	PE#23094 - Civil	LA	3/31/2026
2	Robert J. Lear, Jr., PE, LSI	Waggoner	PE#29394 - Civil	LA	3/31/2027
3	Alex Farr, PE	Waggoner	PE#40426 - Civil	LA	9/30/2026
4	Andrew Windmann, PE	Waggoner	PE#39042 - Civil	LA	9/30/2026
5	Joshua Gonya, PE	Waggoner	PE#40859 - Civil	LA	9/30/2026
6	Jace Ricard, PLS	Waggoner	PLS#5205	LA	9/30/2025
7	Sheelagh Brin Ferlito, PE, PTOE	Vectura	PE#25383 - Civil	LA	9/30/2025
8	Megan Bourgeois, PE	Ardaman	PE#36725 - Civil	LA	3/31/2026
9	Megan Bourgeois, PE	Ardaman	PE#36725 - Civil	LA	3/31/2026
10	Jessica Litt	Ardaman	NICET/Generalist, Laboratory #141243	LA	10/01/2027
11	Casey Floyd	Ardaman	Water Well Driller #212	LA	6/30/2026

* The Waggoner team has multiple personnel assigned to this contract who have the qualifications necessary to meet each minimum personnel requirements. Individuals listed are the key personnel for each MPR. Additional names were not added to keep the response clear and concise.

Section 16

LA 352: Drainage Improvement (St. Martin Parish)
H.014415

Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)

Prime consultant for design of regional drainage improvements at the I-10
Henderson Exit in St. Martin Parish.



16. STAFF EXPERIENCE:



Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)			
Name	Alex Farr, PE	Years of Relevant Experience with this Employer	11
Title	Project Manager	Years of Relevant Experience with Other(s) Employers	2
Degree(s)/Years/Specialization	BS/2011/Civil Engineering		
Active Registration Number/State/Expiration Date	PE#40426/LA/09-30-2026		
Year Registered	2016	Discipline	Civil Engineering
Contract Role(s)/Brief Description of Responsibilities	Project Manager Meets MPR 3		

Alex will serve as Project Manager and will be responsible for the day-to-day management of the Downing Pines Road Roundabout at Mane Street project, **ensuring that the contract is executed according to scope, schedule, and budget.** He will oversee the preparation of **preliminary and final plans**, coordinating with the Vectura team to ensure all designs comply with **LADOTD guidelines** and incorporate all necessary **constructability reviews**. With over 13 years of design and management experience, Alex will **ensure this project meets LADOTD's goals and is completed on time.**

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).
10/20 - Ongoing SECTION 17 PROJECT	I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100) Project Engineer. Alex was responsible for developing the proposed vertical profiles along the entire mainline corridor as well as their respective 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 LADOTD minimum design guidelines. This was performed along this corridor by using as-builts pertaining to their respective locations. Alex was also responsible for calculating the roadway and bridge construction costs for the project opinion of probable costs.
03/13 - 07/22 SECTION 17 PROJECT	I-49 South: US 90 & Ambassador Caffery Interchange, Lafayette Parish, LA (H.002868) Project Engineer. Alex was responsible for the storm sewer drainage design along the northbound and southbound service roads for this project. Alex was also responsible for preparing a traffic signal plan including a traffic signal warrant analysis as well as an operational analysis concerning the two new proposed signals at the NB and SB service roads and Ambassador Caffery. Alex also developed the Transportation Management Plan (TMP) for this project to minimize impacts to the traveling public throughout construction.
03/13 - 07/22 SECTION 17 PROJECT	I-10: East Jct. I-49 to LA 328, Lafayette and St. Martin Parishes, LA (H.003003) I-10: LA 328 to LA 347, St. Martin Parish, LA (H.003014) I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish, LA (H.003014) Project Engineer. Alex prepared road design plans for the interstate, ramps, and overpasses for all three segments of I-10. The TMPs pertained to alternate route analysis, public information, stakeholder involvement, traffic and safety data, temporary traffic control, and work zone impact management strategies. Alex was also responsible for the suggested sequence of construction, temporary signing, and quantity computations for each construction funding source and control section. Alex prepared road design plans for the interstate, ramps, and overpasses for all three segments of I-10. This project included both pavement preservation and capacity functional classifications.
08/18 - 10/22	I-220/I-20 Interchange and BAFB Access Design-Build, Bossier Parish, LA (H.003370) Project Engineer. Alex was responsible for performing the design of the ramp's profiles, including the super elevation calculations as well as the graphical grades. Alex was also responsible for the permanent striping plans, clearing and grubbing plans, and the quantity estimate.



Alex Farr resume continued

10/16 - 12/20	<p>I-10: Highland to LA 73 Design-Build Project, East Baton Rouge and Ascension Parish, LA Project Engineer. Alex was responsible for performing the Traffic Management Plan (TMP) as well as the safety analysis for this project to determine what safety concerns correlated to the construction of this segment. Alex was also responsible for the suggested sequence of construction, guardrail design, and the quantity estimate for the above mentioned project.</p>
2019 - Ongoing	<p>Jones Creek Road Improvements Phases 1A & 1B, East Baton Rouge Parish, LA Project Manager. Waggoner was contracted by the East Baton Rouge Parish Department of Transportation and Drainage (EBR LADOTD) through the MOVEBR Program to design the extension of Jones Creek Road from the existing Tiger Bend Road intersection to a new terminus point on Airline Highway. The project includes a two-mile four-lane boulevard on new alignment, green infrastructure drainage features, a roundabout at Jefferson Highway, a new residential subdivision access point for an existing subdivision, a new bridge over Claycut Bayou, topographic and right-of-way mapping, and stormwater detention ponds to control outfall channel levels. Alex is serving as the Project Manager for this project, designing the roadway geometrics, typical sections, geometric details, cross sections, MOT, quantities, and construction cost estimates.</p>
12/14 - 04/19	<p>Acadian Thruway Safety Improvements (H.011261), East Baton Rouge, LA Project Engineer. Alex computed project quantities, sequence of construction, and the striping plan for this mill and overlay project. Alex was also responsible for utility location along this segment. He designed geometric alternates for the intersection at Claycut Road.</p>
07/19 - 12/22	<p>MOVEBR Infrastructure Enhancement & Traffic Mitigation Project, East Baton Rouge Parish, LA Project Engineer. Waggoner was part of the program management team for East Baton Rouge Parish's \$1.0 billion MOVEBR Infrastructure Enhancement and Traffic Mitigation Program. Alex provided engineering design for projects included in the comprehensive initiative to improve roadways, intersections, and corridors throughout the parish. The MOVEBR program projects focused on capacity increases, safety enhancements, and mobility improvements. Waggoner's responsibilities include developing program design guidelines, managing design consultants, utility coordination, land management, and overseeing multiple corridor and enhancement projects. The program incorporates Complete Street elements, Americans with Disabilities Act (ADA) compliance features, and green infrastructure. Waggoner is involved in all phases from planning through construction, including public outreach, stakeholder engagement, and construction management.</p>
04/21 - Ongoing	<p>Rural Bridge Replacement Initiative Phase II (South), LA (440001338), Various Locations, LA Project Manager. Alex 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, Alex is also responsible for designing a detour route or diversion road, which includes a suggested sequence of construction. Alex is also responsible for the guardrail design at each bridge site. Along with plan development, Alex will be assisting the project manager in subconsultant coordination as well as invoicing and progress reporting to the LADOTD Project Manager.</p>
05/24 - 2018	<p>Scotlandville Parkway to Downtown Baton Rouge Bike Trail (H.013267), East Baton Rouge Parish, LA Project Engineer. Alex served as the project engineer and designed a bike trail from Memorial Stadium to BREC Scotlandville Parkway Park. The design included separated mixed use trails, road to trail conversions, and shared lanes. Alex also prepared the striping and signing plans for this route, quantities, and estimated construction cost.</p>

16. STAFF EXPERIENCE:



Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
Name	Miles Williams, PE		Years of Relevant Experience with this Employer	35
Title	Senior Vice President/Transportation Market Section Lead		Years of Relevant Experience with Other(s) Employers	8
Degree(s)/Years/Specialization		BS/1983/Civil Engineering		
Active Registration Number/State/Expiration Date		PE#23094/LA/03-31-26		
Year Registered	1988	Discipline	Civil Engineering	

Contract Role(s)/Brief Description of Responsibilities | Principal-in-Charge | **Meets MPR 1**

Miles will oversee the project, ensuring that all services are performed in compliance with the contract. He will provide high-level direction and decision-making, ensuring the team adheres to the **LADOTD Location and Survey Manual** and other relevant standards. Miles will also be responsible for final approval of all deliverables and coordination with the LADOTD's Chief Engineer to **ensure quality and conformity with LADOTD's quality standards**. Miles has served as a design engineer and project manager on a wide range of traffic engineering and transportation-related projects. His tasks have included the design of individual signal installations and interconnected signal systems. He has supervised the multidisciplinary design of control signal systems for a variety of governmental and private clients. In addition, Miles has demonstrated **extensive experience in the development of maintenance of traffic, construction phasing, and construction signing plans and specifications**.


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).

10/12 - Ongoing SECTION 17 PROJECT	Hooper Road Widening (LA 408) Blackwater-Joor, East Baton Rouge Parish, LA (H.002316) Principal-in-Charge. Miles is the principal-in-charge for the NEPA EA and urban road design of this 2.2-mile capacity project. Hooper Road is being upgraded to a four-lane boulevard with complete streets accommodations. This project included both pavement preservation and capacity functional classifications.
05/20 - Ongoing SECTION 17 PROJECT	I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100) Road Design Lead. Miles 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.
03/13 - 07/22 SECTION 17 PROJECT	I-10: East Jct. I-49 to LA 328, Lafayette and St. Martin Parishes, LA (H.003003) I-10: LA 328 to LA 347, St. Martin Parish, LA (H.003014) I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish, LA (H.003014) Principal-in-Charge, Road Design Engineer. Miles served as the principal-in-charge and road design engineer for capacity and pavement preservation improvements for I-10 in Lafayette. These three projects were designed concurrently under a road design retainer and constructed under three separate construction contracts. He provided overall contract management, designed sequence of construction plans, and mentored the roadway design calculation and plan preparation process. He also played a supportive role in construction support as well. This project included both pavement preservation and capacity functional classifications.
01/13 - Ongoing SECTION 17 PROJECT	I-49 South: US 90 and Ambassador Caffery Interchange, Lafayette Parish, LA (H.002868) Road Design Engineer. Miles is the road design engineer of record for a new interchange on future I-49 at Ambassador Caffery Parkway in Lafayette, LA. He is responsible for the horizontal and vertical geometric design, subsurface and open ditch drainage design, and road plan production of a four-tiered interchange, eight-lane mainline, two-lane one way frontage roads, and u-turns. He also is responsible for coordinating the frontage road extensions and interchange alternative design for future/interim condition implementation.

Miles Williams resume continued

04/02 - 04/12	<p>Jones Creek Road Improvements Tiger Bend Road - Coursey Boulevard, East Baton Rouge Parish, LA (H.007137) Principal-in-Charge, Project Manager. Miles was the principal-in-charge for the Jones Creek Road Improvements project for LADOTD. The project involves widening an existing two-lane roadway to a five-lane curb and gutter roadway with subsurface drainage. He was responsible for contracts, geometrics, road design, sequence of construction, signing, and coordination of traffic signalization. He was also the project manager during the topographic and boundary survey and right-of-way map preparation phases.</p>
12/14 - 04/19	<p>South Acadian Thruway (Perkins Road - LA 73), East Baton Rouge Parish, LA (H.011261) Principal-in-Charge. Miles 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. Miles reviewed proposed safety and sidewalk improvements as they were implemented in the project. This project included both pavement preservation and capacity functional classifications.</p>
03/03 - Ongoing	<p>LA 1 Improvements: Fourchon-Golden Meadow, Lafourche Parish, LA (700-29-0112 H.008145 H.004526) Project Manager, Lead Road Design Engineer, Principal-In-Charge. Miles was the lead road design engineer for Phase 1 of this multi-segment mega project to add 17-miles of tolled bridge on new alignment through coastal Louisiana. During Phase 1 (Fourchon-Leeville), he designed both interim and ultimate interchange/intersection geometrics, roadway plans, permanent signing, permanent striping, and provided construction support. He is the principal-in-charge for environmental and permitting services, and construction support services for Phase 2 (Leeville-Golden Meadow). This project included both pavement preservation and capacity functional classifications.</p>
08/21 - 05/23	<p>LA 73: US 61 (Airline Highway) - LA 426 (Essen Lane), E. Baton Rouge Parish, LA (H.010652) Miles was the road design engineer-of-record and was responsible for all roadway design and plan preparation tasks. Waggoner was contracted by LADOTD to engineer the reconstruction of LA 73, covering full pavement replacement, curbs, gutters, and sidewalks from Airline Highway to the I-12 on-ramp, and repairs from the I-12 on-ramp to Essen Lane. The project included a 2.3-mile roadway with quantity summaries, cost estimates, and plans to minimize traffic impacts.</p>
04/18 - Ongoing	<p>Belle Chasse Bridge and Tunnel Replacement Public-Private Partnership Project, Plaquemines and Jefferson Parishes, LA (H.004791) Project Principal, Hydraulic Design Engineer. Waggoner is a design subconsultant providing drainage design for this alternative delivery project. Miles 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.</p>

16. STAFF EXPERIENCE:


	Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
	Name	Robert J. Lear, Jr., PE, LSI		Years of Relevant Experience with this Employer	26
	Title	Vice President Senior Project Manager		Years of Relevant Experience with Other(s) Employers	3
	Degree(s)/Years/Specialization		BS/1996/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE#29394/LA/03-31-2027		
	Year Registered	2001	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		QA/QC Meets MPR 2			
<p>Robert will serve as the contract QA/QC Manager. He brings extensive knowledge in roadway design and construction projects including developing design reports, technical reviews, and plan development, along with experience in plan preparation using Microstation and Inroads. For this project, Robert will develop and implement quality assurance and quality control plans, conduct regular inspections and audits, and ensure that all project activities adhere to specified standards to guarantee the highest level of quality in project deliverables. With over 25 years of LADOTD project design and management experience, Robert will ensure projects meet LADOTD's goals and are completed on time and within budget.</p>					
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).				
01/14 - 12/16	<p>LA 347: Roundabout at Melancon Road, St. Martin Parish, LA (H.009456) Project Manager. Robert was the project manager, engineer of record, and survey task manager for the design of a new four-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 cost for this project. He was also responsible for establishing design required right of way lines, utility coordination and right-of-way (R/W) map preparation. All deliverables were prepared using InRoads Survey, CADconform, and Microstation software.</p>				
01/14 - 07/16	<p>LA 342: Roundabout at LA 724, Lafayette Parish, LA (H.002163) Project Manager. Robert served as the project manager and road design engineer for a four-legged single-lane roundabout in Lafayette Parish, LA. He was responsible for the horizontal and vertical geometric design, typical sections, suggested sequencing, permanent pavement markings, permanent signing, quantities, and opinion of probably costs for this project. He also supervised all survey and subsurface utility engineering (SUE) efforts. Utility locates included QL-D and QL-C locates. Robbie coordinated with District 03 for utility relocation requirements and needs.</p>				
09/22 - Ongoing	<p>LA 1088: Soult and Trinity Roundabouts, St. Tammany Parish, LA (H.010116) Senior Road Design Engineer. Robert is the senior road design engineer for the design of two new two-lane roundabouts and urban roadway widening of LA 1088 in St. Tammany Parish, LA. He is responsible for roundabout layout, horizontal and vertical geometrics, and mentoring staff for plan production.</p>				
10/12 - Ongoing	<p>Hooper Road Widening (LA 408) Blackwater-Joor, East Baton Rouge Parish, LA (H.002316) Project Manager. Robert was the project manager during the Environmental Assessment phase of this 2.2-mile urban roadway capacity project. Hooper Road is being upgraded to a four-lane boulevard with complete streets accommodations. He also managed the topographic survey and prepared right-of-way (ROW) maps. This project included both pavement preservation and capacity functional classifications.</p>				

SECTION 17 PROJECT

Robert Lear resume continued

<p>03/13 - 07/22</p> <p>SECTION 17 PROJECT</p>	<p>I-10: East Jct. I-49 to LA 328, Lafayette and St. Martin Parishes, LA (H.003003) I-10: LA 328 to LA 347, St. Martin Parish (H.003014) I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish (H.003014) Project Manager and Lead Road Design Engineer of Record. Robert served as the project manager and lead road design engineer of record for capacity and pavement preservation improvements for I-10 in Lafayette. These three projects were designed concurrently under a road design retainer and constructed under three separate construction contracts. He designed roadway geometrics, drainage, graphical grades, ramp terminals, roundabout intersections, and construction sequencing. He also coordinated the multi-discipline plan set packaging, quantity computations, specifications, special provisions, pay items, design reports, design waivers, design exceptions, and utility conflicts. He played an active role in construction support as well. This project included both pavement preservation and capacity functional classifications.</p>
<p>01/13 - Ongoing</p> <p>SECTION 17 PROJECT</p>	<p>I-49 South: US 90 and Ambassador Caffery Interchange, Lafayette Parish, (H.002868) Roadway Design Engineer. Robert is a roadway design engineer for a new interchange on future I-49 at Ambassador Caffery Parkway in Lafayette, LA. Robert is responsible for the horizontal and vertical geometric design and road plan production of a four-tiered interchange, eight-lane mainline, two-lane one-way frontage roads, and u-turns.</p>
<p>05/20 - Ongoing</p> <p>SECTION 17 PROJECT</p>	<p>I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100) Roadway Design Engineer. Robert is a roadway design engineer for the widening of I-10, interchange improvements, and surface street improvements through Baton Rouge. His responsibilities include urban roadway, freeway, and interchange geometrics, profile design, typical sections, design reports, establishing required ROW, and plan preparation using Microstation and Inroads. He also designed four roundabouts for this project. He is part of the roadway task force which collaborates with the design team, LADOTD, and the CMAR contractor.</p>
<p>08/18 - 10/22</p>	<p>I-220/I-20 Interchange and BAFB Access Design-Build, Bossier Parish, LA (H.003370) Lead Road Design Engineer. 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 four-lane rural arterial roadway. Robert 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. Robert also was responsible for QA/QC reviews and/or independent reviews of the SWPPP, Interchange Modification Report (IMR) re-evaluation, traffic control plans, signing and striping plans, and transportation management plan.</p>
<p>04/02 - 04/12</p>	<p>Jones Creek Road Improvements Tiger Bend Road - Coursey Boulevard, East Baton Rouge Parish, LA (H.007137) Project Manager and Lead Road Design Engineer. Robert was the project manager and lead road design engineer for the widening of a two-lane road to a five-lane urban section. He designed roadway geometrics, intersections, sidewalks, residential and commercial drives, pavement markings, and cross sections. He also managed the topographic survey and worked under PLS supervision for the preparation of ROW maps.</p>
<p>08/21 - 05/23</p>	<p>LA 73: US 61 (Airline Highway) - LA 426 (Essen Lane), E. Baton Rouge Parish, LA (H.010652) Robert performed the roadway QA/QC for the entire project including typical sections, plan profiles, cross sections, pay items, quantities, and opinion of probable costs. Waggoner was contracted by LADOTD to engineer the reconstruction of LA 73, covering full pavement replacement, curbs, gutters, and sidewalks from Airline Highway to the I-12 on-ramp, and repairs from the I-12 on-ramp to Essen Lane. The project included a 2.3-mile roadway with quantity summaries, cost estimates, and plans to minimize traffic impacts.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
	Name	Andrew Windmann, PE		Years of Relevant Experience with this Employer	2
	Title	Senior Bridge Design Engineer		Years of Relevant Experience with Other(s) Employers	13
	Degree(s)/Years/Specialization		BS, Civil Engineering, 2010		
	Active Registration Number/State/Expiration Date		PE#39042/LA/09-30-26		
	Year Registered	2014	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Discipline Manager - Bridge/Structural Design Services Meets MPR 4			
Andrew will serve as the bridge design lead for the Downing Pines Road Roundabout at Mane Street Project. He is a licensed civil engineer with over 15 years of experience in bridge design, including 13 years with LADOTD . As a LADOTD Assistant Bridge Design Administrator (2021-2023) , he managed a \$240 million statewide bridge program, overseeing planning and design for rehabilitation and replacement projects.					
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 - Ongoing	Pecue Lane/I-10 Interchange, East Baton Rouge Parish, LA (H.003047) Bridge Design. Andrew is performing bridge design for this project. East Baton Rouge Parish with assistance from LADOTD and the Federal Highway Administration (FHWA) is developing preliminary and final engineering plans for the construction of a diverging diamond interchange with multiple through and turn lanes on Pecue Lane, an entrance ramp and exit ramp on eastbound I-10, an entrance ramp and exit ramp on westbound I-10, replacing the current two lane overpass bridge, replacing the Pecue Lane/Wards Creek Bridge.				
5/23 - Ongoing	Carroll Avenue over Middle Creek Colyell Creek, Livingston Parish, LA Project Manager/Bridge Design Lead. Andrew coordinated the multidisciplinary effort to deliver the bridge replacement project, including all necessary engineering services, survey services, and environmental services. He also served as the technical lead, verifying the design and directing the creation of the construction plans for the new bridge structure. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 62-foot by 20-foot railcar bridge with a new 24-foot by 80-foot cast-in-place slab span bridge. The new bridge utilizes the Off-System Slab Span standard details for the proposed clear width. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of right-of-way (ROW) maps all while adhering to rigorous quality control measures.				
5/23 - Ongoing	Hood Road over Middle Colyell Creek, Livingston Parish, LA Project Manager/Bridge Design Lead. Andrew coordinated the multidisciplinary effort to deliver the bridge replacement project, including all necessary engineering services, survey services, and environmental services. He also served as the technical lead, verifying the design and directing the creation of the construction plans for the new bridge structure. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 92-foot by 19-foot timber trestle bridge with a new 24-foot by 120-foot cast-in-place slab span bridge. The new bridge is entirely in a 420-foot radius curve on a new alignment that improves existing undesirable geometry in the roadway. Our team has performed the design and detailing for this non-standard case that meets all current LADOTD and AASHTO requirements. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of ROW maps all while adhering to rigorous quality control measures.				
2010 - 2023	LADOTD Bridge Design Section (Prior Firm) Engineer Intern to Assistant Bridge Design Administrator, 2010-2023). Prior to joining Waggoner (Sigma), Andrew worked in the Bridge Design section at LADOTD for 13.5 years. Andrew gained a breadth and depth of organizational, procedural, and state-specific knowledge of LADOTD's design requirements, including internal policies, preferences, and intimate knowledge of the current standard plans. Immediately prior to joining Waggoner (Sigma), Andrew served as the state-wide Bridge Preservation program manager whose responsibility it was to understand the overall health of the over 7,000-bridge inventory as well as program bridge replacement, rehabilitation, and repair projects over a rolling eight-year program to spend an annual budget of \$240 million. He has a unique understanding of the Department's need for practical design and getting the most efficient bridge replacements completed to get the most use of the insufficient funds received for bridge preservation across the state.				

Andrew Windmann resume continued

5/23 - Ongoing	<p>George Jenkins Road over Berrys Creek, Washington Parish, LA Project Manager/Bridge Design Lead. Andrew coordinated the multidisciplinary effort to deliver the bridge replacement project, including all necessary engineering services, survey services, and environmental services. He also served as the technical lead, verifying the design and directing the creation of the construction plans for the new bridge structure. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 120-foot by 13-foot timber trestle bridge with a new 24-foot by 140-foot cast-in-place slab span bridge. The new bridge utilizes the Off-System Slab Span standard details for the proposed clear width. Our team has modified the end bent detail to accommodate the taper-down bridge rail along the approach slab that was necessitated by the proximity of an existing driveway to the proposed bridge. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of ROW maps all while adhering to rigorous quality control measures.</p>
5/23 - Ongoing	<p>Mitch Road over Peters Creek, Washington Parish, LA Project Manager/Bridge Design Lead. Andrew coordinated the multidisciplinary effort to deliver the bridge replacement project, including all necessary engineering services, survey services, and environmental services. He also served as the technical lead, verifying the design and directing the creation of the construction plans for the new bridge structure. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 78-foot by 26-foot timber trestle bridge with a new 24-foot by 100-foot cast-in-place slab span bridge. The new bridge utilizes the Off-System Slab Span standard details for the proposed clear width and skew. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of ROW maps all while adhering to rigorous quality control measures.</p>
04/21 - Ongoing	<p>Rural Bridge Replacement Initiative Phase II (South), LA (16 Projects) (440001338), Various Locations, LA Project Manager. Andrew was the project manager for this project. Waggoner is leading engineering design and coordination for the replacement of 29 state highway bridges across five LADOTD districts, organized into 16 concurrent projects. The team is responsible for preliminary and final roadway and bridge design, drainage and structural engineering (including reinforced concrete components and prestressed girders), ROW determination, and environmental coordination for NEPA compliance. Waggoner collaborates with subconsultants and maintains regular client communication to ensure timely submittals and effective project alignment.</p>
02/24 - Ongoing	<p>BREC Scotlandville Parkway Bridge Replacements, East Baton Rouge Parish, LA Project Manager. Andrew is the project manager and bridge engineer for designing three new bridge structures for pedestrian and small vehicle traffic. He is responsible for bridge design, geotechnical subconsultant management, construction and demolition plan development, site plans, quantities, construction cost estimates, and channel protection.</p>
03/13 - 12/19	<p>I-10: I-49 E. Junction to LA 328 Widening Project, Lafayette, LA Lead Bridge Design Engineer. Andrew led the bridge design on this project that included the widening or full replacement of 12 bridge structures (six unique sites) along the I-10 mainline. The scope of this project included the initial assessment of each bridge to provide recommendation on widening versus replacement, while factoring in current condition, load-carrying capacity, and feasibility of construction. During Stage 3 of the project, Andrew led the structural team, ensuring the design were performed with great quality following LADOTD's QC/QA plan.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
	Name	Joshua Gonya, PE		Years of Relevant Experience with this Employer	1
	Title	Senior Bridge Design Engineer		Years of Relevant Experience with Other(s) Employers	15
	Degree(s)/Years/Specialization		BS/2008/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE#40859/LA/09-30-26		
	Year Registered	2016	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Bridge/Structural Design Services Meets MPR 5			
<p>Joshua will serve as the lead bridge load rating and inspection engineer for the Downing Pines Road Roundabout at Mane Street Project. He is a licensed Professional Engineer and NHI-Certified Bridge Inspector with extensive experience in civil and structural engineering. His expertise includes the design of prestressed and reinforced concrete, steel superstructures, foundations, and sign trusses, and he is proficient in national and state standards including AASHTO, LADOTD, and ACI.</p>					
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).				
05/23 - Ongoing	<p>Carroll Avenue over Middle Creek Colyell Creek, Livingston Parish, LA Bridge Design Engineer. Joshua provided structural design for the cast-in-place slab superstructure and bent cap. He ensured the design met applicable LADOTD Bridge Design Section requirements as stipulated in the Bridge Design and Evaluation Manual (BDEM) and published Bridge Design Technical Memoranda (BDTM). He also directed the development of corresponding construction plans that provide sufficient detail for complete construction of the new bridge. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 62-foot by 20-foot railcar bridge with a new 24-foot by 80-foot cast-in-place slab span bridge. The new bridge utilizes the Off-System Slab Span standard details for the proposed clear width. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of ROW maps all while adhering to rigorous quality control measures.</p>				
05/23 - Ongoing	<p>Hood Road over Middle Colyell Creek, Livingston Parish, LA Bridge Design Engineer. Joshua provided structural design for the cast-in-place slab superstructure and bent cap. He ensured the design met applicable LADOTD Bridge Design Section requirements as stipulated in the BDEM and published BDTM. He also directed the development of corresponding construction plans that provide sufficient detail for complete construction of the new bridge. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 92-foot by 19-foot timber trestle bridge with a new 24-foot by 120-foot cast-in-place slab span bridge. The new bridge is entirely in a 420-foot radius curve on a new alignment that improves existing undesirable geometry in the roadway. Our team has performed the design and detailing for this non-standard case that meets all current LADOTD and AASHTO requirements. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of ROW maps all while adhering to rigorous quality control measures.</p>				

Joshua Gonya resume continued

05/23 - Ongoing	<p>George Jenkins Road over Berrys Creek, Washington Parish, LA Bridge Design Engineer. Joshua provided structural design for the cast-in-place slab superstructure and bent cap. He ensured the design met applicable LADOTD Bridge Design Section requirements as stipulated in the BDEM and published BDTM. He also directed the development of corresponding construction plans that provide sufficient detail for complete construction of the new bridge. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 120-foot by 13-foot timber trestle bridge with a new 24-foot by 140-foot cast-in-place slab span bridge. The new bridge utilizes the Off-System Slab Span standard details for the proposed clear width. Our team has modified the end bent detail to accommodate the taper-down bridge rail along the approach slab that was necessitated by the proximity of an existing driveway to the proposed bridge. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of ROW maps all while adhering to rigorous quality control measures.</p>
05/23 - Ongoing	<p>Mitch Road over Peters Creek, Washington Parish, LA Bridge Design Engineer. Joshua provided structural design for the cast-in-place slab superstructure and bent cap. He ensured the design met applicable LADOTD Bridge Design Section requirements as stipulated in the BDEM and published BDTM. He also directed the development of corresponding construction plans that provide sufficient detail for complete construction of the new bridge. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 78-foot by 26-foot timber trestle bridge with a new 24-foot by 100-foot cast-in-place slab span bridge. The new bridge utilizes the Off-System Slab Span standard details for the proposed clear width and skew. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of ROW maps all while adhering to rigorous quality control measures.</p>
04/21 - Ongoing	<p>Rural Bridge Replacement Initiative Phase II (South), LA (16 Projects), Various Locations, LA Bridge Designer. Waggoner is leading engineering design and coordination for the replacement of 29 state highway bridges across five LADOTD districts, organized into 16 concurrent projects. The team is responsible for preliminary and final roadway and bridge design, drainage and structural engineering (including reinforced concrete components and prestressed girders), ROW determination, and environmental coordination for NEPA compliance. Waggoner collaborates with subconsultants and maintains regular client communication to ensure timely submittals and effective project alignment.</p>
09/19 - 09/21	<p>Morgan County Bridge #52 Replacement, Morgan County/INDOT, Morgan County, Indiana Project Manager and Lead Bridge Designer. Joshua was the Project Manager and Lead Designer for this project. He completed the design of a three span AASHTO Type 1 beam bridge to replace the existing structure. The superstructure was supported by semi-integral end bents and wall piers which were both founded on steel H-piles. This bridge was in a rural area so considerations were taken to account for drainage of fields at all the corners.</p>
05/14 - 05/15	<p>Essen Lane over Wards Creek Bridge Widening, East Baton Rouge Parish, LA Lead Bridge Designer. Joshua was responsible for initial bridge evaluations and widening of the existing Essen Lane bridge over Wards Creek. This project involved utility relocations, extending and matching existing substructures, extending, and matching existing slab span bridge elements. The bridge was evaluated in all temporary structural layouts with temporary traffic conditions.</p>
05/19 - 08/20	<p>SR15 over Eagle Creek Bridge Replacement, Kosciusko County/INDOT Kosciusko County, Indiana (previous firm) Project Manager and Lead Bridge Designer. Joshua completed the design of a custom three-span slab superstructure supported by integral end bents and interior open pile bents found on steel shell piles. Hydraulic design and site visits concluded that drift and debris are a major factor for Eagle creek and the open pile bents were used in order to minimize the amount of drift present at the structure. The bridge was designed to accommodate phased construction so that one lane of heavy truck traffic could be maintained at all times during construction. This bridge was in an urban area and required a large effort for utility coordination and local business coordination.</p>
05/18 - 05/20	<p>Worthsville Road over Tracy Ditch Bridge Replacement, Greenwood, Indiana (previous firm) Project Manager and Lead Bridge Designer. Josh completed the design of a 72'-6" single-span, Hybrid Bulb-Tee Beam bridge to replace the existing three-sided culvert over Tracy Ditch. Bridge Hydraulic design was completed to size the bridge and provide Q100 roadway serviceability. The bridge was designed to accommodate phased construction so that one lane of traffic could be maintained in each direction during construction. The end bents and bridge piling were spaced and designed to span an existing sanitary force main that could not be relocated. The bridge cross section includes four travel lanes, a striped median, two raised sidewalks, and bridge railing.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
	Name	Joshua Olivier, PE		Years of Relevant Experience with this Employer	7
	Title	Project Engineer		Years of Relevant Experience with Other(s) Employers	0
	Degree(s)/Years/Specialization		BS/2017/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE#46498/LA/9-30-26		
	Year Registered	2022	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Bridge/Structural Design Services			
<p>Joshua will support the bridge/structural design services for the Downing Pines Road Roundabout at Mane Street Project. He is a licensed Professional Engineer with experience in bridge and structural design, geometric roadway design, and transportation-related studies. He contributes to the preparation of structural analyses, detailed drafting, and design calculations, supporting safe and efficient bridge construction. Joshua is skilled in tools such as AutoCAD, Civil 3D, and LEAP Bridge Concrete, which he applies to plan preparation and structural modeling.</p>					
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).				
5/23 - Ongoing	<p>Carroll Avenue over Middle Creek Colyell Creek, Livingston Parish, LA Project Engineer. Joshua was project engineer for this project, providing bridge and structural design services. Waggoner was contracted by LADOTD to replace a rail car bridge with a new slab span bridge. The project involved comprehensive services, including topographic and property surveys, ROW mapping, and the development of preliminary and final plans. Waggoner completed road and drainage design, a hydraulic impact analysis, and bridge design for a 4-span structure, all while adhering to LADOTD standards. The scope included utility coordination, construction sequencing, and rigorous quality control measures.</p>				
2018 - Present	<p>LA 3213 Gramercy Bridge Approach (Westbank), St. John the Baptist Parish, LA (H.002960) Project Engineer. Joshua was project engineer for this project, providing bridge and structural design services. This project consists of constructing a new overpass along the existing horizontal alignment on LA 3213 to create a grade separation over the existing Union Pacific railroad tracks while remaining inside the existing ROW and includes the design of an on-site diversion to route traffic around the construction zone. Joshua performed the final structural design for all superstructure and substructure components. All design was performed with the AASHTO L.R.F.D. guidelines and LADOTD's Bridge Design and Evaluation Manual. This project utilized the newly developed "LG" prestressed concrete girders.</p>				
06/23 - Ongoing	<p>Jones Creek Road Improvements Phases 1A & 1B, East Baton Rouge Parish, LA Project Engineer. Joshua is serving as project engineer for this project. Waggoner was contracted by the East Baton Rouge Parish Department of Department of Transportation and Drainage through the MOVEBR Program to design the extension of Jones Creek Road from the existing Tiger Bend Road intersection to a new terminus point on Airline Highway. The project includes a two-mile four-lane boulevard on new alignment, green infrastructure drainage features, a roundabout at Jefferson Highway, a new residential subdivision access point for an existing subdivision, a new bridge over Claycut Bayou, topographic and ROW mapping, and stormwater detention ponds to control outfall channel levels.</p>				
01/18 - 06/20	<p>I-10 Widening, LA30 - LA22, Ascension Parish, LA Project Engineer. Joshua was project engineer for this project, providing bridge and structural design services. This project involves the widening of a five-mile segment of I-10, including two girder bridge structures and one slab span structure as well as the replacement of the LA 941 bridge structure. Joshua was responsible for checking the longitudinal reinforcing design of the slab span bridge as well as the reinforcement of the new LA 941 bridge. He was also responsible for a preliminary bridge quantity estimate for the LA 941 overpass.</p>				

Joshua Olivier resume continued

02/16 - Ongoing	<p>Pecue Lane/I-10 Interchange, East Baton Rouge Parish, LA (H.003047) Project Engineer. Joshua is serving as project engineer for this project. This project consists of the design of an interchange with multiple through and turn lanes on Pecue Lane, an entrance ramp and exit ramp on eastbound I-10, an entrance and exit ramp on westbound I-10, replacing the current Pecue Lane slab span bridge over Wards Creek, and widening the I-10 girder bridge over Wards Creek. Joshua was responsible for the superstructure and substructure design of the I-10 East bound and West bound bridge widening as well as the checking of the Pecue Lane slab span superstructure and substructure design. He also assisted with the load rating of all structures. Additionally, Joshua performed shop drawing review as the project entered construction.</p>
10/12 - Ongoing SECTION 17 PROJECT	<p>Hooper Road Widening (LA 408), East Baton Rouge Parish, LA Project Engineer. Joshua is serving as project engineer for this project, providing bridge and structural design services. This project is for the widening of an existing two-lane roadway to a four-lane boulevard to increase capacity. The project began with an Environmental Assessment (EA) and National Environmental Policy Act (NEPA) environmental documentation.</p>
01/18 - 05/20	<p>I-10 Corridor Improvements (LA 415 to Essen Lane) EA, West & East Baton Rouge Parishes, LA Project Engineer. Joshua assisted in the development of the proposed vertical profiles for the Perkins Drive through Acadian Throughway section of the corridor. He was responsible for the identification of critical points of clearance along this region and the corresponding impacts to the design Profile Grade Line. He was also responsible for developing construction sequencing for the removal of the straddle bent over the Kansas City Rail Road overpass.</p>
2014 - Ongoing SECTION 17 PROJECT	<p>Ambassador Caffery & US 90 I/C (Future I-49), Lafayette, LA (H.002868) Project Engineer. Joshua is serving as project engineer for this project. This project entails construction of a new fully access controlled grade-separated interchange at the intersection of Ambassador Caffery Parkway (LA 3073) and US 90 (future I-49 South) in Lafayette Parish. Joshua assisted with checking the superstructure and column bent substructure design. This project utilized the newly developed "LG" prestressed concrete girders. Additionally, Joshua performed shop drawing review as the project entered construction.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
	Name	Charlotte Gremillion, PE		Years of Relevant Experience with this Employer	5
	Title	Project Engineer		Years of Relevant Experience with Other(s) Employers	2
	Degree(s)/Years/Specialization		BS/2018/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE#47930/LA/09-30-2027		
	Year Registered	2023	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Discipline Lead - Road Design Services			
<p>Charlotte will lead the road design services team. She will be responsible for developing roadway design criteria, performing geometric design, and ensuring all plans adhere to engineering standards and regulator requirements. Charlotte is experienced with transportation and commercial projects, including road design, geometric design, and on-site work. She is trained and experienced in AutoCAD, Civil 3D, MicroStation, and GlobalMapper, which she uses for plan preparation and design, contributing to high-quality deliverables that meet LADOTD standards.</p>					
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).				
05/20 - Ongoing SECTION 17 PROJECT	<p>I-10: LA 415 to Essen Lane on I-10 and I-12, Baton Rouge, LA (H.004100) Lead Design Engineer. This project is to replace the urban interstate through downtown Baton Rouge under an alternative delivery process. Charlotte serves as a technical design engineer for urban freeways, grade separation interchanges, urban arterials, urban collectors, and local streets. She is the lead design engineer for roundabouts at the Dalrymple Drive Exit Ramp and Terrance Street at Braddock Street intersection. She prepares roadway design calculations, executes technical reviews, and prepares construction plans for several stages, phases, and segments of the project. She also performs quantity calculations and prepares quantity tables for various submittal stages. She is responsible for plan and profile preparation, cross sections, and roadway geometrics for various sections and stages of the project. She is also the lead design engineer for four roundabouts, which are designed in accordance with NCHRP 1043 Guidelines.</p>				
10/20 - Ongoing	<p>I-10/I-12 College Flyover, East Baton Rouge Parish, LA (H.013897) Technical Review Engineer. This project includes design upgrades to a grade separation fully directional interchange of two interstates in Baton Rouge, LA. Charlotte serves as a technical review engineer for the owner verification team on the following design units: definitive design, clearing, and grubbing, roadway (multiple units), drainage, maintenance of traffic (multiple units), pavement marking and signing, SWPPP, and TMP Level 4. Her responsibilities include technical reviews of calculations and drawings for conformance to the minimum guidelines, project technical performance specifications, and contract documents. She manages all technical comments originating from her firm and take part in technical review meetings with the design-builder and owner.</p>				
09/22 - Ongoing	<p>LA 1088: Sault and Trinity Roundabouts, St. Tammany Parish, LA (H.010116) Project Engineer. This project includes replacing two intersections and the connecting two-lane urban arterial with roundabouts and a four-lane boulevard section. Charlotte responsibilities include roadway geometrics, design reports, technical calculations, and plan development. She designed all typical sections through the addition of two new roundabouts. She identified and assessed the roadway design constraints in the area when deciding the location of the two roundabouts and roadway approaches. She connected the existing conditions to the new designs so that access would not be limited. She is also the lead design engineer for both roundabouts, which are being designed in accordance with NCHRP 1043 Guidelines.</p>				
04/21 - Ongoing	<p>Rural Bridge Replacement Initiative Phase II, LA Project Engineer. Charlotte is in charge of managing a bridge replacement project included in this contract. This work includes assessing site conditions, deciding the structure type, and size based on the hydraulics of the channel, and designing the roadway approaches. She will be responsible for preparing the submittals for each of these bridges as well as submitting monthly progress reports.</p>				


Charlotte Gremillion resume continued

02/24 - Ongoing	<p>Enterprise Boulevard Extension, Lake Charles, LA Roadway Manager. Charlotte's role in this project includes roadway geometry, design reports, technical calculations, and plan preparation. She was responsible for designing all typical sections for the two new roundabouts and evaluated the design constraints in the area to determine the optimal locations for the roundabouts and their connecting roadways. Charlotte ensured a seamless connection between the existing conditions and the new designs to maintain unrestricted access. Additionally, she coordinated with subconsultants in the areas of survey, traffic, and geotechnical work. The project involves replacing two intersections and transforming a two-lane urban arterial into a four-lane boulevard with roundabouts. These roundabouts are being designed in accordance with NCHRP 1043 Guidelines.</p>
08/23 - 11/24	<p>Gadsden Lakewood Drive Improvements, Gadsden, AL Project Engineer. Charlotte was responsible for designing the drainage system for a roadway project in the City of Gadsden. The work involved conducting site assessments, evaluating hydrological conditions, and creating a drainage plan to manage stormwater, prevent flooding, and protect infrastructure. Using software like Civil 3D and Openroads, the stormwater drains and culverts were designed to ensuring compliance with local regulations.</p>
10/20 - Ongoing	<p>I-10/I-12 College Flyover, East Baton Rouge Parish, LA (H.013897) Technical Review Engineer. This project includes design upgrades to a grade separation fully directional interchange of two interstates in Baton Rouge, LA. Charlotte serves as a technical review engineer for the owner verification team on the following design units: definitive design, clearing, and grubbing, roadway (multiple units), drainage, maintenance of traffic (multiple units), pavement marking and signing, SWPPP, and TMP Level 4. Her responsibilities include technical reviews of calculations and drawings for conformance to the minimum guidelines, project technical performance specifications, and contract documents. She manages all technical comments originating from her firm and take part in technical review meetings with the design-builder and owner.</p>
01/23 - Ongoing	<p>Hooper Road: LA 3037 - LA 37, East Baton Rouge Parish, LA (H.009300) Lead Road Design Engineer. Charlotte is the lead road design engineer for this project, which includes three segments of LA 408 in Central, LA. This project includes widening to Hooper Road at Sullivan Road (LA 3037) intersection to a four-lane boulevard, a 2x1 roundabout at Deval Road, turn lanes at major subdivision entrances along Hooper Road, and a 2x1 roundabout at Greenwell Springs Road (LA 37). She designed both roundabouts in accordance with NCHRP 1043 Guidelines.</p>
03/25 - Ongoing	<p>LA 933 at Joe Sevario Road Roundabout, Ascension Parish, LA (H.014409) Lead Road Design Engineer. Charlotte is the lead road design engineer for this project, which includes replacing a stop-controlled intersection with a single lane roundabout. She is designing the horizontal and vertical geometrics, typical sections, plan profiles, geometric details, sequence of construction, and cross sections. The design of these roundabouts are in accordance with NCHRP 1043 Guidelines.</p>

16. STAFF EXPERIENCE:

	Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
	Name	Kelsie Bankston, PE		Years of Relevant Experience with this Employer	4
	Title	Project Engineer		Years of Relevant Experience with Other(s) Employers	3.5
	Degree(s)/Years/Specialization		BS/2018/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE#47126/LA/03-31-2027		
	Year Registered	2022	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Road Design Services			
<p>For this project, Kelsie will serve on the roadway design and construction support team, creating layouts and plans in adherence to LADOTD's required engineering standards and provide construction phase support. She will consider traffic flow, terrain, and environmental impacts to optimize designs and minimize risk. She will ensure that all measurements, including travel lanes, shoulder widths, and utility locations, are accurately documented. Her work will contribute to the preliminary and final plan preparations, ensuring the designs meet the required LADOTD guidelines. She has over seven (7) years of experience with a focus on roadway, drainage and structural engineering. Previously, Kelsie worked as an engineer intern at Forte & Tablada, Inc., where she conducted site visits, assisted with bridge inspections, prepared reports, and designed bridge replacements. She also trained new engineers and coordinated project progress, demonstrating her commitment to quality and attention to detail.</p>					
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 - 02/23	LA 73: US 61 (Airline)-Essen Lane, East Baton Rouge, LA (H.010652) Project Engineer. This roadway transfer project involves replacement of the existing LA 73 roadway with a new asphalt pavement section. Kelsie assisted in setting up the base geometry using as-built drawings and survey data for the reconstruction of LA 73, including curb and gutter and sidewalks throughout the limits of the project. She was responsible for all quantity calculations, including compiling the quantity book, and the summary sheets. She also performed the QA/QC of the geometric details.				
10/21 - Ongoing SECTION 17 PROJECT	I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), E. Baton Rouge Parish, LA (H.004100) Project Engineer. Kelsie has assisted in the preparation of various submittals for this project. She has assisted in the typical section design, plan, and profile preparation, required right-of-way and roadway geometrics for various sections and stages of this project, and is responsible for the graphical grading and superelevation design of multiple ramps throughout the corridor. She is responsible for documenting and tracking information, documents, and comments received from LADOTD and other consultants on the design team. Kelsie has performed quantity calculations and prepared quantity tables for various submittal stages.				
05/21 - 03/23	LA 352 Drainage Improvement, St. Martin Parish, LA (H.014415) Project Engineer. This project involves channel improvements and adding subsurface drainage systems to an outfall channel adjacent to LA 352. Kelsie is responsible for the typical sections, plan profiles, developing a suggested sequence of construction, diversion road design for maintenance of traffic, quantity computations, pay item list, and documentation of comments and responses.				
04/21 - Ongoing	Rural Bridge Replacement Initiative Phase II, LA Project Engineer. Kelsie is managing and designing four bridge replacement projects included in this contract. This work includes assessing site conditions, deciding the structure type and size based on the hydraulics of the channel, and designing the roadway approaches. She is responsible for project management, roadway and slab span bridge design, construction plan preparation, quantity computations, and developing an opinion of probable costs.				


16. STAFF EXPERIENCE:

	Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
	Name	Bryan Harmon, PE		Years of Relevant Experience with this Employer	10
	Title	Vice President, Special Projects Engineer		Years of Relevant Experience with Other(s) Employers	34
	Degree(s)/Years/Specialization		BS/1982/Civil Engineering BS/1981/Agricultural Engineering		
	Active Registration Number/State/Expiration Date		PE#22595/LA/3-31-2027		
	Year Registered	1987	Discipline	Civil, Environmental	
Contract Role(s)/Brief Description of Responsibilities		Discipline Lead - Hydraulics & Drainage Design			
<p>For this contract, Bryan will lead the hydraulic engineering and drainage design services ensuring alignment with engineering standards and regulatory requirements. His responsibilities will include providing hydraulic analysis and design, developing type, size, and location parameters for drainage structures, and establishing project design criteria. Additionally, Bryan will supervise the planning and implementation of hydraulics and drainage systems, ensuring compliance with engineering standards and environmental regulations.</p>					
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).				
03/13 - 07/22 SECTION 17 PROJECT	<p>I-10: East Jct. I-49 to LA 328, Lafayette and St. Martin Parishes, LA (H.003003) I-10: LA 328 to LA 347, St. Martin Parish, LA (H.003014) I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish, LA (H.003014) QA/QC. Bryan performed roadway and drainage design for these three segments of I-10. He also performed superelevation computations and graphical grades to provide positive drainage along relatively flat grades in the median of the interstate. He was also responsible for QA/QC of the roadway plans and sequence of construction for the LA 347 roundabouts and roadway improvements.</p>				
08/18 - 10/22	<p>I-220/I-20 Interchange and BAFB Access Design-Build, Bossier Parish, LA (H.003370) Supervising Design Engineer. Bryan was responsible for the evaluation and design of both the existing and proposed drainage systems for this new four-lane rural arterial and roadway. In addition to the standard LADOTD 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 their 2-D Unsteady 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.</p>				
05/20 - Ongoing SECTION 17 PROJECT	<p>I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100) Supervising Drainage Engineer. Bryan is serving as Waggoner's supervising drainage engineer for this major interstate improvement project from just east of the Mississippi River bridge crossing to just west of College Drive. Bryan is responsible for the final drainage design of the interstate collection systems, local frontage roads and drainage outfalls including the bridge hydraulic evaluation of the Acadian Thruway Bridge over Dawson Creek.</p>				


Bryan Harmon resume continued

<p>2016 - Ongoing</p> <p>SECTION 17 PROJECT</p>	<p>Hooper Road (LA 408), East Baton Rouge Parish, LA (H.002316/CP#12-CS-HC-0017) Hydraulic Design QA/QC. The project consists of improving Hooper Road in Central, LA from Blackwater Road to Sullivan Road. Bryan performed all QA/QC and hydraulic design oversight for the project including existing and proposed drainage computations, existing drainage areas, pre and post development stormwater parameters, HEC-RAS models of the five existing major cross drains to evaluate existing and proposed conditions, design of reinforced box culverts for cross drains, open ditches and/or drainage structures and piped systems for storm drainage collection. He was the plan checker for the drainage plan and profile, existing and proposed drainage, and the summary of drainage structure sheets. The design computations were performed using HYDRWIN, Global Mapper, HEC-RAS, Excel, and Civil3D.</p>
<p>05/21 - 03/23</p>	<p>LA 352 Drainage Improvement, St. Martin Parish, LA (H.014415) Lead Hydraulic Engineer. Bryan 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. Bryan 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.</p>
<p>10/20 - Ongoing</p>	<p>I-10 and I-12 College Drive Flyover Ramp Design-Build (CE&I/OV), E. Baton Rouge Parish, LA (H.013897) Road Design and Drainage Design Reviewer. Bryan is serving as both a road design and drainage design reviewer, providing support services to LADOTD for this Project. This project consists of modifying the I-10 West/College Drive exit into separate I-12 West and I-10 West exits. Bryan's responsibilities include participation in the progress reviews of each Design Unit and Ready for Construction (RFC) Plan submittals. These reviews include roadway plans, construction sequencing, primary drainage systems, open channel design, with consideration being given to LADOTD Design Guidelines, Hydraulics Manual, Standard Details and Specifications, and to potential impacts to the Wards Creek drainage basin and adjoining infrastructure developments. Having served as the Drainage Engineer, Chief Engineer, and ultimately the Director of Public works for the East Baton Rouge City-Parish, Bryan brings significant institutional knowledge of the local drainage and roadway systems within the parish and how they may react to this Project modification. He clearly understands the concerns that may be expressed by the local community and the need for proper public-private communication and partnership on a project of this magnitude.</p>
<p>10/20 - Ongoing</p>	<p>Rural Bridge Replacement Initiative Phase II (South), LA (440001338) Supervising Hydraulic Design Engineer. Bryan is serving as Waggoner's supervising hydraulic design engineer for the Phase II Rural Bridge Replacement Initiative. Hydrologic and hydraulic evaluations are being developed to provide a hydraulically suitable replacement for the existing bridge structures that have been designated for replacement under this program. All bridge hydraulic reports, data forms, and data tables are being prepared in accordance the current LADOTD Hydraulics manual and design directives.</p>
<p>08/21 - 05/23</p>	<p>LA 73: US 61 (Airline Hwy.) - LA 426 (Essen Lane), E. Baton Rouge Parish, LA (H.010652) Project Manager. Bryan was the project manager for the development of preliminary and final plans to fully reconstruct existing LA 73, including complete pavement and base removal and replacement, curbs and gutters and sidewalks from Airline Highway to the I-12 on-ramp near Drusilla Lane, and for concrete pavement patching and repair of damaged curbs and sidewalks from the I-12 on-ramp to Essen Lane. This plan development consists of all engineering services including a summary of estimated of quantities and cost.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
	Name	Gage Spell, LSI		Years of Relevant Experience with this Employer	1
	Title	Senior Project Designer		Years of Relevant Experience with Other(s) Employers	11
	Degree(s)/Years/Specialization		BS/2017/Physical Geography		
	Active Registration Number/State/Expiration Date		LSI#686/LA/03-31-2027		
	Year Registered	2018	Discipline	Surveying	
Contract Role(s)/Brief Description of Responsibilities		Hydraulics & Drainage Design			
<p>Gage has 11 years of experience in hydrology and hydraulics modeling, site investigation, and project management. From 2017 to 2020, he worked on the Livingston Parish Watershed Modeling project, identifying capital improvement opportunities and conducting aerial drone inspections. Over the past decade, Gage has led drainage design and impact studies for over 100 commercial and residential developments. His expertise in hydrologic and hydraulic modeling, project coordination, and site analysis will enhance the roadway and drainage design and construction support efforts, ensuring compliance with LADOTD standards and effective flood mitigation strategies.</p>					
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).				
01/23 - Ongoing	<p>Hooper Road Widening (LA 3034 - LA 37), East Baton Rouge Parish, LA (H.009300) Sr. Project Designer. Gage is providing hydrological and hydraulic design for roadway improvements to Hooper Road from Sullivan Road to Greenwell Springs Road. The proposed drainage improvements will include a combination of subsurface and open channel features, as well as major cross drain improvements.</p>				
04/21 - 08/23	<p>MOVEBR, Sherwood Forest Extension, Baton Rouge, LA Modeler. Gage served as the modeler for this project, which involved the extension of Sherwood Forest Boulevard from Greenwell Springs Road to Joor Rd. He created a two-dimensional (2D) hydraulic model to analyze the impacts of proposed roadway alignments and profiles in the Hurricane Creek and Comite River watersheds, ensuring compliance with all MOVEBR design guidelines.</p>				
02/23 - Ongoing	<p>Bolivar and Sunflower County Watershed Plan, Cleveland, Bolivar and Sunflower County, MS Hydrologic and Hydraulic Modeler. Gage modeled existing conditions and proposed improvements to identify effective solutions for repetitive flooding in the Bogue Chitto watershed. He analyzed and compared results to provide recommendations to local and state authorities and coordinated with the project team to develop Environmental Assessments in compliance with USDA NRCS standards and requirements. Bolivar County had expressed the desire to collaborate in the development of a Comprehensive Watershed Based Stormwater Management Program to identify, analyze, quantify, prioritize, and develop a short- and long-term implementation plan for both capital and maintenance requirements needed to address drainage-related deficiencies throughout the watershed area as directly related to preserving and enhancing municipal and/or county infrastructure. Waggoner was contracted with Mississippi Soil and Water Conservation Commission to provide engineering and technical support services for six HUC-12 watersheds in Bolivar County.</p>				
03/25 - Ongoing	<p>LA 933 at Joe Sevario Road Roundabout, Ascension Parish, LA Senior Project Designer. Waggoner's Baton Rouge Airline team is delivering engineering services for the LA 933 at Joe Sevario Road Roundabout project in Ascension Parish. The team is preparing preliminary and final design plans, right-of-way maps, and roadway lighting specifications to support construction of the new roundabout. This work improves traffic flow and enhances safety at a key intersection in the parish.</p>				

16. STAFF EXPERIENCE:

	Firm Employed By: Waggoner Engineering, Inc.				
	Name	Steve Gilliam, PE		Years of Relevant Experience with this Employer	1
	Title	Project Engineer		Years of Relevant Experience with Other(s) Employers	7
	Degree(s)/Years/Specialization		BS/2015/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE#46515/LA/09-30-2026		
	Year Registered	2022	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Hydraulics & Drainage Design			
<p>As part of the road/drainage design and construction support team, Steven will focus on the topographic surveys, particularly on the stationing of the project centerline and measuring cross-sections of the roadway. He will ensure that drainage structures, utilities, and other key features are accurately recorded and integrated into the final plans. Steve's attention to detail will ensure that the project designs align with the LADOTD's requirements and reflect the existing site conditions. Steven brings a solid understanding of roadway and site planning design principles, as well as experience with surface water and utility engineering. He has provided engineering design for commercial and residential developments.</p>					
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).				
05/20 - Ongoing SECTION 17 PROJECT	I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100) Project Engineer. Steven designed the proposed drainage systems for the surface streets within the project corridor. This includes HydroWIN calculations for subsurface systems, drainage pump plan profiles, and design drainage maps.				
01/23 - Ongoing	Hooper Road Widening (LA 3034 - LA 37), East Baton Rouge Parish, LA (H.009300) Project Engineer. Steven prepared the existing drainage map and designed the proposed drainage for this project. The design includes both open ditch and subsurface drainage streets. He prepared HEC-RAS models, HydroWIN calculations, drainage plan profiles, the drainage report, and both existing and design drainage maps.				
02/23 - Ongoing	Enterprise Boulevard Extension, Lake Charles, County, LA Design Engineer. Waggoner was retained by the City of Lake Charles to perform engineering, surveying, bidding assistance, and construction administration. The project consists of extending the existing four-lane boulevard section of Enterprise Boulevard northward on a new alignment from its current intersection at Katherine Street to an intersection on N. Goos Boulevard near Woodring Street, widening N. Goos Boulevard northward to its intersection with Fitzenreiter Road, and widening Fitzenreiter Road eastward to its intersection with N. Simmons Street. The project also includes the addition of a bike path to the Riverside Park Complex consistent with the City of Lake Charles Bicycle and Pedestrian Master Plan.				
03/22 - Ongoing	Nail Road Extension - Polk Lane to Center Hill Road, DeSoto County, MS Review Engineer. This project encompasses preliminary engineering design and bid documents for two miles of a new two-lane rural roadway, three-lanes at Polk and Center Hill for turn lanes, and five-lane earthwork on Nail Road from Polk Lane to Center Hill road.				
04/21 - 08/23	MoveBR Sherwood Forest Extension, Baton Rouge, LA Lead Designer. Steven's role included civil design, site grading, drainage design, and utility coordination. The project included a new two-lane highway, intersections, and wetland mitigation. (previous experience)				
01/19 - 02/20	Eagle Bend Subdivision, Livingston Parish, LA Lead Designer. For this 34-lot development, Steven's role included civil design, site grading, drainage design, and utility coordination for the subdivision. The project included a re-route of a minor drainage artery, required detention basin, and assuring streets and parking met Parish standards. (previous experience)				


16. STAFF EXPERIENCE:

	Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
	Name	Joshua Renard, PE		Years of Relevant Experience with this Employer	19
	Title	Project Manager		Years of Relevant Experience with Other(s) Employers	1
	Degree(s)/Years/Specialization		BS/2006/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE#36015/LA/03-31-2027		
	Year Registered	2011	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Discipline Lead - Utility Coordination			
<p>Joshua will lead utility coordination and develop utility conflict matrices. He will be responsible for identifying and documenting all utilities, ensuring accurate location and mapping within the project limits. His work will be crucial in coordinating with utility companies and integrating utility adjustments into the preliminary and final design plans, adhering to LADOTD standards. With over 19 years of experience, he will ensure effective management of utility related aspects of the project, minimizing risks and maintaining project timelines. Joshua has extensive knowledge in HEC-RAS, HYDRWIN, and PondPack software packages.</p>					
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).				
01/22 - Ongoing SECTION 17 PROJECT	LA 408: Hooper Road (Blackwater Bayou to Joor Road) East Baton Rouge Parish, LA (H.002316/CP#12-CS-HC-0017) Project Manager. Joshua was the project manager for the four-lane road widening project in the city of Central. This two-mile rural road includes a new two-lane roundabout and accommodates pedestrians, bicyclists and vehicles. His responsibilities included roadway and drainage design, plan preparation, utility coordination, and SUE services including QL-B designations and QL-A locates.				
05/20 - Ongoing SECTION 17 PROJECT	I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100) SUE Project Engineer. Joshua designed the utility duct bank plans to relocate critical existing and new fiber optic and electrical power infrastructure. This immediate relocation served necessary for the fast upcoming I-10 widening project from LA 415 through Essen Lane.				
10/16 - 12/20	I-10: Highland to LA 73 Design-Build Project, East Baton Rouge and Ascension Parishes, LA (H.009250) Utility Coordinator. Joshua 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 and the contractor could proceed without conflict. Joshua 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.				
02/24 - Ongoing	Saline Bayou Relief & Mill Cr. Brs. Water Lines Locate & Design - SUE - Utility Coordination, QL-A through D Locates, and Relocation Plans, Winn Parish, LA Project Manager. Waggoner is locating existing water lines and preparing relocation plans for 3 bridge sites on LA 126 over Saline Bayou, Mill Creek and Cypress Creek in Winn Parish, LA. Josh obtained as-builts, and performed QL-B and QL-A SUE services at each site. He is the engineer of record for the utility relocation plans.				
2019 - Ongoing	MOVEBR Program Management, East Baton Rouge Parish, LA Lead Utility Coordinator. Joshua serves as the main point of contact for all utility companies on 50+ Enhancement Projects 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 services 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.				

Joshua Renard resume continued


2017 - 2018	<p>LA 675 and LA 87 Improvements - SUE Services, New Iberia, LA (H.011781) Project Manager. Joshua served as the project manager for this LADOTD 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, Waggoner (formerly 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 LADOTD representatives, design engineers, surveyors, and subcontractors to coordinate the location work, providing valuable utility location information to the design team.</p>
2018 - 2019	<p>Subsurface Utility Engineering Causeway Boulevard at Earhart, Jefferson Parish, LA Joshua managed this utility location project for LADOTD. The primary goal of this project was to locate sewer, water, and fiber lines to provide LADOTD's design team with sufficient information to adjust their design to miss the utilities or have the utilities relocated. Waggoner (formerly Sigma) located utilities through all Quality Levels. He coordinated with utility owners and Waggoner's locating crew to identify, locate, and mark the utilities, as well as coordinated with Waggoner's survey team to have the lines surveyed. Based on the location crew's fieldwork he helped develop a final plan set as well as a Utility Owner Contact List and a Utility Conflict Matrix for delivery to LADOTD.</p>
2015 - 2017	<p>Jones Creek Road (Coursey to Tiger Bend), East Baton Rouge Parish, LA Joshua worked directly for the City of Baton Rouge resolving construction and utility related issues in a timely manner during the construction phase of this project. This included gravity and force main sewer installation, roadway drainage installation, concrete pours, traffic lane switching, and signage. He served as the main point of contact for all utility coordination efforts and successfully managed this charge through the completion of the project.</p>
2019	<p>Subsurface Utility Engineering I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA (H.003370) Joshua coordinated with multiple utilities affected by this project. He was able to obtain detailed information on the size, type and location of the utilities in conflict or potential conflict with construction activities. These included abandoned pipelines, active fiber optic lines, buried cables with unknown ownership, and multiple utilities within KCS Railroad right of way. Joshua then led the SUE team in obtaining Level A location information for these utilities.</p>
2019	<p>Subsurface Utility Engineering Leesville Roundabout, Vernon Parish, LA (H.011909) Project Manager. Joshua served as the project manager for this LADOTD project, which included Level A through D underground utility location at the intersection of Boone Street and US 171 in Leesville, LA. His responsibilities included coordination with utility companies and local government representatives to obtain as-built drawings, meeting with LADOTD representatives, design engineers, surveyors, and subcontractors to coordinate the location work, providing valuable utility location information to the design team. He was also responsible for traffic control plan development, Level A field investigations, SUE plan development, and utility conflict matrix preparation.</p>

16. STAFF EXPERIENCE:

	Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
	Name	Jace Ricard, PLS		Years of Relevant Experience with this Employer	2
	Title	Land Surveyor		Years of Relevant Experience with Other(s) Employers	10
	Degree(s)/Years/Specialization		BS/2014/Geomatics		
	Active Registration Number/State/Expiration Date		PLS#5205/LA/09-30-2025		
Year Registered	2019	Discipline	Surveying		
Contract Role(s)/Brief Description of Responsibilities		Discipline Lead - Survey and Right-of-Way Services Meets MPR 6			
<p>Jace will serve as the Discipline Lead for Survey and Right-of-Way services. He will conduct field measurements, stationing project centerlines, and gather data on drainage structures and roadway cross-sections. Jace will support the preparation of right-of-way maps and ensure all data collected meets LADOTD's quality standards. Additionally, he will collaborate with the design team to integrate survey findings into the project plans. Jace joined Waggoner in 2023 as Survey Department Manager, bringing over 10 years of diverse surveying experience with Louisiana firms.</p>					
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).				
10/12 - Ongoing SECTION 17 PROJECT	<p>Hooper Road Widening (LA 408) Blackwater-Joor, East Baton Rouge Parish, LA Land Surveyor. Jace served as the land surveyor of record for the property survey and right-of-way maps for this MOVEBR project, which included widening Hooper Road between Blackwater Road and Joor Road from an existing two-lane roadway to a four-lane boulevard with sidewalks. A total of 86 parcels were included in the right-of-way maps. Jace was responsible for performing the property survey and preparation of the property map, acquisition right-of-way maps, and recordation right-of-way maps in accordance with LADOTD standards. This project included both pavement preservation and capacity functional classifications.</p>				
06/23 - Ongoing	<p>Jones Creek Road Improvements Phases 1A & 1B, East Baton Rouge Parish, LA Land Surveyor. Jace is the land surveyor of record for topographic survey updates and right-of-way map revisions for this MOVEBR project, which includes extending Jones Creek Road on a new alignment from Tiger Bend Road to Airline Highway. Jace prepared recordation and acquisition set right-of-way map revisions.</p>				
02/24 - Ongoing	<p>BREC Scotlandville Parkway Bridge Replacements, East Baton Rouge Parish, LA Surveyor. Jace is the surveyor of record for this project, which includes performing topographic surveys at five sites along the Scotlandville Parkway. These surveys serve as the basis for designing new pedestrian and small vehicle bridges and channel protections along the parkway.</p>				
06/23 - Ongoing	<p>Carrol Avenue over Middle Colyell Creek, Livingston Parish, LA Surveyor. Jace is the surveyor of record for the topographic and property surveys and right-of-way maps for this LADOTD bridge replacement project. He was responsible for establishing local horizontal and vertical control, collecting all roadway, bridge, drainage, utility, and miscellaneous features topography, generating a survey map and digital terrain model, and establishing the existing centerline. He is also responsible for preparing the existing property map and proposed right-of-way maps.</p>				
02/24 - Ongoing	<p>Ardenwood-Lobdell Connector, East Baton Rouge Parish, LA Surveyor. Jace is the surveyor of record for the property survey and right-of-way maps for this MOVEBR project. He is responsible for recovering existing property corners, establishing existing property locations, and preparing the right-of-way acquisition and recordation maps. All work is being performed in accordance with MOVEBR guidelines.</p>				



16. STAFF EXPERIENCE:

	Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
	Name	Milan Lear		Years of Relevant Experience with this Employer	7
	Title	Survey Party Chief		Years of Relevant Experience with Other(s) Employers	0
	Degree(s)/Years/Specialization		N/A		
	Active Registration Number/State/Expiration Date		N/A		
	Year Registered	N/A	Discipline	N/A	
Contract Role(s)/Brief Description of Responsibilities		Survey and Right-of-Way Services			

Milan is a **Survey Crew Chief and Certified Survey Technician**, with extensive experience in **topographic and boundary surveys** for **transportation, utility, and development projects**. He is proficient in using Leica and Trimble survey equipment, including total stations, **RTK GPS, scanners, and digital levels**. For this project, Milan will **lead the field survey crew**, responsible for collecting topographic and utility data, documenting cross sections, and supporting right-of-way mapping in accordance with the **LADOTD Location and Survey Manual**. His experience with **ALTA/NSPS surveys, as-built surveys, and Subsurface Utility Engineering (SUE) at quality levels A-C** ensures accurate field data collection for use in final 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).

10/12 - Ongoing
SECTION 17 PROJECT
Hooper Road Widening (LA 408), East Baton Rouge Parish, LA Utility Locator and Survey Party Chief. Milan was the survey party chief for the topographic survey of 2.2 miles of a two-lane roadway. As part of the topographic survey, he collected painted QL-C utility markings, above ground utility features, and applied appropriate survey line coding for line connectivity. The locating of QL-B markings performed by others included preparation of shot count sheets and line designations. He was also the party chief for surveying QL-A test holes at eight locations. Test holes were performed to locate existing sewer force mains and critical fiber optic communication lines along the project corridor.

5/23 - Ongoing
Carroll Avenue over Middle Creek Colyell Creek, Livingston Parish, LA Survey Field Crew Chief. Milan served as Survey Party Chief for the topographic survey on this project, leading a three-man crew to capture sufficient field data to create accurate designs and construction plans. Part of the field acquisitions involved establishing horizontal and vertical controls, capturing detailed surface features, channel features, existing utilities through coordination with LA One Call, and recording existing bridge components. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 62-foot by 20-foot railcar bridge with a new 24-foot by 80-foot cast-in-place slab span bridge. The new bridge utilizes the Off-System Slab Span standard details for the proposed clear width. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of ROW maps all while adhering to rigorous quality control measures.


5/23 - Ongoing
Hood Road over Middle Colyell Creek, Livingston Parish, LA Survey Field Crew Chief. Milan served as Survey Party Chief for the topographic survey on this project, leading a three-man crew to capture sufficient field data to create accurate designs and construction plans. Part of the field acquisitions involved establishing horizontal and vertical controls, capturing detailed surface features, channel features, existing utilities through coordination with LA One Call, and recording existing bridge components. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 92-foot by 19-foot timber trestle bridge with a new 24-foot by 120-foot cast-in-place slab span bridge. The new bridge is entirely in a 420-foot radius curve on a new alignment that improves existing undesirable geometry in the roadway. Our team has performed the design and detailing for this non-standard case that meets all current LADOTD and AASHTO requirements. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of ROW maps all while adhering to rigorous quality control measures.



Milan Lear resume continued

5/23 - Ongoing	<p>George Jenkins Road over Berrys Creek, Washington Parish, LA Survey Field Crew Chief. Milan served as Survey Party Chief for the topographic survey on this project, leading a three-man crew to capture sufficient field data to create accurate designs and construction plans. Part of the field acquisitions involved establishing horizontal and vertical controls, capturing detailed surface features, channel features, existing utilities through coordination with LA One Call, and recording existing bridge components. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 120-foot by 13-foot timber trestle bridge with a new 24-foot by 140-foot cast-in-place slab span bridge. The new bridge utilizes the Off-System Slab Span standard details for the proposed clear width. Our team has modified the end bent detail to accommodate the taper-down bridge rail along the approach slab that was necessitated by the proximity of an existing driveway to the proposed bridge. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of ROW maps all while adhering to rigorous quality control measures.</p>
5/23 - Ongoing	<p>Mitch Road over Peters Creek, Washington Parish, LA Survey Field Crew Chief. Milan served as Survey Party Chief for the topographic survey on this project, leading a three-man crew to capture sufficient field data to create accurate designs and construction plans. Part of the field acquisitions involved establishing horizontal and vertical controls, capturing detailed surface features, channel features, existing utilities through coordination with LA One Call, and recording existing bridge components. Waggoner was contracted by LADOTD to provide preliminary and final engineering and plan preparation to replace a 78-foot by 26-foot timber trestle bridge with a new 24-foot by 100-foot cast-in-place slab span bridge. The new bridge utilizes the Off-System Slab Span standard details for the proposed clear width and skew. Waggoner also completed road and drainage design, bridge hydraulic and scour impact analyses, topographic survey, property survey, and preparation of ROW maps all while adhering to rigorous quality control measures.</p>
2018 - 2019	<p>Causeway Blvd - Earhart Expressway Interchange SUE (LADOTD), Jefferson Parish, LA Utility Locator and Instrument Man. Milan performed QL-B utility designations and QL-A surveying at 22 test hole locations. Utilities located include water lines, sewer force mains, gas, fiber optic telecommunications, storm drains, and active large diameter gas transmission lines.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Vectura Consulting Services, LLC				
	Name	Sheelagh Brin Ferlito, PE, PTOE		Years of Relevant Experience with this Employer	10
	Title	Principal		Years of Relevant Experience with Other(s) Employers	27
	Degree(s)/Years/Specialization		BS/1988/Civil Engineer		
	Active Registration Number/State/Expiration Date		PE#25383/LA/09-30-2025		
	Year Registered	1993	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Discipline Lead - Traffic Engineering Meets MPR 7			
<p>As the traffic engineering lead, Brin will oversee all aspects of the traffic engineering components of the project. She will be responsible for conducting traffic analyses, including evaluating current traffic flow, identifying potential issues, and recommending improvements. Brin will coordinate with the design team to integrate traffic management solutions, ensuring safety and efficiency are prioritized in all phases of the project. She will also oversee the preparation of traffic control plans, ensure compliance with LADOTD standards, and provide leadership and guidance to the traffic team throughout the project.</p>					
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 - Ongoing	<p>EBR Computerized Traffic Signal, Phase VB, Baton Rouge, LA (H.007160) Task Leader. 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 LADOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.</p>				
07/19 - Ongoing	<p>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 LADOTD and EBR Traffic Engineering Department. She understands the current requirements for all aspects of traffic engineering projects.</p>				
07/19 - Ongoing	<p>LADOTD Belle Chasse Bridge & Tunnel Replacement PPP, Belle Chasse, LA (H.004791) Project Manager. 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 LADOTD.</p>				
04/18 - 06/21	<p>US 171 at Boone St. Roundabout, Vernon Parish, LA (H.011909.5-4) Project Manager. Brin reviewed 60 Percent Preliminary Signing and Striping Plans and developed documented comments based on LADOTD Road Design Manual, LADOTD Standard Details and MUTCD. She is also the project manager for the design of temporary traffic signal plans that will be implemented during the roundabout construction at the intersection of US 171 at Boone Street in Leesville, LA. She coordinated access management issues using aerials, aged traffic volumes and Synchro Software.</p>				
09/20 - 12/21	<p>LA 30 Roundabouts at Tanger I-10, Ascension Parish, LA (H.010960.5) Project Manager. 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 multi-lane roundabouts along LA 30 at I-10 Interchange ramps and at Tanger Boulevard. Vectura also developed signal timing plans for each phase of the construction to maintain progression along LA 30.</p>				

Sheelagh Brin Ferlito resume continued

07/18 - 04/19	<p>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 LADOTD Traffic Engineering Manual Crosswalk Guidelines followed by traffic signal design plans based on LADOTD 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, LADOTD pay items, estimated quantities, and construction cost. Brin also assisted with the Parish with the LADOTD Permit Request for Intersection Control Devices on a State Right of Way.</p>
09/17-04/18	<p>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 LADOTD 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.</p>
02/17 - 10/17	<p>Stage 0 Judge Tanner Boulevard at N. Causeway Roundabout Study, St. Tammany Parish, LA Project Manager. Brin developed the safety analyses for a Stage 0 Study for four intersections in the Mandeville area. The study was based on EDSMs VI.1.1.1 / VI.1.1.5 and LADOTD Traffic Engineering Manual Section 20.2. Brin assisted collecting 7-day, 24-hour counts with Classification, turning movement counts for peak periods and speed data for mainlines. She developed signal timing in the PTV Vistro software. The signal timings were then used in Sidra to complete the HCM analyses. Brin provided a quality control review of the traffic report.</p>
06/16 - 09/17	<p>Stage 0 Roundabout Studies, Lafayette Parish, LA Project Manager. Brin developed sections of a Stage 0 Feasibility Study for roundabouts that conformed to LADOTD EDSMs and Traffic Engineering Manual Section 20.2 at ten intersections in the Lafayette, LA area. Brin, along with Laurence, collected 7-day, 24-hour counts with classification, turning movement counts for AM and PM peak periods and speed data for mainlines. Brin provided a QC review of the Sidra analyses and developed traffic signal timing for 3 intersections for Years 2019 and 2039, AM & PM peak hours and developed a crash analyses as defined in Section 20.2 of TEM. CMF factors were identified for the preferred alternative to predict the number of crashes that could be eliminated. Brin provided a QC review of the final draft.</p>
04/14 - 12/14	<p>Signal Design for N. Sherwood Forest Dr. Widening Project, Baton Rouge, LA (H.002301) 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 LADOTD 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.</p>
07/12-03/14	<p>CE&I for EBR Traffic Signal Systems Jefferson Highway Construction, Baton Rouge, LA (EBR 03-TS-CI-0026) 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 LADOTD 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 all items on the EBR project closeout checklist.</p>
02/03 - 01/04	<p>EBR Traffic Signal Systems Phases IV and V, Baton Rouge, LA (SPN 700-17-0172) 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.</p>


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	10
	Title	Principal		Years of Relevant Experience with Other(s) Employers	18
	Degree(s)/Years/Specialization		BS/1997/Civil Engr. MS/2006/Civil Engr. (Transportation focus) MBA/2010		
	Active Registration Number/State/Expiration Date		PE#2990/LA /3-31-2026		
	Year Registered	2001	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Traffic Engineering			
As part of the traffic engineering team, Laurence will focus on conducting traffic studies and analyzing data related to vehicle flow, signal timing, and intersection performance . He will assist in developing traffic control plans and provide input on signage and pavement markings to optimize road safety and efficiency. Collaborating closely with the traffic lead, he will ensure that all recommendations are aligned with project goals and LADOTD regulations .					
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).				
10/21 - 03/22	I-10 ITS Scott to Lake Charles, Calcasieu and Lafayette Parishes, LA (H.013256.5) Lead Traffic Engineer. Laurence was the lead traffic engineer for a Level 2 Traffic Management Plan (TMP) for the construction of ITS equipment along I-10. The plan included a safety strategy that included a CAT Scan, LOS determination utilizing Citrix data, lane closure recommendations based on a queue analysis and public information strategies.				
07/22 - 09/22	US 167: Camellia Blvd - Churchill Drive Pedestrian Count Study, Lafayette, LA (H.013716.5) Laurence developed a technical memorandum as part of a LADOTD Safety IDIQ contract to document if an approach at a signalized intersection met the warrants listed in the Traffic Engineering Manual Sections 3B.2.4 and 3B.2.8 for a pedestrian marked crosswalk.				
07/19 - Ongoing	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 developed specifications of Rectangular Rapid Flashing Beacons (RRFB) for the City of Baton Rouge.				
04/18 - 12/21	LA 30 Roundabouts at Tanger & I-10 Gonzales, Ascension, LA (H.010960.5) 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	Roundabout: US 171 at Boone Street, Vernon Parish, LA (H.011909.5-4) 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 LADOTD 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.				

Laurence Lambert resume continued

09/17-04/18	<p>US 11 at US 190 Bus. (Fremaux Ave.) Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Equipment Design Slidell, LA Laurence assisted Brin in the development a formal traffic study for a proposed crosswalk with pedestrian traffic signal equipment and pedestrian clearance timings based on LADOTD requirements. Laurence 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.</p>
10/17 - 10/18	<p>University Avenue Corridor Planning Study, Lafayette, LA (H.013025 LA 182) 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 morning & evening 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.</p>
01/17 - 07/17	<p>Minnesota Park Road Improvements Traffic Study, Tangipahoa Parish, LA Laurence was the task leader for a traffic data collection and intersection analyses of a Stage 0 Feasibility study for Minnesota Park Road in Hammond, LA. Laurence utilized Sidra software to perform a roundabout alternative. The LADOTD procedures for utilizing Sidra were followed for this project.</p>
09/16 - 04/17	<p>I-12 To Bush - LA 3241 (I-12 - LA 36) Corridor Study, St. Tammany Parish, LA (H.004957.5) Laurence was the lead traffic engineer for a LADOTD 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 LADOTD 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.</p>
07/14 - 01/17	<p>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.</p>
06/16 - 09/17	<p>Stage 0 Roundabout Studies, Lafayette Parish, LA (H.004490) Laurence performed a Stage 0 Feasibility Study for roundabouts at ten intersections in the Lafayette area. The scope was developed based on EDMSs 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.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Vectura Consulting Services, LLC				
	Name	Reece Rodriguez, PE, PTOE, RSP1		Years of Relevant Experience with this Employer	5
	Title	Project Traffic Engineer		Years of Relevant Experience with Other(s) Employers	7
	Degree(s)/Years/Specialization		BS/2013/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE#42074/LA/3-31-2026		
	Year Registered	2017	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Traffic Engineering - Traffic Control Design / Temporary Traffic Signal Analysis and Design			
As part of the traffic engineering team, Reece will be responsible for gathering and evaluating traffic data, including traffic counts and speed studies , to support the development of traffic management strategies. He will work on the design of traffic signals and control systems , ensuring their implementation meets safety standards and addresses potential traffic issues. He will assist in reviewing plans and providing technical support during the project's execution.					
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 - Ongoing	MOVEBR Direct Select for Traffic Signal Design, Baton Rouge, LA Project Engineer. 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.				
07/21 - Ongoing	EBR Computerized Traffic Signal, Phase VB, Baton Rouge, LA (H.007160) Project Engineer. 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 LADOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.				
04/20 - Ongoing	LADOTD Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project, Belle Chasse, LA (H.004791) Project Engineer. Reece is responsible for designing the temporary traffic signal for the intersection of LA 23 at Engineers Rd. 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 LADOTD and ITE guidance. Reece is responsible for producing the traffic impact analysis portion of the Traffic Management Plan that was also used in planning for the permanent and temporary signal timing plans. Reece was also responsible for producing the 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. In addition, Reece was responsible for reviewing and approving shop drawings that were submitted by the contractor for use in construction.				
01/21 - 05/21	I-10 ITS Scott to Lake Charles, Lafayette, Acadia, and Jefferson Davis Parishes, LA (H.013256) Project Engineer. 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 LADOTD's Bid Tabulation and Cost Estimating Tool.				

Reece Rodrigue resume continued

09/20 - 12/21	<p>4 Roundabout: US 171 at Boone St., Vernon Parish, LA (H.011909.5) Project Engineer. Reece is an essential design engineer, who is assisting 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.</p>
09/20 - 12/21	<p>LA 30 Roundabouts at Tanger I-10, Ascension Parish, LA (H.010960.5) Project Engineer. Reece is a design 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.</p>
02/20 - 09/21	<p>College Drive Corridor Enhancement from Perkins Road to I-10, Baton Rouge, LA Project Engineer. 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.</p>
07/19 - 12/19	<p>Burgess Avenue at Duff Road Traffic Signal Design, Walker, LA Project Engineer. 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.</p>
02/16 - 12/16	<p>US 190 Superstreet Task Order, St. Tammany Parish, LA (H.005733.5) 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.</p>
01/16 - 11/17	<p>Ochsner Main Campus Traffic Signals, Jefferson Parish, LA 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 LADOTD's latest version of the TSI format. He was responsible for estimating construction quantities using LADOTD's 2016 Spec Item list.</p>
10/16 - 05/17	<p>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.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Vectura Consulting Services, LLC				
	Name	Kristen Farrington, PE, PTOE, RSP1		Years of Relevant Experience with this Employer	4
	Title	Project Traffic Engineer		Years of Relevant Experience with Other(s) Employers	7
	Degree(s)/Years/Specialization		BS/2014/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE#42785/LA /3-31-2027		
	Year Registered	2018	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Traffic Engineering - Traffic Study			
<p>Kristen will play a key role on the traffic engineering team addressing the impacts of construction on existing traffic patterns and developing strategies to minimize disruptions. She will focus on the layout of traffic control devices and the design of temporary traffic routes. Additionally, Kristen will collaborate with the broader team to ensure that all traffic related designs are compliant with LADOTD guidelines and contribute to the overall safety and efficiency of the project.</p>					
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).				
05/23 - 07/23	<p>Morgan City Sidewalks & Shared Use Path, Morgan City, LA (H.013722) Kristen was the lead engineer as part of a LADOTD Safety IDIQ contract to document if an approach at a signalized intersection met the warrants listed in the Traffic Engineering Manual Sections 3B.2.4 and 3B.2.8 for a pedestrian marked crosswalk. The study also included an evaluation of a mid-block crossing based on the criteria set in Section 3B.2.7 of the Traffic Engineering Manual. The study consisted of vehicular and pedestrian counts, spot speed study, safety analysis and field observations.</p>				
04/21 - Ongoing	<p>Bus Rapid Transit (BRT) Improvement Project, Baton Rouge, LA (CP No. 16 CI-US-0032) 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.</p>				
08/21 - 04/22	<p>Downtown to Scotlandville Parkway Trail Safety Enhancement Study, Baton Rouge, LA (H.013267) 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 on a state route.</p>				
02/20 - 09/21	<p>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.</p>				
09/17 - 09/18	<p>LA 73 Corridor Study Stage 0 (LA 74 to LA 621), Ascension Parish, LA (H.011160) Project Engineer. 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.</p>				

Kristen Farrington resume continued

6/19 - 2/21	<p>US 167 Improvements Stage 0 Elsie Street to Gilbert Street, St. Landry Parish, LA (H.013459) 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. She was the 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. She compiled meeting agenda materials and minutes.</p>
04/19 - 6/21	<p>LA 117 Improvements Stage 0, Vernon and Natchitoches Parishes, LA (H.013817.1) Project Engineer. Kristen served as project engineer responsible for a Stage 0 study for 18 miles of two-lane highway. 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.</p>
03/19 - 11/19	<p>LA 429 Connector Stage 0, Ascension Parish, LA (H.012311) Project Engineer. 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 the 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.</p>
11/18 - 3/21	<p>LA 3040 Feasibility / Safety Study Stage 0, Houma, LA (H.013322) Project Engineer. 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 LADOTD, 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 LADOTD Traffic Process and Report and wrote Chapter 1 of report. Kristen represented the project at stakeholder meetings to discuss project status.</p>
04/18 - 04/19	<p>I-49 at US 190 and LA 31 Interchange Improvements Stage 0, St. Landry Parish, LA (H.011243.1) Project Engineer. 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 LADOTD 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.</p>
09/17 - 09/18	<p>LA 73 Corridor Study Stage 0 LA 74 to LA 621, Ascension Parish, LA (H.011160) Project Engineer. 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.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Vectura Consulting Services, LLC				
	Name	Bridget Robicheaux, PE, PTOE (Part-Time)		Years of Relevant Experience with this Employer	8
	Title	Project Traffic Engineer		Years of Relevant Experience with Other(s) Employers	9
	Degree(s)/Years/Specialization		BS/2007/Civil Engineering MS/2014/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE#41272/LA /3-31-2027		
	Year Registered	2016	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Traffic Engineering			
<p>As part of the traffic engineering team, Bridget brings 17 years of experience as a transportation engineer specializing in traffic control design, signal analysis, and safety studies. She has led numerous traffic and safety studies for both public and private clients, utilizing advanced traffic engineering software and adhering to industry standards including LADOTD requirements. Her expertise includes data collection, traffic simulation modeling, corridor progression studies, and traffic impact analysis. Bridget is dedicated to creating effective, data-driven designs that enhance roadway safety and traffic operations. For this project, she will be responsible for traffic control design, signal analysis and design, traffic study support, and peer reviews.</p>					
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 - Ongoing	EBR Computerized Traffic Signal, Phase VB, Baton Rouge, LA (H.007160) Bridget is part of the team responsible for Construction Engineering and Inspection. Bridget has reviewed the signal mast arm shop drawings (checking pole quantities and markups) to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Bridget also reviewed the traffic signal supports and documented all of her comments in a quality control tracker spreadsheet.				
06/21 - 06/21	Bus Rapid Transit (BRT) Improvement Project, Baton Rouge, LA (CP No. 16 CI-US-0032) Bridget assisted with the traffic signal design of 19 signals along three corridors: Plank Road, 22nd Street and US 190 (Florida Street).				
04/20 - 07/20	LADOTD Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project, Belle Chasse, LA (H.004791) Bridget assisted the project engineer who designed the temporary traffic signal for the intersection of LA 23 at Engineers Rd by pulling crash data along LA 23, reviewing and summarizing crash reports, and performing CATScan analysis.				
04/19 - 01/20	Traffic Studies for Broussard Middle School and Billeaud Elementary School, Lafayette Parish, LA Bridget was the project engineer for developing a traffic study for two school entrances in Broussard, LA. Her tasks included traffic data collection, forecast traffic volume development, existing traffic analyses and future traffic analyses using HCM software. She performed turn lane warrants based on NCHRP Report Number 457 as well as storage lengths based on queues and LADOTD requirements.				
07/19 - Ongoing	MOVEBR New Capacity Projects Program Management, Baton Rouge, LA Bridget assists Brin daily for the entire New Capacity Projects program management team. Bridget has performed multiple reviews of traffic studies and traffic signal designs. This includes reviewing raw data, unmet demand, volume maps, existing and build analyses, and safety analyses for accuracy and consistency throughout the report. She provides comments in a spreadsheet known as the Comment Tracker. All comments are posted in the Comment Tracker so that all parties are aware. Many of these projects are located on state routes and require approval by the Traffic Engineering staff of LADOTD and EBR Traffic Engineering Department. She understands the current requirements for all aspects of traffic engineering projects. Using methods outlined in NCHRP 765, Bridget helped to develop design year volumes for the Jones Creek (Airline to Jefferson) MOVEBR project. She has developed Turn Lane tech memos for the MOVEBR Old Hammond Highway Segments 1A and two projects and for the MOVEBR Highland at Siegen project.				

Bridget Robicheaux resume continued

07/18 - 04/19	<p>LA 1 Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Design West Baton Rouge Parish, Addis, LA Bridget assisted Brin with the crosswalk study by pulling and formatting the crash data. She also assisted Brin with the crash analysis and formatting the findings.</p>
10/17 - 07/18	<p>Travel Demand Model Update: Southeast Louisiana Travel Model, New Orleans, LA Bridget developed base year traffic volumes to calibrate and test of the regional travel demand as part of updating the New Orleans Regional Planning Commission Travel Demand Model in TransCAD. Specifically, Bridget obtained and reviewed the over 4,000 traffic counts (cars / trucks) that were used in the validation of the SELATRAM model to check for consistency, reasonableness, and completeness. She tabulated her results in a spreadsheet that was included in a technical memorandum.</p>
09/17 - 11/17	<p>US 11 (Front St.) at US 190 Bus. (Fremaux Ave.) Traffic Study, St. Tammany Parish, LA Bridget participated in the development of a Crosswalk Traffic Engineering Study for the City of Slidell as part of improvements to the intersection of US 11 (Front St.) at US 190 Bus. (Fremaux Ave.). Bridget processed raw traffic videos and developed AM and PM peak period turning movement vehicle count figures. She also assisted Brin with a PTV Vistro model for the AM and PM Peaks for the five intersections for capacity analyses as well as progression analyses. She also developed portions of the report.</p>
02/17 - 10/17	<p>Stage 0 Judge Tanner Boulevard at N. Causeway Roundabout Study, St. Tammany Parish, LA Bridget participated in the development of a Stage 0 Feasibility Study for roundabouts at four intersections in St. Tammany Parish. The scope was developed based on EDSMs VI.1.1.1 / VI.1.1.5 and DOTD Traffic Engineering Manual Section 20.2. Bridget developed traffic turning movement counts for morning and evening peak periods including peak hour factor and heavy vehicle percentages. Growth rates for design year volumes were also developed based on information provided from the TransCAD model. She performed portions of the Sidra unsignalized, signalized and roundabout analyses for implementation and design years and report development.</p>
06/16 - 09/17	<p>Stage 0 Roundabout Studies, Lafayette Parish, LA (H.004490) Bridget assisted with developing a Stage 0 Feasibility Study for roundabouts at seven intersections in the Lafayette area. The scope was developed based on EDSMs VI.1.1.1 / VI.1.1.5 and LADOTD Traffic Engineering Manual Section 20.2. Bridget developed traffic turning movement counts diagrams for peak periods including peak hour factor and heavy vehicle percentages. She developed the speed data analyses as well as assisted with performing Sidra unsignalized, signalized and roundabout analyses for implementation and design years. Bridget also developed several figures that were included in the report.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Ardaman and Associates, LLC				
	Name	Megan Bourgeois, PE		Years of Relevant Experience with this Employer	19
	Title	Principal Engineer / Assistant Manager		Years of Relevant Experience with Other(s) Employers	0
	Degree(s)/Years/Specialization		BS/2006/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE#36725/LA/03-31-2026 Traffic Control Supervisor/LA /6-21-2028 LADOTD Flagger/LA /8-14-2028 Certified NHI Drilled Shaft Inspector		
	Year Registered	2011	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Geotechnical Engineering Meets MPR 8, 9			
<p>Megan brings over 19 years of expertise in geotechnical engineering, with extensive experience supporting major LADOTD bridge and roadway projects across Louisiana. Her deep understanding of local soil conditions has significantly contributed to her proficiency in the geotechnical design of bridge foundation elements. Her technical capabilities include shallow foundation design, embankment settlement analysis, and deep foundation systems such as piles and drilled shafts. She is well-versed in LRFD, FHWA, and GEC design standards, as well as slope stability analysis for embankments and excavations, and the design of earth retaining structures. Megan meets MPR Requirements #8 and #9 and has led numerous geotechnical investigations, design evaluations, and she currently serves as director of Ardaman's the geotechnical and CMT laboratories in Baton Rouge, LA. In this role, she oversees laboratory operations, supervises staff, ensures compliance with testing protocols, maintains certifications (including AMRL, CCRL, DEQ, and USACE), and provides training materials to support quality and consistency in testing procedures.</p>					
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).				
07/23 - Ongoing	<p>MRB SOUTH GBRL: LA 1 TO LA 30 CONNECTOR: West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes, LA (H.013284) Project Engineer. The project consists of an Enhanced Planning investigation into SP No. H.013284, MRB South GBR: LA 1 to LA 30 Connector, with the objective of constructing a new Mississippi River crossing located between the I-10 and LA 70 River crossings from three proposed alignments. Megan helped oversee supervision of the field program, development of the laboratory testing program, quality control review, and development of an interactive geotechnical database to compile all the soil borings and Electronic Cone Penetration Testing (ECPT). The preliminary engineering analyses included caisson design, driven piles, drilled shafts, embankments, proposed alignment comparisons, environmental concerns, and testing program recommendations.</p>				
02/20 - Ongoing	<p>Design Support Services LA 23, Belle Chasse Bridge & Tunnel, Plaquemine Parish, LA (H.004791) Project Engineer/Laboratory Director. Ardaman's scope consists of review and acceptance of all geotechnical services including technical design reports, field documentation, drawings, and RFI's for the P3 Project consisting of replacing the Belle Chasse bridge and tunnel. In addition, Ardaman performs acceptance verification sampling and testing during the construction for soils and concrete. Megan is assisting in review and acceptance of geotechnical services as well as quality control and review of all acceptance verification sampling and testing during construction.</p>				
09/18 - 10/18	<p>Germany Road-Braud Road Roundabout, Prairieville, LA Project Engineer. Megan was responsible for geotechnical site characterization and flexible pavement design and recommendations to support a full reconstruction of the intersection at Germany Road and Braud Road that would convert the existing signal-controlled intersection into a roundabout.</p>				

Megan Bourgeois resume continued

07/21 - 01/22	<p>I-10 Calcasieu River Bridge, Calcasieu Parish, LA (H.003931) Project Manager. Megan was responsible for managing all aspects of this project pertaining to coordination of fieldwork including 37 deep soil borings, 39 ECPTs and 13 geophysical survey transects. A majority of the soil borings were completed from a barge over deep water, some from a marsh buggy over shallow water and thick marsh grass. Megan also managed and oversaw the laboratory testing program and processing and analyzing of the ECPT and ER data. She also assisted with development of a geotechnical database and preparation and submittal of a geotechnical data report. This project consisted of obtaining geotechnical data under a strict deadline to be used in the design of a replacement of the existing I-10 Calcasieu River Bridge with a new structure and improvements to various other interchanges.</p>
04/21 - Ongoing	<p>Rural Bridge Initiative Phase II, West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, LA (700-29-0112, 700-29-0130, H.012565, H.012891, H.014251, H.014252, H.014253, H.014254, H.014256, H.014257) Project Engineer. This project consists of the replacement of multiple small two-lane bridges throughout rural areas of Southeast LA which generally ranged in length from 100 to 400 feet, over various size rivers and creeks. Megan is leading the technical reviews pertaining to selection of design reaches, geotechnical design of pile foundations, drivability, slope stability, settlement analyses, construction testing program recommendations, and report preparation in accordance with LADOTD guidelines.</p>
10/15 - Ongoing	<p>Pecue Lane I-10 Interchange, East Baton Rouge Parish, LA (H.013579) Project Manager. This project consists of twin bridges with MSE wall abutments for both bridges crossing Interstate I-10, a bridge crossing Ward's Creek, and on/off-ramps in south Baton Rouge. Megan is managing all aspects of the project which includes field investigations, laboratory testing, and engineering design. She is responsible for performing analyses including settlement estimates with recommendations for monitoring, driven pile design including down drag considerations, MSE Wall design, slope stability and pavement section recommendations; all completed according to LADOTD standards. She is currently assisting with the field construction monitoring.</p>
10/09 - Ongoing	<p>I-20 Mississippi River Bridge Review, Vicksburg, MS (H.004646.5) Project Manager. Megan is managing this multi-milliondollar, highly technical project focused on investigating movement of the I-20 Bridge in Vicksburg, MS. She leads a highly technical team that includes academia, experts, internationally recognized geotechnical engineers, geohydrologists, instrumentation specialists, and 3-D geotechnical modeling experts. She oversees a comprehensive laboratory testing program where she was responsible for refining the geotechnical site characterization of the bank/bluff area showing evidence of shifting creating movement in the bridge structure. The specialized testing she performs and manages includes x-ray diffraction, x-ray scanning to identify existing shearing planes and stress-reversal direct shear tests to determine true residual angles of critical strata. Megan is also responsible for the geotechnical instrumentation program including vibrating wire piezometers, Casagrande type piezometers, SAA inclinometers, and traditional inclinometers. In addition, Megan conducts seepage and drawdown analyses, slope stability analyses, evaluation of remedial measures including design and evaluation of large foundation structures and develops technically feasible solutions to mitigate ground movement. She also co-authored the geotechnical analysis and design report while currently overseeing the comprehensive monitoring program.</p>
09/18 - 06/19	<p>Roddy Road at LA 931, Prairieville, LA Project Engineer. Responsible for geotechnical site characterization and flexible pavement design and recommendations to support a full reconstruction of the intersection at Roddy Road and LA 931 (Germany Road) that would convert the existing signal-controlled intersection into a roundabout.</p>
03/25 - Ongoing	<p>Culvert Replacements, Rapides, Richland, Vernon, Winn, Evangeline, Jackson, St. Landry Parishes, LA (H.016313.5, H.016314.5, H.016315.5, H.016316.5, H.016317.5, H.016318.5, H.016319.5, H.016320.5, H.016325.5) Project Manager. The project consisted of geotechnical field investigations throughout Louisiana consisting of ten soil borings to depths ranging from 100 to 120 feet, associated laboratory testing and reporting for new box culvert structures. Megan produced soil boring logs and CPT soundings in LADOTD format and developed the data reports.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Ardaman and Associates, LLC				
	Name	Robert Jewell, PE		Years of Relevant Experience with this Employer	18
	Title	Project Engineer / Branch Manager		Years of Relevant Experience with Other(s) Employers	0
	Degree(s)/Years/Specialization		BS/2009/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE# 38579/LA/09-30-2026 Traffic Control Supervisor/LA/08-23-2028 LADOTD Flagger/LA/ 07-31-2029		
	Year Registered	2013	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Geotechnical Engineering			
<p>Robert serves as the manager of our Baton Rouge office and has over 15 years of experience with design and analyses of countless types of foundations including shallow, embankment settlement analysis, deep foundations (pile and drilled shafts), LRFD design, FHWA and GEC design, slope stability (embankment and excavation) and earth retaining structures. He has managed and coordinated many geotechnical field investigations, including shallow and deep borings, CPT soundings, and performed analyses and prepares design recommendation reports for LADOTD projects. Robert has extensive experience in construction phase testing and oversight including dynamic and static testing, pile integrity testing, cross hole sonic logging, settlement monitoring, and geotechnical instrumentation. In particular, he has over 15 years of experience performing, analyzing, and reporting for PDA testing.</p>					
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).				
07/23 - Ongoing	<p>MRB South GBR: LA 1 TO LA 30 Connector, West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes, LA (H.013284) Project Manager. The project consists of an Enhanced Planning investigation into MRB South GBR: LA 1 to LA 30 Connector, with the objective of constructing a new Mississippi River crossing located between the I-10 and LA 70 River crossings from three proposed alignments. Robert is managing the field program, development of the laboratory testing program, quality control review, and development of an interactive geotechnical database to compile all the soil borings and ECPT. He helped oversee the preliminary engineering analyses which included caisson design, driven piles, drilled shafts, embankments, proposed alignment comparisons, environmental concerns, and testing program recommendations. A data report and preliminary geotechnical assessment report were submitted.</p>				
07/21-Ongoing	<p>I-10: LA 415 To Essen Lane on I-10 & I-12 (CMAR), Baton Rouge Parish, LA (H.004100.5) Project Manager. The project consists of a Construction Management at Risk (CMAR) project which includes widening of the east and westbound lanes, elevated structures, interchanges, and ramps along I-10 from LA 415 in West Baton Rouge Parish to Essen Lane on I-10 and I-12 in East Baton Rouge Parish spanning approximately 2.5 miles. Robert is currently overseeing all aspects of engineering analyses pertaining to selection of design reaches, geotechnical design of deep foundations, earth retaining structures, slope stability, soil-structure interaction with existing structures and load testing recommendations. Robert helped develop the geotechnical data reports, memorandums, and design reports for this project.</p>				
04/21 - Ongoing	<p>Rural Bridge Initiative Phase II, West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, LA (700-29-0112, 700-29-0130, H.012565, H.012891, H.014251, H.014252, H.014253, H.014254, H.014256, H.014257) Project Engineer. This project consists of the replacement of multiple small two-lane bridges throughout rural areas of Southeast LA which generally ranged in length from 100 to 400 feet, over various size rivers and creeks. Robert oversees all aspects of engineering analyses pertaining to selection of design reaches, geotechnical design of pile foundations, drivability, slope stability, settlement analyses and construction testing program recommendations.</p>				

Robert Jewell resume continued

09/22-Ongoing	Evangeline Road and CN Railroad Culvert, St. Charles Parish, LA Project Manager. Ardaman completed the subsurface exploration and geotechnical engineering evaluation for this project. This project consists of the installation of two reinforced concrete box culverts (RCBCs) on the north and south sides of the CN Railroad as it crosses over Evangeline Road near Montz, LA in St. Charles Parish. Robert performed the geotechnical fieldwork and engineering evaluation including recommendations for site preparation, shoring and bedding recommendations, and pavement design in a final report.
07/23-Ongoing	US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030) Project Manager. The project consists of construction of three bridges for US 371 KC Railroad overpasses that replaced two parallel bridges and one standalone bridge. Robert performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.
10/18-11/21	I-220 / I-20 Interchange Improvement and Barksdale Air Force Base Access Road, Bossier Parish, LA (H.003370) Project Manager. This was a Design Build project which included direct access to Interstate I-20 from the Barksdale Air Force Base (BAFB) and constructed an interchange and access road from Interstate 20 in Bossier City, LA. Robert managed and oversaw the preparation of the preliminary design and planning report. He also oversaw the field construction services consisting of PDA monitoring, bi-directional load cell load tests, and settlement monitoring. The PDA program consisted of monitoring PPC piles during initial drive and restrikes to allow for evaluation of setup and early acceptance of pile resistances.
07/15-Ongoing	I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange), Lafayette Parish, LA (H.004273.5) Project Manager. The project involves the construction of 5 miles of freeway consisting of a 3.5-mile elevated structure from I-10 to the Airport in Lafayette, LA. Robert oversaw the completion of the Phase I geotechnical investigation, which included 116 deep and shallow soil boring, and 15 CPT soundings, and laboratory testing program per LADOTD guidelines. He oversaw the completion of the geotechnical data report and assisted with technical reviews pertaining to selection of design reaches, geotechnical design of pile and drilled shaft foundations, drivability, slope stability, earth retaining structures, settlement analyses and construction testing program recommendations, including an advanced test pile program. He is currently overseeing development of the Phase 2 field and laboratory program for each segment.
04/14-Ongoing	I-12 to Bush Segment 2, LA 3241 (LA 36-LA435), St. Tammany Parish, LA (H.004435) Project Manager. Robert oversaw and coordinated the geotechnical investigation which included drilling 32 deep soil borings, 10 culvert borings, and 88 shallow roadway borings, sampling, and laboratory testing along the alignment which includes two bridges: LA 435 over Bayou Lacombe Tributary and LA 36 over Bayou Lacombe Tributary 2. He assisted in developing the geotechnical analyses and design recommendation report which included pile foundations for the bridge structures and shallow foundation design for the culverts. Robert oversaw the construction phase which included PDA testing and settlement monitoring.
10/09 - Ongoing	I-20 Mississippi River Bridge Review, Vicksburg, MS (H.004646.5) Project Engineer. Robert assisted in several aspects of the geotechnical engineering for this multi-million-dollar, high risk, high technical needs, high visibility project consisting of investigating movement of the I-20 Bridge in Vicksburg, MS. This project consisted of a comprehensive laboratory testing program and refinement of the geotechnical site characterization for the bank/bluff where there was evidence of shifting creating movement in the bridge structure. Robert helped managed the field investigations and instrumentation programs, along with review of the field data and engineering reporting.
09/18 - 10/18	Germany Road-Braud Road Roundabout, Prairieville, LA Project Engineer. Robert was responsible for geotechnical site characterization and flexible pavement design and recommendations to support a full reconstruction of the intersection at Germany Road and Braud Road that would convert the existing signal-controlled intersection into a roundabout.
09/18 - 06/19	Roddy Road at LA 931, Prairieville, LA Project Engineer. Robert was responsible for geotechnical site characterization and flexible pavement design and recommendations to support a full reconstruction of the intersection at Roddy Road and LA 931 (Germany Road) that would convert the existing signal-controlled intersection into a roundabout.


16. STAFF EXPERIENCE:

	Firm Employed By: Ardaman and Associates, LLC				
	Name	Mark Woodward, PE		Years of Relevant Experience with this Employer	7
	Title	Principal Engineer		Years of Relevant Experience with Other(s) Employers	36
	Degree(s)/Years/Specialization		MS/2019/Risk Management MS/1986/Civil Engineering BS/1982/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE# 24206/LA/ 9-30-2025		
	Year Registered	1991	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Geotechnical Engineering			
<p>Mark joined Ardaman in 2018 as Principal Geotechnical Engineer, providing oversight and design review for major foundation elements across LA, MS, AL, AR, and TX. His expertise includes foundations for dams, levees, hydraulic structures, floodwalls, and coastal restoration projects, often involving specialized marine and marsh drilling investigations. Mark retired from the USACE New Orleans District as Deputy Chief of the Geotechnical Branch and Dam and Levee Safety Program Manager, where he oversaw engineering, drilling, laboratory testing, and administrative operations. He brings decades of experience in ground improvement, deep excavations, seepage control, and beneficial use of dredged material.</p>					
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 - 01/25	Rural Bridges Phase I, Claiborne Parish, LA (H.013987) Principal Engineer. The Rural Bridges project initiative consists of replacing many older bridges throughout the State of LA. Mark provided review of the geotechnical design including pile foundations for 3 bridges.				
01/19 - 12/23	Cheniery Spillway and Bridge Replacement, Ouachita Parish, LA (H.008226) Principal Engineer. Mark served as the Principal Engineer for this project which included the replacement of the current damaged spillway and bridge structure in Ouachita Parish, LA.				
10/18 - 11/21	I-220 / I-20 Interchange Improvement and Barksdale Air Force Base Access Road, Bossier Parish, LA (H.003370) Principal Engineer. This Design Build project consisted of direct access to Interstate I-20 from the Barksdale Air Force Base (BAFB) and an interchange and access road from Interstate 20 in Shreveport, LA. Mark provided quality assurance oversight for this project, reviewing the work during the design and construction phase.				
05/18 - 08/19	I-12 Widening (US 190 to LA 59), St. Tammany Parish, LA (H.011152.5) Principal Engineer. Mark provided technical oversight for this project which included the widening of I-12 in St. Tammany Parish. Ardaman conducted a geotechnical investigation which included 23 deep soil borings, sampling, and laboratory testing along the 3-mile alignment between US 190 and LA 59 for lane widening which included four bridges structures. Mark provided oversight to perform additional soil borings, lab testing and engineering analyses for a retaining wall for one of the bridge abutments.				
07/23 - Ongoing	US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030) Principal Engineer. The project consists of construction of three bridges for US 371 KC Railroad overpasses that replaced two parallel bridges and one standalone bridge. Ardaman performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.				
05/18 - 09/19	US 190: LA 437 to Use 190 Business, Phase I, St. Tammany Parish, LA (H.001344) Principal Engineer. Mark provided technical oversight for this project which includes the widening of US 190 to a four-lane boulevard between US 437 and US 190.				

Mark Woodward resume continued

05/18 - 07/18	<p>IMTT Access Road Pavement, Avondale, Jefferson Parish, LA Principal Engineer. Mark served as senior engineer for 2,200-foot-long x 50-foot wide rigid and flexible roadway design for AASHTO loading per LADOTD guidelines, including subsurface exploration and testing, California Bearing Ratio, subbase material and thickness recommendations, wearing course thicknesses, and construction recommendations.</p>
06/16 - 07/16	<p>Southeast Louisiana Urban Flood Control, Louisiana Avenue Paving, Orleans Parish, LA Chief of Structural Design. Mark served as they key decision maker as Chief of Structural Design, USACE New Orleans, for asphalt or concrete paving, looking at factors such as construction cost, durability, maintenance cycles and costs, constructability, construction duration, etc.</p>
2006	<p>Homeplace Levee with Ground Improvement, P24: Plaquemines Parish, LA Lead Geotechnical Engineer. In the aftermath of Hurricane Katrina, Mark was assigned to USACE Task Force Guardian as Geotechnical Engineer for Plaquemines Parish, LA to restore levee damage to pre-Katrina conditions. The Homeplace Floodwall had translated due to loading and had to be removed. In order to replace the risk reduction system with an earthen levee, the foundation had to be improved. Using knowledge gained from full scale test section Mark had coordinated pre-Katrina for Deep Mixing. Mark designed ground improvement, reviewed and approved all construction submittals and oversaw construction.</p>


16. STAFF EXPERIENCE:

	Firm Employed By: Ardaman and Associates, LLC				
	Name	Jarmon King, PE		Years of Relevant Experience with this Employer	6
	Title	Project Engineer		Years of Relevant Experience with Other(s) Employers	1
	Degree(s)/Years/Specialization		BS/2019/Civil Engineering		
	Active Registration Number/State/Expiration Date		PE# 49179/LA/ 03-31-2027 Traffic Control Supervisor/LA/11-08-2027 LADOTD Flagger/LA/05-29-2028		
	Year Registered	2004	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Geotechnical Engineering			
<p>Jarmon brings over seven years of geotechnical engineering experience serving Ardaman's Baton Rouge office. He oversees and conducts geotechnical investigations and is responsible for preparing soil boring logs and analyzing Cone Penetration Test (CPT) data. His design experience includes shallow and deep foundations, embankment settlement, LRFD, FHWA and GEC design, slope stability, and earth retaining structures. Jarmon also has hands-on experience with Pile Driving Analyzer (PDA) testing during construction phases. His broad technical expertise supports a wide range of transportation, commercial, and infrastructure projects in various types of soils.</p>					
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).				
07/23 - Ongoing	<p>MRB South GBR: LA 1 TO LA 30 Connector, West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes, LA (H.013284) Project Engineer. The project consists of an Enhanced Planning investigation into MRB South GBR: LA 1 to LA 30 Connector, with the objective of constructing a new Mississippi River crossing located between the I-10 and LA 70 River crossings from three proposed alignments. Jarmon helped oversee the field program, development of the laboratory testing program, development of an interactive geotechnical database to compile all the soil borings and ECPT. He helped perform the preliminary engineering analyses included caisson design, driven piles, drilled shafts, embankments, proposed alignment comparisons, environmental concerns, and testing program recommendations. He also assisted in preparation of the Data and Design reports for this project.</p>				
07/21 - 01/22	<p>I-10 Calcasieu River Bridge, Calcasieu Parish, LA (H.003931) Assistant Project Engineer. Jarmon assisted with all aspects of this project pertaining to coordination of fieldwork including 37 deep soil borings, 39 ECPTs and 13 electrical resistivity (ER) geophysical survey transects. Most of the soil borings were completed from a barge, some over a considerable amount of water. Some soil borings were completed from a marsh buggy over shallow water and thick marsh grass. He also assisted with the laboratory testing program, processing and analyzing of the ECPT and ER data, development of a geotechnical database and preparation and submittal of a geotechnical data report. This project consisted of obtaining preliminary geotechnical data under an extremely strict deadline to be used in the design phase of a project that will consist of replacing the existing I-10 Calcasieu River Bridge with a new structure and improvements to various other interchanges.</p>				
04/21 - Ongoing	<p>Rural Bridge Initiative Phase II, West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, LA (700-29-0112, 700-29-0130, H.012565, H.012891, H.014251, H.014252, H.014253, H.014254, H.014256, H.014257) Assistant Project Engineer. This project consists of the replacement of multiple small two-lane bridges throughout rural areas of Southeast Louisiana which generally ranged in length from 100 to 400 feet, mainly over small rivers and creeks. Jarmon assisted in engineering design pertaining to selection of design reaches, geotechnical design of pile foundations, drivability, slope stability, settlement analyses, construction testing program recommendations, and report preparation in accordance with LADOTD guidelines.</p>				

Jarmon King resume continued

07/21 - Ongoing	I-10: LA 415 To Essen Lane on I-10 & I-12 (CMAR), Baton Rouge Parish, LA (H.004100.5) Project Engineer. The project consists of a Construction Management at Risk (CMAR) project which includes widening of the east and westbound lanes, elevated structures, interchanges, and ramps along I-10 from LA 415 in West Baton Rouge Parish to Essen Lane on I-10 and I-12 in East Baton Rouge Parish spanning approximately 2.5 miles. Jarmon co-manages and oversees the engineering analyses pertaining to selection of design reaches, geotechnical design of deep foundations, earth retaining structures, slope stability, soil-structure interaction with existing structures and load testing recommendations. He also helped develop the geotechnical data reports, memorandums, and design reports for this project.
7/23 - Ongoing	US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030) Assistant Project Engineer. The project consists of construction of three bridges for US 371 KC Railroad overpasses that replaced two parallel bridges and one standalone bridge. Jarmon performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.
06/20 - 11/22	Nicholson Drive (LA HWY 30) Segment 1: East Baton Rouge Parish, LA (H.002825) Assistant Project Engineer. This project consisted of the reconstruction and widening of a section of Nicholson Drive between the intersections of Brightside Lane and Burbank Drive for the MOVEBR Program. Thirteen shallow soil borings and two deep soil borings were drilled at the subject site and associated laboratory testing was performed. Jarmon oversaw the field investigation and engineering analyses which included pavement and culvert crossing design recommendations in accordance with LADOTD specifications.
10/18 - 06/21	Chef Menteur Pass Bridge and Approach, Orleans Parish, LA (H.000263) Assistant Project Engineer. Jarmon assisted in the production of soil boring logs and CPT soundings in LADOTD format. He also assisted with the development of the data report.
10/18 - 11/21	I-220 / I-20 Interchange Improvement and Barksdale Air Force Base Access Road, Bossier Parish, LA (H.003370) Assistant Project Engineer. This was a Design Build project which provides direct access to Interstate I-20 from the Barksdale Air Force Base (BAFB) and constructing an interchange and access road from Interstate 20 in Bossier City, LA. Jarmon assisted with the construction monitoring aspect of the project which included PDA testing and CAPWAP analyses.
03/19 - 07/20	I-10 Widening (LA 415 to Howard Street), East Baton Rouge Parish, LA (H.004100.5-2) Assistant Project Engineer. Jarmon evaluated the laboratory test results and produced logs for the widening of the East and Westbound lanes, elevated structures, and construction of interchange and ramps on Westbound lanes along I-10 between LA 415 and Howard Street spanning approximately 1 mile. The geotechnical investigation included 58 deep borings and 11 cone penetrometer (CPT) soundings, associated laboratory testing and the preparation of a geotechnical data report.
03/25 - Ongoing	Culvert Replacements, Rapides, Richland, Vernon, Winn, Evangeline, Jackson, St. Landry Parishes, LA (H.016313.5, H.016314.5, H.016315.5, H.016316.5, H.016317.5, H.016318.5, H.016319.5, H.016320.5, H.016325.5) Project Engineer. This project consists of geotechnical field investigations throughout LA consisting of ten soil borings to depths ranging from 100 to 120 feet, associated laboratory testing, and reporting for new box culvert structures. Jarmon is assisting in the production of soil boring logs and CPT soundings in LADOTD format and developed the data reports.
09/22 - Ongoing	Evangeline Road and CN Railroad Culvert, St. Charles Parish, LA Project Manager. Ardaman completed subsurface exploration and geotechnical engineering evaluation. This project consists of the installation of two reinforced concrete box culverts (RCBCs) on the north and south sides of the CN Railroad as it crosses over Evangeline Road near Montz, LA in St. Charles Parish. Jarmon is performing the geotechnical fieldwork and engineering evaluation including recommendations for site preparation, shoring and bedding recommendations, and pavement design in a final report.
07/23 - Ongoing	US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030) Project Manager. This project consists of construction of three bridges for US 371 KC Railroad overpasses that replaced two parallel bridges and one standalone bridge. Jarmon is performing the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.


16. STAFF EXPERIENCE:

	Firm Employed By: Ardaman and Associates, LLC				
	Name	Jessica Litt		Years of Relevant Experience with this Employer	12
	Title	Laboratory Manager		Years of Relevant Experience with Other(s) Employers	0
	Degree(s)/Years/Specialization		BS/2010/Biology		
	Active Registration Number/State/Expiration Date		NICET / Generalist, Laboratory No. 141243 / 10-01-2027		
	Year Registered	N/A	Discipline	N/A	
Contract Role(s)/Brief Description of Responsibilities		Geotechnical Engineering - Laboratory Manager Meets MPR 10			
<p>Jessica brings over 12 years of experience in geotechnical testing and she currently manages Ardaman's AMRL Certified, DEQ Accredited, and USACE-validated laboratory in Baton Rouge, LA, under the direction of Megan Bourgeois, PE. She oversees laboratory testing operations, organizes, and schedules testing, trains, develops and supervises five laboratory technicians and ensures quality control across all assignments. Jessica is experienced in soil mechanics laboratory testing in accordance with appropriate AASHTO and LADOTD testing protocol, which includes Soil Classification, Atterberg Limits, Grain Size Analysis, Gradation Testing, Organic Content, Hydrometer Analysis, Moisture Content, Consolidation Testing, Hydraulic Conductivity, pH, Resistivity, Strength Testing (Unconfined, Unconsolidated-Undrained Triaxial, Consolidated-Undrained Triaxial), Direct Shear, Specific Gravity, and Permeability of Granular Soils.) Jessica's experience satisfies the requirements for MPR #10.</p>					
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).				
03/25 - Ongoing	<p>Culvert Replacements, Rapides, Richland, Vernon, Winn, Evangeline, Jackson, St. Landry Parishes, LA (H.016313.5, H.016314.5, H.016315.5, H.016316.5, H.016317.5, H.016318.5, H.016319.5, H.016320.5, H.016325.5) Laboratory Manager. Jessica is responsible for managing the completion of a comprehensive laboratory testing program for 100 deep soil borings that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Organic Content, Particle Size Analysis, Hydrometer, Unit Weight of Undisturbed Samples, and UU Strength Tests in accordance with LADOTD guidelines. Jessica entered the laboratory test results into gINT in order to produce the LADOTD soil boring logs.</p>				
08/24 - Ongoing	<p>LA 44 Roundabouts and Widening, Ascension Parish, LA (H.015568.5, H.015569) Laboratory Manager. Oversaw the completion of a comprehensive laboratory testing program for 10 deep and 14 shallow soil borings that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Organic Content, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests in accordance with LADOTD guidelines. Jessica entered the laboratory test results into gINT to produce the LADOTD soil boring logs.</p>				
07/23 - Ongoing	<p>MRB South GBRL: LA 1 TO LA 30 Connector, West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes, LA (H.013284) Laboratory Manager. Jessica oversaw the completion of a comprehensive laboratory testing program for 18 deep soil borings that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Organic Content, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests in accordance with LADOTD guidelines. Jessica reviewed the consolidation test results and entered the laboratory test results into gINT in order to produce the LADOTD soil boring logs.</p>				
07/23 - Ongoing	<p>IJA Off-System Bridges, Allen, Beauregard, and Calcasieu Parishes, LA (H.015489, H.015490, H.015491, H.015492) Laboratory Manager. Jessica oversaw the completion of a comprehensive laboratory testing program for 10 deep soil borings that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests in accordance with LADOTD guidelines. Ms. Litt entered the laboratory test results into gINT to produce the LADOTD soil boring logs.</p>				

Jessica Litt resume continued

07/23 - Ongoing	US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030) Laboratory Manager. The project consists of construction of three bridges for US 371 KC Railroad overpasses that replaced two parallel bridges and one standalone bridge. Ardaman performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.
10/18 - 06/21	Chef Menteur Pass Bridge and Approach, Orleans Parish, LA (H.000263.5-1) Laboratory Technician. Jessica assisted with the completion of a comprehensive laboratory testing program that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Triaxial Permeability (constant head), Conventional Incremental Consolidation, Organic Content, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests.
09/22 - Ongoing	Evangeline Road and CN Railroad Culvert, St. Charles Parish, LA Laboratory Technician. Ardaman completed subsurface exploration and geotechnical engineering evaluation. The project consists of the installation of two reinforced concrete box culverts (RCBCs) on the north and south sides of the CN Railroad as it crosses over Evangeline Road near Montz, LA in St. Charles Parish. Ardaman performed the geotechnical fieldwork and engineering evaluation including recommendations for site preparation, shoring and bedding recommendations, and pavement design in a final report.
11/15 - 01/21	Macarthur Interchange Completion Phase 2, Route US 90-Z, Jefferson Parish, LA (700-29-0112, 700-29-0130, H.012565, H.012891, H.014251, H.014252, H.014253, H.014254, H.014256, H.014257) Laboratory Technician. Jessica assisted with completion of a comprehensive laboratory testing program that included Atterberg Limits, Moisture Content and Visual Classification, Fines Content, Sieve Analysis, Triaxial Permeability (constant head), Conventional Incremental Consolidation, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests.
04/14 - 03/22	I-12 to Bush Segment 2, LA 3241, St. Tammany Parish, LA (H.004435) Laboratory Technician. Jessica assisted with completion of a comprehensive laboratory testing program that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Triaxial Permeability (constant head), Conventional Incremental Consolidation, Organic Content, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests.
04/14 - 05/18	I-12 to Bush Segment 3, LA HWY. 3241 (LA 435 to LA 40 / 41), St. Tammany Parish, LA (H.004113) Laboratory Technician. Jessica assisted with completion of a comprehensive laboratory testing program that included Atterberg Limits, Moisture Content and Visual Classification, Fines Content, Sieve Analysis, Triaxial Permeability (constant head), Conventional Incremental Consolidation, Unit Weight, Particle Size Analysis (Hydrometer), and UU Strength Tests.
10/09 - Ongoing	I-20 Mississippi River Bridge Review, Vicksburg, MS (H.004646.5) Laboratory Manager. Jessica assisted with completion of a comprehensive laboratory testing program that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Triaxial Permeability (constant head), Conventional Incremental Consolidation, Organic Content, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests.

16. STAFF EXPERIENCE:

	Firm Employed By: Ardaman and Associates, LLC				
	Name	Casey Floyd		Years of Relevant Experience with this Employer	4
	Title	Drilling Supervisor		Years of Relevant Experience with Other(s) Employers	30
	Degree(s)/Years/Specialization		High School Diploma		
	Active Registration Number/State/Expiration Date		Traffic Control Technician/LA/9-5-2027 Traffic Control Supervisor/LA/9-6-2027 DOTD Flagger/LA/6-04-2028 LA Water Well Driller's License #WWC-212/6-30-2026		
	Year Registered	N/A	Discipline	N/A	
Contract Role(s)/Brief Description of Responsibilities		Geotechnical Engineering - Drilling Supervisor Meets MPR 11			
<p>Casey has over 30 years of experience drilling in the LA Gulf Coast Region including performing soil borings (on land and over water), CPT soundings, monitor well installation and abandonment, and installation of geotechnical monitoring instrumentation. He has planned and supervised numerous geotechnical investigation projects in accordance with LADOTD requirements. These projects consist of shallow borings and deep soil borings to depths of approximately 300 feet. Casey's experience also includes arranged right of entry, utility locations, site clearing, arranging for police assistance (as required) and traffic control/crew safety, and coordinating between engineering staff and drill crew. Casey's experience satisfies the requirements for MPR #11.</p>					
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).				
03/25 - Ongoing	Culvert Replacements, Rapides, Richland, Vernon, Winn, Evangeline, Jackson, St. Landry Parishes, LA (H.016313.5, H.016314.5, H.016315.5, H.016316.5, H.016317.5, H.016318.5, H.016319.5, H.016320.5, H.016325.5) Drilling Supervisor. This project consists of geotechnical field investigations throughout LA consisting of ten soil borings to depths ranging from 100 to 120 feet. Casey oversaw the field investigation program consisting of 10 deep soil borings in accordance with LADOTD guidelines. He performed site reconnaissance at each location and coordinated the access along with traffic control.				
08/24 - Ongoing	LA 44 Roundabouts and Widening, Ascension Parish, LA (H.015568.5, H.015569) Drilling Supervisor. Casey oversaw the field investigation program consisting of 10 deep and 14 shallow soil borings in accordance with LADOTD guidelines. He performed site reconnaissance, coordinated the access along with traffic control and pavement coring.				
07/23 - Ongoing	IJA Off-System Bridges, Allen, Beauregard, and Calcasieu Parishes, LA (H.015489, H.015490, H.015491, H.015492) Drilling Supervisor. Casey oversaw the field investigation program consisting of 10 deep soil borings in accordance with LADOTD guidelines. He performed site reconnaissance, coordinated the access along with traffic control and pavement coring.				
03/22 - 01/25	Boudreaux Canal Bridge Replacement, Terrebonne Parish, LA (H.002244.5) Drilling Supervisor. The project consisted of replacement of the existing LA 56: Boudreaux Canal Bridge with a new bridge just west of the center line of the existing bridge. Casey oversaw the field investigation program consisting of 8 deep soil borings and 4 CPT soundings in accordance with LADOTD guidelines. He performed site reconnaissance, coordinated the access along with traffic control and pavement coring. Casey oversaw the completion of one of the soil borings that was performed on a barge.				
07/23 - Ongoing	US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030) Drilling Supervisor. The project consists of construction of three bridges for US 371 KC Railroad overpasses that replaced two parallel bridges and one standalone bridge. Ardaman performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.				
07/21 - 01/22	I-10 Calcasieu River Bridge, Calcasieu Parish, LA (H.003931) Drilling Crew Chief. Casey helped manage and oversee all aspects of an extensive field investigations program which included 37 deep soil borings and 39 CPT soundings in accordance with LADOTD guidelines. Most of the soil borings were completed from a barge, some over a considerable amount of water. Some soil borings were completed from a marsh buggy over shallow water and thick marsh grass.				

Casey Floyd resume continued

09/22 - Ongoing	<p>Evangeline Road and CN Railroad Culvert, St. Charles Parish, LA Drilling Supervisor. Ardaman completed subsurface exploration and geotechnical engineering evaluation. The project consists of the installation of two reinforced concrete box culverts (RCBCs) on the north and south sides of the CN Railroad as it crosses over Evangeline Road near Montz, LA in St. Charles Parish. Ardaman performed the geotechnical fieldwork and engineering evaluation including recommendations for site preparation, shoring and bedding recommendations, and pavement design in a final report.</p>
04/21 - Ongoing	<p>Rural Bridge Initiative Phase II, West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, LA (700-29-0112, 700-29-0130, H.012565, H.012891, H.014251, H.014252, H.014253, H.014254, H.014256, H.014257) Drilling Crew Chief. This project consists of the replacement of multiple small two-lane bridges throughout rural areas of Southeast LA which generally ranged in length from 100 to 400 feet, mainly over small rivers and creeks. Casey oversaw all aspects of this project pertaining to coordination of fieldwork including 31 deep soil borings. Some of these borings were performed through the middle of bridges and at hard access locations.</p>
03/19 - 07/20	<p>I-10 Widening (LA 415 to Howard Street), East Baton Rouge Parish, LA (H.004100.5-2) Drilling Crew Chief. Casey helped oversee the field investigation included 58 deep borings and 11 cone penetrometer (CPT) soundings in accordance with LADOTD guidelines, and electrical resistivity imaging along the entire alignment for the widening of I-10 project. He performed site reconnaissance at each location and coordinated the access along with traffic control.</p>
10/18 - 06/21	<p>Chef Menteur Pass Bridge and Approach, Orleans Parish, LA (H.000263.5-1) Drilling Crew Chief. Casey helped manage and oversee all aspects of an extensive field investigation program which included 37 deep soil borings in accordance with LADOTD guidelines, including borings over 200 feet in over 80 feet deep of high flow water.</p>
07/15 - Ongoing	<p>I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange), Lafayette Parish, LA (H.004273.5) Drilling Supervisor. The project consists of construction of 5 miles of freeway consisting of a 3.5-mile elevated structure from I-10 to the Airport in Lafayette, LA. Casey managed and oversaw the completion of the Phase 2 Kaliste-Saloom Interchange field investigation program which included 26 deep soil borings and 10 CPT soundings in accordance with LADOTD guidelines. He performed site reconnaissance, coordinated the access along with traffic control and pavement coring.</p>
10/09 - Ongoing	<p>I-20 Mississippi River Bridge Review, Vicksburg, MS (H.004646.5) Drilling Supervisor. Casey has performed and supervised all aspects of field operations associated with this multi-million-dollar, high technical needs project consisting of investigating the movement of the I-20 Bridge in Vicksburg, MS. Ardaman managed a comprehensive laboratory testing program and refined a geotechnical site characterization for the bank/bluff where there was evidence of shifting creating movement in the bridge structure. To allow for this advanced testing program, it was imperative to obtain high quality undisturbed soil samples in difficult drilling conditions. Casey was instrumental in completing these tasks as well as installing all types of instrumentation to maintain a highly extensive automated monitoring program at the site including vibrating wire piezometers, SAA inclinometers and traditional inclinometers.</p>

Sections 17

LA 347 Roundabout at Doyle Melancon Road (St. Martin Parish)
H.009456

Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)

Completed roundabout at the intersection of LA 347 (Grand Pointe Ave) and Doyle Melancon Road in Breaux Bridge, LA.
(construction plans prepared by Waggoner (formerly Sigma).)



17. FIRM EXPERIENCE:

Firm Name	Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)		
Project Name	Hooper Road Widening (LA 408) Blackwater - Joor	Past Performance Evaluation Category(ies)*	
		Firm Responsibility	Prime
Project Number	H.002316	Owner's Name	East Baton Rouge Department of Transportation and Drainage
Project Location	East Baton Rouge Parish, LA	Owners Project Manager	Tom Stephens, PE
Owners Address, Phone, Email	222 Saint Louis Street, 8th Floor, Baton Rouge, LA 70802 225.389.3186 tstephens@brla.gov		
Services Commenced by this Firm (mm/yy)	10/12	Total Consultant Contract Cost (\$1,000's)	\$1,818
Services Completed by this Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by this Firm (\$1,000's)	\$1,111

Project Description:

Waggoner was contracted by East Baton Rouge Parish Department of Transportation and Drainage, in cooperation with the FHWA and LADOTD, to provide NEPA environmental documentation, planning, **topographic and property surveying, ROW mapping, and preliminary and final plans** for this MOVEBR program project. Hooper Road is an existing two-lane rural roadway with steep open ditch drainage from Blackwater Road to Sullivan Road in suburban Central, LA. MoveBR is proposing capacity and **safety upgrades** to the corridor using a four-lane boulevard with **subsurface drainage, sidewalks, bike paths, and intersection improvements**.

A formal Environmental Assessment was prepared by Waggoner and a FONSI was granted by FHWA. Waggoner prepared preliminary and final roadway and drainage plans for this 2.2-mile-long corridor. The four-lane boulevard features a 16-foot-wide raised median, 11-foot lanes, a dedicated five-foot bike lane in both east-bound and west-bound directions, five foot sidewalks, and a new two-lane roundabout at the intersection of Hooper Road and Lovett Road. The sidewalks and pedestrian accommodations are **ADA compliant** and consistent with PROWAG guidelines. Turn lanes and R-CUT bulb outs were added to safely accommodate U-turn movements throughout the boulevard section.



The construction plans include the following:

- Typical sections
- Pay item quantities
- Roadway plan and profiles
- Drainage plan and profiles w/subsurface drainage systems
- Existing and design drainage maps
- Geometric layouts and details
- Pcc pavement joint layouts and graphical grades
- Suggested sequence of construction
- Pedestrian signal plans
- Permanent striping and signing layout
- Roadway lighting plans
- Utility relocation space allocation layouts
- Cross sections

The topographic and property surveys and ROW maps were prepared in accordance to DOTD location and survey standards and deliverables. The ROW maps were reviewed by location and survey since this is a state highway.

Waggoner also performed QL-D, QL-C, QL-B, and QL-A SUE services for the project. Test holes were performed at critical conflict points. A utility conflict matrix was prepared and updated throughout the design process.

As the prime consultant, Waggoner managed the project schedule, held and documented design meetings and status meetings with the client, and participated in cost risk assessments.

Project Relevance:

- ✓ Project Management
- ✓ Road Design
- ✓ Drainage Evaluation
- ✓ Utility Coordination
- ✓ Comment & Response Logs
- ✓ Electronic Plan Development
- ✓ Preliminary & Final Road Plans
- ✓ Traffic Management Plan
- ✓ Topographic Survey
- ✓ Property Survey
- ✓ ROW Map
- ✓ Construction Support

Team Members Involved:

Robert Lear, Miles Williams, Alex Farr, Bryan Harmon, Joshua Renard, Jace Ricard



17. FIRM EXPERIENCE:

Firm Name	Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)		
Project Name	I-10: LA 347 to Atchafalaya Floodway Bridge	Past Performance Evaluation Category(ies)*	Road, Survey, Traffic, Other (Project Management), Other (SUE)
		Firm Responsibility	Prime
Project Number	H.003014	Owner's Name	LADOTD
Project Location	St. Martin Parish, LA	Owners Project Manager	Nick Oliver, PE
Owners Address, Phone, Email	P.O. Box 94245, Baton Rouge, LA 70806 225.379.1133 nicholas.oliver@la.gov		
Services Commenced by this Firm (mm/yy)	6/13	Total Consultant Contract Cost (\$1,000's)	\$852.7
Services Completed by this Firm (mm/yy)	7/22	Cost of Consultant Services Provided by this Firm (\$1,000's)	\$852.7

Project Description:

Waggoner (formerly 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 terminal**, and roadway improvements to LA 347. This project was performed under a Road Safety IDIQ Contract.

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

The interstate design includes three lanes in the WB direction and two 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. **Waggoner coordinated closely with LADOTD Bridge Design section (Andrew Windmann, now with Waggoner, was the lead designer), 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 Waggoner to alleviate flooding problems at the interchange.

Waggoner also provided detailed hydraulic analysis of the outfall channel adjacent to LA352. This included the HEC-RAS modeling to determine solutions to alleviate flooding problems at the interchange. The selected alternative included removing undersized pipes at 3 locations on LA352, the installation of a 10x6 RCB at two locations, and installation of a combination of open ditch and subsurface drainage

bypass system. The bypass system equalizes flow from the interchange and enters the system at a lower starting water surface elevation.

Waggoner assembled the multi-discipline plan set, quantities, pay items and worked with LADOTD Project Management to develop the estimated construction costs. Waggoner (formerly Sigma) provided ongoing construction related engineering services throughout the 3-year duration of construction. This included partnering meetings, RFI's, Change Orders, shop drawings, and public meetings.



Project Relevance:

- ✓ Project Management
- ✓ Topographic Surveys
- ✓ Traffic Control Design, Traffic Signal Analysis, & Design
- ✓ PP/FP Roadway Design, Plan Development, Cost Estimate
- ✓ Hydraulic Analysis & Design
- ✓ Road Design During Environmental Process
- ✓ Special Provisions Write-Ups
- ✓ Transportation Management Plans
- ✓ Quality Plan Reviews
- ✓ Technical Research & Guidance
- ✓ Construction Support

Team Members Involved:

Robert Lear, Miles Williams, Alex Farr, Kelsie Bankston, Charlotte Gremillion, Bryan Harmon, Joshua Renard

17. FIRM EXPERIENCE:

Firm Name	Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)		
Project Name	I-10: LA 415 to Essen Lane on I-10 and 1-12 CMAR	Past Performance Evaluation Category(ies)*	Road, Traffic, Other (Project Management), Other (SUE)
		Firm Responsibility	Subconsultant
Project Number	H.004100	Owner's Name	LADOTD
Project Location	East Baton Rouge & West Baton Rouge Parishes	Owners Project Manager	Nick Oliver, PE
Owners Address, Phone, Email	P.O. Box 94245, Baton Rouge, LA 70806 225.379.1133 nicholas.oliver@la.gov		
Services Commenced by this Firm (mm/yy)	10/20	Total Consultant Contract Cost (\$1,000's)	\$29,583
Services Completed by this Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by this Firm (\$1,000's)	\$4,170

Project Description:

Waggoner (formerly Sigma) is the **lead roadway design team** member for this transformational transportation improvement for the Capital Region. It is being delivered in an accelerated time frame by an alternative delivery CMAR process. Our primary responsibility includes **geometrics and road design for the frontage roads, ramps, and local roadway upgrades**. We are also responsible for the **drainage design for the entire project**, which includes **subsurface and open ditch** systems.

The road design components include typical sections, plan profiles, drainage plan profiles, geometric layouts, geometric details, graphical grades, cross sections, complete streets pedestrian and bicycle facilities, pay item and quantity computations, and non-standard special provisions. Waggoner prepared all **Design Reports** for the project which included interstate, ramp, urban arterial, urban collector, local roads, and roundabout classifications. All associated **design waivers** and **design exception documentation** was also prepared by Waggoner. All plan development is being performed in accordance with **LADOTD electronic delivery standards**.

Traffic engineering responsibilities include providing geometrics and alternatives for the **IMR, complex urban and freeway geometrics, construction phasing, and suggested sequence of construction/MOT**.

Waggoner also served as a sub for the Environmental Assessment NEPA process. Waggoner was responsible for the **line and grade study geometrics, interchange alternatives**, community connections meetings, public meetings and workshops, researching and compiling as-built plans, constructability reviews, opinion of probable costs, and ROW limits.

Waggoner also prepared **SUE and Utility Relocation** plans to consolidate utilities into a major duct bank. The duct bank minimizes the need for multiple relocations during project phasing and is a significant cost savings. We participated in utility coordination with LADOTD, EBR Parish, and several utility companies.

Construction support includes shop drawings reviews, review and responses to RFIs, and review of contractor proposals made throughout the CMAR process.

This project includes four **roundabouts** that are being designed in accordance with **NCHRP 1043 Guidelines**.

Project Relevance:

- ✓ Project Management
- ✓ Traffic Control Design, Traffic Signal Analysis, & Design
- ✓ PP/FP Roadway Design, Plan Development, Cost Estimate
- ✓ Hydraulic Analysis & Design
- ✓ Road Design During Environmental Process
- ✓ Special Provisions Write-Ups
- ✓ Transportation Management Plans
- ✓ Quality Plan Reviews
- ✓ Technical Research & Guidance
- ✓ Construction Support



Team Members Involved:

Robert Lear, Miles Williams, Bryan Harmon, Alex Farr, Joshua Renard, Kelsie Bankston, Charlotte Gremillion, Steve Gilliam

17. FIRM EXPERIENCE:

Firm Name	Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)		
Project Name	I-49 South: Ambassador Caffery & US 190 Interchange	Past Performance Evaluation Category(ies)*	
		Firm Responsibility	Subcontractor
Project Number	H.002868	Owner's Name	LADOTD
Project Location	Lafayette Parish	Owners Project Manager	Ryan Morvant, PE
Owners Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA 708021225.379.1067 Ryan.Morvant@la.gov		
Services Commenced by this Firm (mm/yy)	1/13	Total Consultant Contract Cost (\$1,000's)	Unknown
Services Completed by this Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by this Firm (\$1,000's)	\$1,294.8

Project Description:

The 1-49 Ambassador Caffery project upgrades an existing at-grade intersection on US 90 with a **grade separated X-Pattern interchange** on Future 1-49. It includes **two-lane one-way frontage roads, U-turns, MSE Walls, subsurface and open drainage systems, and signalized ramp intersections**. The project was also designed to accommodate **future flyover directional ramps** to Ambassador Caffery Pkwy and continuation of the interstate and frontage roads southward.

Waggoner is a major subconsultant for this project and was responsible for all **roadway geometrics** for the interstate, frontage roads, urban arterials, ramp connections, intersections, and transitions to existing roadways.

Waggoner also prepared all existing and design **drainage calculations** and **drainage plan profiles**.

All bridge design for the 1-49 bridges over Ambassador Caffery were designed by Waggoner. We coordinated with Huval & Associates who designed the bridges over the BNSF Railroad at the north end of the project. Additional design responsibilities included traffic signal design, utility conflict matrix development, and construction support.

Waggoner is currently providing **construction support**, including shop drawing reviews, RFI's, change orders, and on-call services as needed.



Project Relevance:

- ✓ Project Management & Support
- ✓ Quality Control & Peer Reviews
- ✓ Traffic Engineering & Design
- ✓ Roadway & Hydraulics
- ✓ Bridge Design
- ✓ Plan Development & Letting Support
- ✓ Construction Support

Team Members Involved:

Robert Lear, Miles Williams, Alex Farr, Bryan Harmon, Joshua Renard, Joshua Olivier, Kelsie Bankston, Andrew Windmann

17. FIRM EXPERIENCE:

Firm Name	Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)		
Project Name	LA 347: Roundabout at Melancon Road	Discipline(s)*	Road, Survey, Traffic, Right-of-Way
		Firm Responsibility	Prime
Project Number	H.009456	Owner's Name	LADOTD
Project Location	St. Martin Parish LA	Owners Project Manager	Christina Brignac, PE
Owners Address, Phone, Email	PO Box 94245, Baton Rouge, LA 70806 225.379.1394 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

Project Description:

This project included full topographic surveying, right-of-way mapping, and **road design for a new single lane roundabout** in Breaux Bridge, LA. This project was performed under a Road Safety IDIQ Contract.

Waggoner (formerly Sigma) **designed a single-lane, four-legged roundabout** at the intersection of LA 347 and Doyle Melancon Road/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-inch 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 LADOTD District 03 Utility Coordinator and utility owners for utility impacts to the project. Right of way maps were also prepared by Waggoner.

Topographic/Property Survey & ROW 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

Project Relevance:

- ✓ Project Management
- ✓ Topographic Surveys
- ✓ Traffic Control Design, Traffic Signal Analysis, & Design
- ✓ PP/FP Roadway Design, Plan Development, Cost Estimate
- ✓ Hydraulic Analysis & Design
- ✓ Road Design During Environmental Process
- ✓ Special Provisions Write-Ups
- ✓ Transportation Management Plans
- ✓ Technical Research & Guidance
- ✓ Construction Support

"Consultant managed the project well and was always available. Consultant acted and responded with a sense of urgency. Quick to resolve any edits and concerns. All submittals were acceptable and on time. Submittals included final plans, final cost estimate and quantities and final ROW Maps. Sigma was the prime consultant and submittals were on time and accurate."

- Cristina Brignac, PE - DOTD Project Manager



Team Members Involved:

Robert Lear, Alex Farr, Joshua Renard, Miles Williams



17. FIRM EXPERIENCE:

Firm Name	Vectura Consulting Services, LLC		
Project Name	Roundabout: US 171 at Boone St.	Discipline(s)*	Traffic
		Firm Responsibility	Subconsultant
Project Number	H.011909.5	Owner's Name	LADOTD
Project Location	Vernon Parish, LA	Owners Project Manager	Josh Harrouch
Owners Address, Phone, Email	PO Box 94245 Baton Rouge, LA 70804 (225) 242-4640 Joshua.Harrouch@la.gov		
Services Commenced by this Firm (mm/yy)	04/17	Total Consultant Contract Cost (\$1,000's)	Unknown
Services Completed by this Firm (mm/yy)	12/20	Cost of Consultant Services Provided by this Firm (\$1,000's)	\$82.045

Project Description:

Vectura designed temporary traffic signal plans as part of the sequence of construction plan for a roundabout construction at the intersection of US 171 at Boone Street in Leesville, LA. The purpose of the project was to replace the existing signalized intersection with a multilane roundabout at Boone Street.

Project Relevance:

- ✓ Traffic Engineering
- ✓ Traffic Signal Design

Temporary Traffic Signal Design

Vectura performed following design tasks to develop temporary traffic signal plans

- Detailed study of sequence of construction plans to determine the optimal traffic signal operation and required traffic signal equipment for each sequence of construction phase
- Reviewed potential access issues for all the impacted driveways / streets along the project area for each sequence of construction phase
- Developed multiple traffic signal timing plans by time of day for each sequence of construction phase to maintain progression along main corridor
- Developed temporary signal plans including pole and span wire layout, signs, striping, power source, signal timings by time of day, vehicle detection, signal head placement, wiring diagram, pole height calculations, clearance calculations, quantities, construction cost estimate
- Coordinated with LADOTD Traffic Section and District Traffic Engineer

Quality Control Review

Vectura 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.

Team Members Involved:

Brin Ferlito, Reece Rodrigue, Laurence Lambert, Bridget Robicheaux



17. FIRM EXPERIENCE:

Firm Name	Vectura Consulting Services, LLC		
Project Name	LA 30 Roundabouts at Tanger I-10	Discipline(s)*	Traffic
		Firm Responsibility	Subconsultant
Project Number	H.010960.5	Owner's Name	LADOTD
Project Location	Ascension Parish, LA	Owners Project Manager	Josh Harrouch
Owners Address, Phone, Email	PO Box 94245 Baton Rouge, LA 70804 (225) 242-4640 Joshua.Harrouch@la.gov		
Services Commenced by this Firm (mm/yy)	04/17	Total Consultant Contract Cost (\$1,000's)	Unknown
Services Completed by this Firm (mm/yy)	12/20	Cost of Consultant Services Provided by this Firm (\$1,000's)	\$153,294

Project Description:

Vectura designed temporary traffic signal plans that were implemented during the construction of three roundabouts along LA 30 in Gonzales, LA. The project involved replacing three existing signalized intersections with multilane roundabouts along LA 30 at the I-10 Interchange ramps and Tanger Boulevard. Vectura also provided Quality Control review of construction plans.

Project Relevance:

- ✓ Traffic Engineering
- ✓ Traffic Signal Design

Temporary Traffic Signal Design

Vectura performed the following design tasks to develop temporary traffic signal plans:

- Detailed study of sequence of construction plans to determine the optimal traffic signal operation and required traffic signal equipment for each sequence of construction phase
- Reviewed potential access issues for all the impacted driveways / streets along the project area for each sequence of construction phase
- Developed multiple traffic signal timing plans by time of day for each sequence of construction phase to maintain progression along main corridor
- Developed temporary signal plans including pole and span wire layout, signs, striping, power source, signal timings by time of day, vehicle detection, signal head placement, wiring diagram, pole height calculations, clearance calculations, quantities, construction cost estimate
- Coordinated with DOTD Traffic Section and District Traffic Engineer

Quality Control Review

Vectura 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.

Team Members Involved:

Brin Ferlito, Reece Rodrigue, Laurence Lambert, and Bridget Robicheaux



17. FIRM EXPERIENCE:

Firm Name	Vectura Consulting Services, LLC		
Project Name	Stage 0 Roundabout Feasibility Studies in the Lafayette Area	Discipline(s)*	Traffic
		Firm Responsibility	Subconsultant
Project Number	H.004490	Owner's Name	Acadiana Planning Commission
Project Location	Lafayette, LA	Owners Project Manager	Chris Cole
Owners Address, Phone, Email	101 Jefferson Street, Lafayette, LA 70501 (337) 806-9363 ccole@planacadiana.org		
Services Commenced by this Firm (mm/yy)	05/16	Total Consultant Contract Cost (\$1,000's)	~\$200
Services Completed by this Firm (mm/yy)	09/17	Cost of Consultant Services Provided by this Firm (\$1,000's)	\$80

Project Description:

Vectura provided Stage 0 feasibility studies for roundabouts at 10 intersections in the Lafayette area. The scope was developed based on EDSMs VI.1.1.1 / VI.1.1.5 and LADOTD Traffic Engineering Manual (TEM) Section 20.2.

Project Relevance:

- ✓ Stage 0 Feasibility Study
- ✓ Turning Movement Counts
- ✓ Traffic Analysis
- ✓ Crash Analysis
- ✓ Project Management

Task 1 Data Collection

Vectura collected the following traffic data for 10 intersections:

- Seven-day (mainlines) and Two-day (side streets) 24-hour tube counts w/ classification
- Turning movement counts for morning and evening peak periods
- Radar speed studies

Task 3 Project Management

This task included a kick-off meeting by conference call as well as two progress conference calls as needed.

Task 4 Final Traffic Study and Deliverables

Comments from the draft Traffic Study were addressed in this task. Two copies of the final traffic study and electronic files were submitted.

Task 2 Traffic Study

This task included a roundabout study as defined in EDSM VI.1.1.5, VI.1.1.1 and LADOTD TEM Section 20.2. This task included the following elements:

- Developed growth rate methodology and AM and PM peak traffic volumes for Implementation Year and Design Year
- Performed **traffic signal warrants analyses**
- Developed Sidra analyses for unsignalized, signalized and roundabout alternatives for implementation and design year
- **Developed three-year crash analyses**
- Developed draft traffic study report



Team Members Involved:

Brin Ferlito, Laurence Lambert, Bridget Robicheaux

17. FIRM EXPERIENCE:

Firm Name	Ardaman & Associates, Inc.			
Project Name	I-20 Mississippi River Bridge Review	Discipline(s)*		Geotech
		Firm Responsibility	Prime	
Project Number	H.004646 09-L1049 H.010603.6 13-3720 H.010612.6 20-3729 H.004647.6 22-3746, 22-3753, 24-3707	Owner's Name	LADOTD	
Project Location	Madison Parish, LA	Owners Project Manager	Chris Nickel	
Owners Address, Phone, Email	PO Box 94245, Baton Rouge, LA 70806 225.379.1133 Nicholas.Olivier@la.gov			
Services Commenced by this Firm (mm/yy)	10/09	Total Consultant Contract Cost (\$1,000's)	\$10,881	
Services Completed by this Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by this Firm (\$1,000's)	\$10,881	

Project Description:

Ardaman conducted a geotechnical study to develop a list of technically feasible remedial alternatives to decrease the potential for ground movements to occur at the site of the I-20 Bridge. Movement of the east abutment of the bridge was first realized in 2001 during an inspection. Over the years Mississippi DOT has retained several consultants who have studied the problem, but no viable solution was identified. Ardaman conducted a comprehensive review of past slope stability evaluations and recommendations. This task was followed by developing a refined geotechnical site characterization plan for the bank/bluff area for further analyses. Drilling operations included obtaining extremely sensitive samples containing prehistoric shear planes from the river via barge and on land, all with extremely difficult access conditions. The drilling program also included installation of geotechnical instrumentation such as Shape Accelerator Arrays, inclinometers, and vibrating wire piezometers. Engineering analyses performed included seepage and drawdown analyses and both equilibrium and finite element numerical modeling slope stability analyses.

As part of the project, Ardaman developed a full slope stabilization design and construction remediation strategy and a monitoring program for the bluff instability and ground movements affecting the existing I-20 Mississippi River Bridge.

Ardaman is currently managing a phase of the project which involves upgrading the entire instrumentation communication system. It also includes gathering and continuously monitoring various types of instrumentation data, inspects of the site and monitoring changes in topography by obtaining periodic survey data.

Project Relevance:

- ✓ Project Management & Support
- ✓ Geotechnical Engineering



Team Members Involved:

Megan Bourgeois, Robert Jewell, Jarmon King, Casey Floyd, Jessica Lit
Waggoner Engineering, Inc.



17. FIRM EXPERIENCE:

Firm Name	Ardaman & Associates, Inc.		
Project Name	I-12 to Bush - Route LA 3241 (LA 36 - LA 435) Segment 2	Discipline(s)*	
		Firm Responsibility	Subconsultant
Project Number	H.004435	Owner's Name	LADOTD
Project Location	St. Tammany Parish, LA	Owners Project Manager	Chris Nickel
Owners Address, Phone, Email	PO Box 94245, Baton Rouge, LA 70806 225.379.1133 Nicholas.Olivier@la.gov		
Services Commenced by this Firm (mm/yy)	04/14	Total Consultant Contract Cost (\$1,000's)	\$3,197
Services Completed by this Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by this Firm (\$1,000's)	\$460

Project Description:

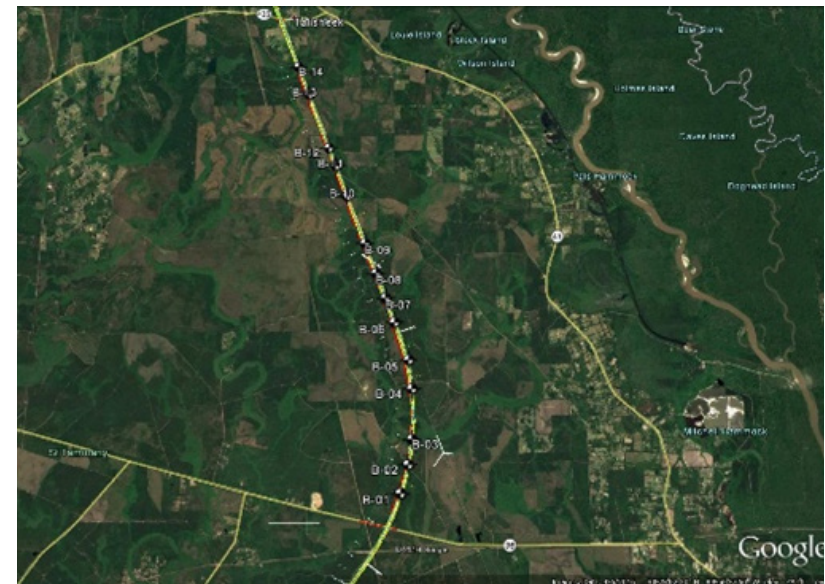
As part of the TIMED Program, the project consists of design of a new highway which ties into I-12 at the existing I-12/ LA 434 Interchange (Exit 74) and proceeds northerly along LA 434 for approximately 2.5 miles then leaves the existing highway and proceeds on new alignment until it connects with an abandoned railroad corridor approximately 1.7 miles north of LA 36. The alignment then follows the abandoned railroad alignment north and ties into the intersection of LA 40 and LA 41. The project is divided into three distinct project segments for which Ardaman was on the teams selected for Segments 2 and 3.

Segment 2 consists of an 8-mile alignment between LA 36 and LA 435 including two bridge structures and 8 culvert structures. The field investigation, conducted in accordance with LADOTD specifications, included field reconnaissance including access and gaining rights of entry, completing utility locations, locating/staking boring locations, and developing a plan for the initial mobilization of equipment to the site and mobilization between sites. The project consisted of 32 deep soil borings, 10 intermediate culvert borings, and 88 shallow roadway borings, sampling, and laboratory testing along the alignment. Global Positioning System (GPS) data was collected at each soil boring location along with groundwater level readings.

Soil boring logs were created in LADOTD format. Ardaman also provided geotechnical analyses and recommendations according to LRFD guidelines that included recommended pile capacities, culvert bearing capacities, embankment settlement analyses, and a pile data table. Ardaman also oversaw the pile testing program consisting of dynamic monitoring with PDA for the indicator and monitor piles at the various bridges. Ardaman analyzed the driving system with GRLWEAP the PDA data and issued reports with the pile recommendations based on the field results.

Project Relevance:

- ✓ Project Management & Support
- ✓ Geotechnical Engineering



Team Members Involved:

Megan Bourgeois, Robert Jewell, Jarmon King, Jessica Lit

17. FIRM EXPERIENCE:

Firm Name	Ardaman & Associates, Inc.		
Project Name	Roddy Road Safety Widening (LA 935 to LA 612), Gonzales, Louisiana	Discipline(s)*	Geotech
		Firm Responsibility	
Project Number	18-80-3744	Owner's Name	Ascension Parish Government - Sub to T. Baker Smith
Project Location	Ascension Parish, LA	Owners Project Manager	Dennis Hymel
Owners Address, Phone, Email	615 E Worthey St., Gonzales, LA 70737 (225)450-1200		
Services Commenced by this Firm (mm/yy)	09/17	Total Consultant Contract Cost (\$1,000's)	Unknown
Services Completed by this Firm (mm/yy)	03/18	Cost of Consultant Services Provided by this Firm (\$1,000's)	\$39

Project Description:

Ardaman conducted a geotechnical investigation consisting of ten shallow and two deep soil borings and associated laboratory testing for a safety widening along Roddy Road from LA Highway 935 to LA Highway 621 to provide two 12-foot lanes, 4-foot shoulders and a defined side ditch for roadside drainage, as well as the design of various turn lanes at the intersection locations, and a new bridge over Black Bayou. Engineering analyses consisted of providing soil boring logs in LADOTD format, deep foundation analyses, assessment of existing pavement conditions, earthwork considerations, and pavement design.

Project Relevance:

- ✓ Project Management & Support
- ✓ Geotechnical Engineering



Team Members Involved:

Megan Bourgeois, Robert Jewell, Jessica Lit



Sections 18

I-10: Highland Road to LA 73 Design-Build, East Baton Rouge & Ascension Parishes (H.009250)

Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)
Lead Design Firm

The James Construction Group (Primoris)/Sigma (Waggoner) team was the only bidder after the other two teams declined to submit a bid.

Past Performance Disciplines performed by Waggoner: Road, Bridge, Traffic, Environmental, Other (Project Management) Other (Alternative Delivery), Other (SUE)



18. APPROACH AND METHODOLOGY:

PROJECT BACKGROUND AND UNDERSTANDING

Our approach to the Downing Pines Road Roundabout project is rooted in proven design practices, proactive coordination, and a commitment to safety and efficiency. We recognize the importance of delivering a design that meets LADOTD standards while minimizing impacts to the traveling public during construction. Leveraging our experience with roundabout projects such as LA 347 and the I-10/I-12 CMAR corridor, we bring practical insight into constructability, traffic operations, and stakeholder coordination. A key element of our methodology will be close coordination with both LADOTD and the City of West Monroe to ensure that local priorities, utility considerations, and community impacts are addressed early and effectively. Our process emphasizes early problem-solving, continuous communication, and rigorous QA/QC to ensure a safe, cost-effective design tailored to the unique needs of Ouachita Parish.

PROJECT TEAM

The Waggoner team brings proven experience on LADOTD roundabout projects, combining leadership, design expertise, and structural support to ensure successful delivery of the Downing Pines Road Roundabout.



Robert Lear, PE, LSI | QA/QC Manager – Robert will serve as the QA/QC manager, bringing extensive roadway and roundabout design expertise to ensure all deliverables meet LADOTD’s standards of quality. He played key roles on the LA 347 roundabout at Melancon Road and the roundabout design at the I-10/LA 347 entrance and exit ramps, providing roadway design expertise and ensuring compliance with LADOTD standards.



Alex Farr, PE | Project Manager – Alex will serve as project manager and main point of contact for LADOTD and the City of West Monroe. He worked alongside Robert Lear, PE, LSI, on the previously mentioned projects, gaining hands-on experience managing complex roundabout and roadway designs. His collaborative leadership style, combined with his proven record of success on LADOTD projects, ensures a well-managed and efficient delivery for the Downing Pines Roundabout project.



Andrew Windmann, PE | Structural Lead – Andrew will provide structural engineering support, bringing a strong background in bridge and structural design on LADOTD projects. A key structural component of the Downing Pines Roundabout will be the large box culvert under Mane Street, which will require either replacement or extension. Andrew’s experience with hydraulic structures and culvert design uniquely positions him to ensure that this element is addressed with durable, cost-effective solutions that meet LADOTD standards and minimize construction impacts.



In addition to Waggoner’s core team, we have assembled specialized subconsultants to provide expertise critical to the success of the Downing Pines Road Roundabout. **Vectura** will lead traffic engineering, bringing extensive experience in roundabout traffic analysis and safety assessments to ensure optimal operations during and after construction. **Ardaman** will provide geotechnical services, with a focus on evaluating subsurface conditions related to the box culvert under Mane Street. Their expertise in soil characterization, foundation recommendations, and structural support for culvert replacement or extension will be essential in developing a safe, durable, and cost-effective design solution.

PROJECT GOALS AND KEY DESIGN ELEMENTS

At the outset of the Downing Pines Road Roundabout project, our team met with the LADOTD Project Team to establish clear lines of communication and align expectations. We also conducted a comprehensive site visit to better understand existing conditions and potential constraints. From this effort, we identified several critical design elements. By recognizing these priorities early, we can proactively develop solutions that minimize risk, streamline design, and support a smooth and efficient construction process.

Traffic Analysis and Geometric Design: The first step in developing the Downing Pines Road Roundabout is a traffic study and analysis to determine the appropriate lane configuration. In our meeting with the LADOTD Project Team, we learned that an older study exists for this location. Given the significant new development in the area, we will review and update this study to reflect current and projected traffic demands. Vectura—drawing on extensive experience in traffic operations and roundabout analysis—will lead the effort by evaluating growth patterns, turning movements, and peak-hour conditions to establish the most efficient configuration. Their updated analysis will form the foundation for a design that optimizes safety, capacity, and long-term performance.

Building on this analysis, Waggoner will develop the proposed roundabout geometry, leveraging our proven experience on projects such as the LA 347 Roundabout at Melancon Road and the I-10 exit/entrance roundabout. A key milestone will be the preparation of a 30% geometric submittal, allowing LADOTD to review and provide feedback early in the process to ensure the design is functional, constructible, and aligned with project goals.

Box Culvert Under Mane Street: One of the most significant design considerations for the Downing Pines Road Roundabout will be the box culvert under Mane Street, which must be either extended or fully replaced to accommodate the new roundabout geometry. This structure is a critical path item, directly influencing roadway alignment, traffic staging, and construction sequencing.



Other key design elements include:

- √ **Hydraulic Design** - We will perform detailed hydraulic modeling to ensure the culvert maintains adequate conveyance capacity and flood resilience under the new roadway geometry.
- √ **Structural Design** - Our comprehensive structural analysis will address load ratings, foundation stability, and integration between existing and new culvert segments. This effort will benefit from Andrew Windmann's prior experience with LADOTD in designing and evaluating complex structural elements.
- √ **Geotechnical Design** - Ardaman's evaluation of foundation conditions and constructability will be essential to ensure durability and long-term performance. They will apply their geotechnical expertise to minimize risks and impacts to adjacent infrastructure.

Drainage Design: In addition to the primary design effort focused on the box culvert under Mane Street, the project corridor also includes additional drainage features that must be considered to ensure a fully integrated system:

- √ **Open Ditch Drainage Systems** - An open ditch system runs along the east side of Downing Pines Road and follows Short Constitution Drive, conveying runoff from adjacent commercial properties and the roadway. These systems will be analyzed for slope, capacity, and tie-in to the proposed roundabout drainage design. If conditions warrant, conversion to a subsurface system may be considered to improve performance and integration with the new roadway footprint.
- √ **Cross Drain along Downing Pines Road** - Located just south of the project area is a cross drain under Downing Pines Road north of the driveway of Coast Professionals, Inc. While it is not expected to be a major design element, it will be evaluated for both structural condition and hydraulic capacity. The intent is that this facility will remain in place unless deficiencies in capacity are identified during design.

Maintenance of Traffic: Another critical element of the Downing Pines Road Roundabout project will be maintenance of traffic. Because the project area is highly commercialized along Mane Street, Downing Pines Road, and Constitution Drive, and sits directly off the I-20 exit, maintaining safe and efficient traffic flow will be essential to minimize disruption to businesses, residents, and interstate travelers. Addressing the box culvert under Mane Street during the initial phase of construction will be a key step in establishing the footprint for the roundabout and allowing traffic to be shifted safely throughout the remainder of the project. Our approach will focus on implementing a phased traffic plan that maintains access while ensuring safety and minimizing congestion throughout construction.

ROW Acquisition and Utility Coordination: Another vital component of the Downing Pines Road Roundabout project will be the establishment of required right-of-way (ROW) and the identification of potential utility impacts. Given the highly developed and commercialized nature of the project corridor, it will be essential to define ROW needs early in the design process to avoid delays in acquisition and construction. At the same time, coordination with utility providers will be critical to identify conflicts, determine necessary relocations, and sequence adjustments in a way that minimizes disruption to surrounding businesses and residents. Addressing these elements proactively will help control costs, reduce schedule risks, and ensure smooth progression from design into construction.

APPROACH AND METHODOLOGY

Scope and Task Development: Immediately upon selection, we will work with the LADOTD project manager to define scope and set key parameters such as manhours, sheet count, and schedule. This early coordination aligns LADOTD and Waggoner on goals, deliverables, and expectations, enabling accurate manhour estimates for fee negotiation.

Kick-Off Meeting/Pre-Design Planning Conference and Work Planning: Once a Notice to Proceed is issued, Waggoner, LADOTD, and the City of West Monroe will convene a project kick-off meeting, preferably in person.

The team will review the project scope, set milestone deliverable dates, and establish LADOTD review periods. We will also confirm design criteria, Stage 0 environmental constraints, and safety considerations, and document these discussions. Any LADOTD-provided services will be requested at this meeting. Finally, points of contact will be collected, and meeting minutes distributed to all relevant personnel.

Topographic Survey: Waggoner will complete a full topographic survey in accordance with LADOTD's Location and Survey Manual and all current automation procedures. The survey will capture the defined project limits shown in the Exhibit attached in the Advertisement along Downing Pines Road, Mane Street, and Constitution Drive, documenting all utilities with depths, drainage features, and finished floor elevations of buildings within the survey area. Control will be established per LADOTD standards, and deliverables will be submitted in Microstation/Inroads or Openroads (ORD) format.

Preliminary and Final Plan Preparation: 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 LADOTD Road Design Manual. Milestone submittals will be made at the 30% (Geometric Submittal), 60%, 90%, and 100% Preliminary Plan (PP) stages and at the 60%, 95%, and stamped/signed 98% Final Plan (FP) stages. These submittals will include plans and associated calculations as defined in the advertisement. Work will not commence on final plans until Environmental Clearance is received from Federal Highway Administration (FHWA). Bridge and roadway design will work in conjunction to ensure that the approach roadway and proposed bridge section are compatible, including during intermediate construction stages that will be required.

All required documentation such as review comments and responses, QA/QC certifications, constructability review forms, opinions of probably construction cost (OPCC), and calculations will be submitted with each appropriate delivery milestone. A final OPCC will accompany the final plan submittal, including all required special provisions and NS-Item specification write-ups.

Key Milestones:

- ✓ **30% PP** - Geometric submittal ensuring early alignment on the roundabout layout and design approach.
- ✓ **60% PP** - Geometry review-establish limits of construction, drainage review, initiate environmental review with established project footprint, initiate geotechnical field investigation, initiate property survey, preliminary bridge concept (from Evaluation Report), sequence of construction
- ✓ **90% PP** - Project team site visit, review for constructability, finalize required right-of-way (ROW)
- ✓ **100% PP** - Finalize property survey and base ROW Maps
- ✓ **Environmental Clearance** - Clears the team to move into final design and plan development

- ✓ **60% FP** - Initiate bridge final design, drainage review
- ✓ **Joint Plan Review** - Meet with Location Survey, finalize ROW maps
- ✓ **Environmental Clearance** - Clears the team to move into final design and plan development
- ✓ **90% FP** - Final plan review meeting with project team, bridge design, and details majorly complete
- ✓ **98% FP** - Full-sized sealed plans, final QC/QA forms, final calculations and files, final special provisions, and final construction cost estimate

Road And Drainage Design: The LADOTD Minimum Design Guidelines and recommended conceptual layouts from the Roundabout Justification Report will be reviewed and updated as necessary. Design Reports will be prepared for each functional class of roadway. The LADOTD Road Design Manual, American Association of State Highway and Transportation Officials (AASHTO) Green Book 2018, Roadside Design Guide, LADOTD Hydraulics Manual, and accepted LADOTD reference material will be used to guide the road design process. LADOTD's HydroWin software will be the primary tool for open ditch, storm drain systems, and cross drain design on the project.

We recommend incorporating recently published information from NCHRP Research Report 1043 - Guide for Roundabouts (2023) where practical. These suggestions include:

- ✓ Pedestrian/bicycle accommodations and incorporating the latest safety and quality of service features (Chapter 4)
- ✓ Conduct performance checks for roundabouts to ensure the design incorporates the necessary principles and safety features such as stopping and intersection sight distances, view angles, fastest path, speed control, design vehicle accommodation, and bicycle/pedestrian wayfinding and crossing assignments (Chapter 9)

The preliminary plan phase will focus on establishing the horizontal and vertical geometrics, typical sections, drainage design, cross sections, and conceptual sequence of construction components. The final plans phase will provide full details and quantity computations for the project.

Bridge Evaluation And Design: The existing 3-barrel RCB was constructed in 2000 and is currently classified to be in "Fair" condition status based on the latest available NBI data. Its NBI Inventory Rating value of 35.7 tons suggests that the existing culvert would load rate above a 0.9 factor and thus would not require strengthening for the HL-93 design vehicle. As part of our widening analysis, and prior to commencing plan development, Waggoner will confirm this notion in accordance with LADOTD Bridge Design Sections' *Design Policy for Bridge Rehabilitation/Repair Projects*, which also covers widenings. Nevertheless, if either the top slab or side walls of the existing RCB require strengthening, the specific locations where traffic is anticipated in the final roundabout configuration will be addressed during various stages of the construction phasing, and any new, extended portions of the box will meet or exceed both the load-carrying capacity of the existing RCB and the minimum governing design load.

A new As-Designed load rating will be performed and documented in a report in accordance with AASHTO Manual for Bridge Evaluation, BDEM Part II, Vol. 5, and applicable Bridge Design Technical Memoranda.

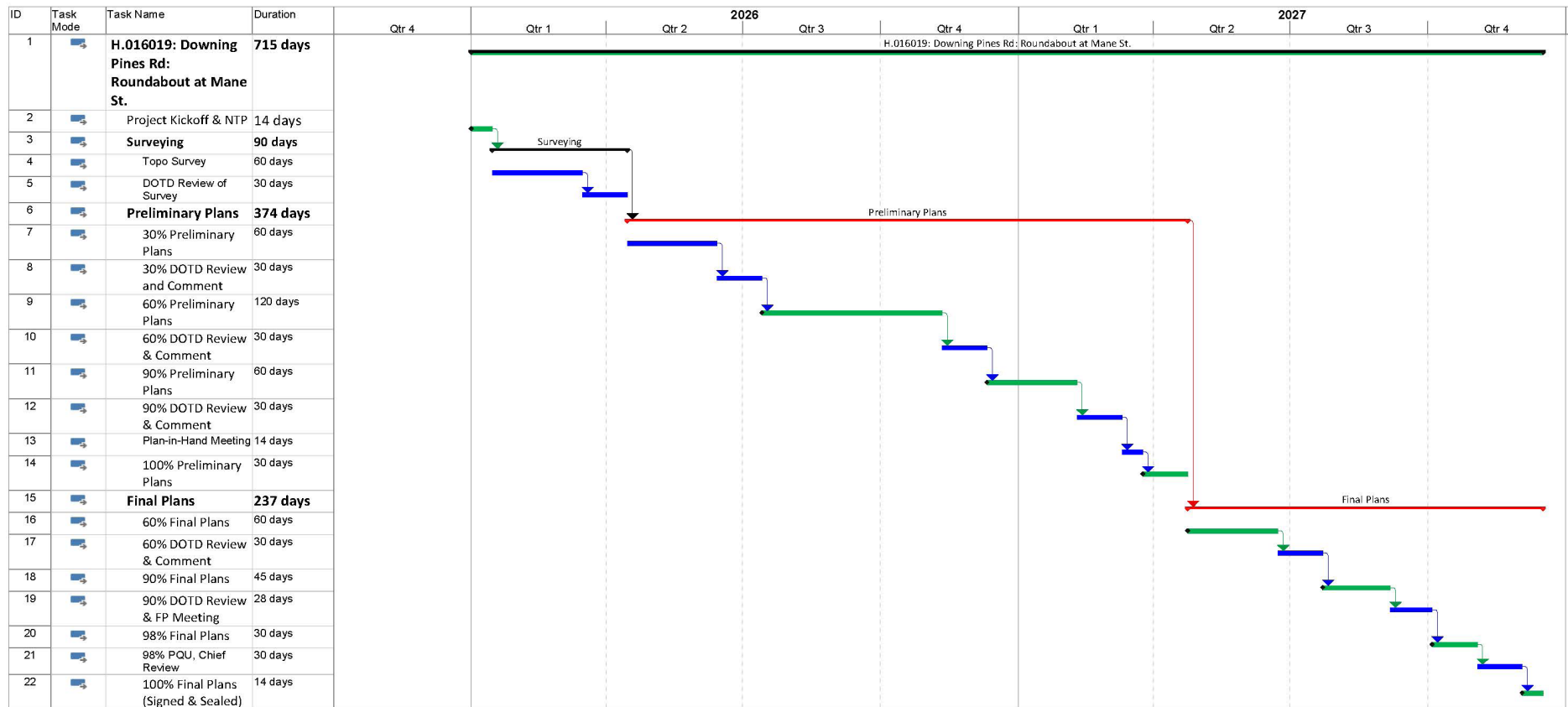
Right-of-Way: The LADOTD Location & Survey Manual and Addendum A will be followed for the property survey and right-of-way map preparation. Title take-offs will be pulled during the topographic survey phase to assist with establishing the apparent right-of-way. The property survey and map preparations will be initiated after the Plan in Hand meeting. Maps will be submitted at the Property Map, Base Right-of-Way Maps, Right-of-Way Checkprints, and Final Right-of-Way Map milestones.

Opinion of Probable Construction Costs, Pay Items and Quantities: We will prepare Opinions of Probable Construction Costs (OPCC) starting with the 90% Preliminary Plan submittal and update them with each subsequent submittal. Each update will refine the estimate and reduce contingency. Waggoner’s design professionals bring extensive experience with the LADOTD Purple Book, pay item list, and special provisions, as well as in developing specifications for non-standard items. We also understand the requirements for breaking down quantities by funding source, control section, and LADOTD asset (e.g., bridge structures).

Quality Assurance/Quality Control (QA/QC): Waggoner proposes to utilize our currently implemented quality control plan for this contract, which includes LADOTD’s QA/QC requirements and forms. Built around LADOTD’s philosophy and internal QA/QC plans, the key components to this plan include communication, redundancy, and application of experience.

Project Schedule: We have worked on LADOTD projects for decades and understand 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 is a large part of the work effort. **Please see below a schedule of the major milestones and deliverables anticipated in this contract.**

Conclusion: Waggoner has experience providing all the elements described in the Scope of Services to LADOTD. With our knowledge of LADOTD procedures and practices, Waggoner provides a design consultant with an unparalleled depth of hands-on experience, technical expertise, and capability to perform the services needed within budget and on time.



Section 19-23


Pecue Lane/I-10 Interchange, East Baton Rouge Parish, LA (H.003047)


Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)


Prime consultant for design of an interchange with multiple through and turn lanes on Pecue Lane, an entrance ramp and exit ramp on eastbound I-10, an entrance and exit ramp on westbound I-10, replacing the current Pecue Lane slab span bridge over Wards Creek, and widening the I-10 girder bridge over Wards Creek.



19. WORKLOAD:

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Discipline(s)	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance
	Road	44-19010, H.010652	LA 73: US 61 (Airline) - Essen Lane	\$2,349
		44-19010, H.010116	LA 1088: Soult and Trinity Roundabouts	N/A
		unavail, H.004791	Belle Chase Bridge & Tunnel Replacement	N/A
		44-18646, H.004100	I-10: LA 415 to Essen Lane on I-10 and I-12	\$1,058,156
		44-24084, H.009300	CMAR Contract for Hooper Road Widening (LA 3034 - LA 37)	\$175,238
		4400004666, H.002868	Ambassador Caffery & US 90 Interchange Construction Support	N/A
	Bridge	4400029912 (formerly 4400019338)	Rural Bridge Replacement Initiative Phase II (South) (16 Project #s)	\$342,708
		4400029918 (formerly 4400025041)	IIJA Off-System Bridge Program, District 62 (6 Project #'s)	\$124,620
		4400029197, H.016093	US 84: Grand Cane Bayou & Relief Bridges	\$351,186
	Survey	4400025041	IIJA Off-System Bridge Program, District 62 (7 Project #'s)	N/A
Right-of-Way	4400025041	IIJA Off-System Bridge Program, District 62 (7 Project #'s)	\$17,490	




	Traffic	4400005484	New Orleans Rail Gateway Avondale EA	\$57,644
		H.004791	Belle Chasse Bridge & Tunnel Replacement PPP	\$ 11,202
		4400021519	KCS RR Overpasses HBI	\$ 572
		4400023075	S. Lewis Street Widening	\$ 7,499
		4400025299	LA 47 Hayne Blvd Safety Improvements	\$ 9,437
		4400018271	LA 383 Stage 0 Corridor Study	\$ 20,146
		4400025299	Dist. 02H Flashing Yellow Arrow Part 2	\$ 83,260
	CE&I / OV	4400020018	EBR Computerized Traffic Signal, Ph VB	\$28,737
	ITS	4400016364	Houma Regional ITS Architecture Update	\$ 10,746


	Geotech	44-4128; H.004273	I-49 Connector, Lafayette	\$338,752
		44-18899; H.004791	LA 23: Belle Chasse Bridge & Tunnel (HBI)	\$40,897
		44-19013; H.004100.5	I-10 CMAR Design Continuation: LA 415 TO ESSEN ON	\$692,204
		H.004435	I-12 to Bush Construction Phase	\$47,370
		44-8671; H.009266	I-10 Widening: LA 73 to LA 30	\$25,760
		44-19013; H.002244.5	Boudreaux Canal Bridge (LA 56)	\$180
		44-17438; H.013284	MRB GBR LA 1 to LA 30 Connector	\$2,781
		44-6189; H.004647.6	I-20 Mississippi River Bridge at Vicksburg	\$1,651,052
		H.015935	LA 47 at Bayou Bienvenue Bridge Replacement PDA	\$23,059
		44-25025; H.015337, H.015452, H.015453, H.015454, H.015455, H.015456, H.015457, H.015458, H.015459, H.015460, H.015461, H.015462, H.015463	IJA	\$77,119
		44-24652; H.014265.5	N River Road Irving Branch	\$65
		44-24652; H.012533.5	LA 1252 Bayou Pt Brule Bridge	\$39
		44-24652, H.012607.5	Henderson Bayou Bridge LA 933	\$65
		44-24652, H.015568.5,	Pelican Point Roundabout	\$45,870
		44-24652; H.012842.5	LA 124 Ext. Larto Lake	\$152
		44-21519; H.012030.5	KCS RR Overpasses US 371	\$44,036
		44-21887; H.012542, H.012453, H.012544, H.012047	Replacement of 15 Bridges	\$579,165
44-6189; H.016313.5, H.016314.5, H.016315.5, H.016316.5, H.016317.5, H.016318.5, H.016319.5, H.016320.5, H.016325.5	Culvert Replacements	\$187,765		
H.015429, H.015430, H.015432	IJA	\$14,545		

20. CERTIFICATIONS/LICENSES:

Certificate of Completion
presented to
Alex Farr
for completing the
**Traffic Engineering Analysis Process & Report
Module 1**




Date: July 16, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 2


 Authorized Instructor
  Authorized Instructor
  Authorized instructor



Certificate of Completion
presented to
Alex Farr
for completing the
**Traffic Engineering Analysis Process & Report
Module 2**




Date: July 23, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 3


 Authorized Instructor
  Authorized Instructor
  Authorized instructor



Certificate of Completion
presented to
Alex Farr
for completing the
**Traffic Engineering Analysis Process & Report
Module 3**

Date: October 18, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 3

 Authorized Instructor
  Authorized Instructor
  Authorized instructor




PROOF OF TRAINING
THIS CERTIFICATE HEREBY RECOGNIZES THAT

Alex Farr
has attended
Louisiana Traffic Control Supervisor Refresher
Training Course

11/10/2023 to 11/10/2027
Training Valid Through

Baton Rouge, LA
Location


 Vice President of Education and Technical Services
 President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.

 American Traffic Safety Services Association ATSSA.com



20. CERTIFICATIONS/LICENSES:





ATSSA
Safer Roads Save Lives

Robert Lear Jr.
has attended
Louisiana Traffic Control Supervisor Refresher

Completed: 16-MAY-2025
CEU (If Applicable): 0.75

ATSSA provides training and certification but neither constitutes employment by ATSSA.
This certificate provides proof of training, not certification.

American Traffic Safety Services Association
ATSSA.com


ATSSA
Safer Roads Save Lives

Joshua Renard
has attended
Louisiana Traffic Control Supervisor Refresher

Completed: 16-MAY-2025
CEU (If Applicable): 0.75

ATSSA provides training and certification but neither constitutes employment by ATSSA.
This certificate provides proof of training, not certification.

American Traffic Safety Services Association
ATSSA.com




PROOF OF TRAINING
THIS CERTIFICATE HEREBY RECOGNIZES THAT

Milan Lear
has attended
Louisiana Traffic Control Technician
Training Course


9/5/2023 to 9/5/2027
Training Valid Through

Baton Rouge, LA
Location

Donna M. Clark
Vice President of Education and Technical Services

Sharon Ferguson
President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.


ATSSA
Safer Roads Save Lives

Jace Ricard
has attended
Louisiana Traffic Control Supervisor Refresher

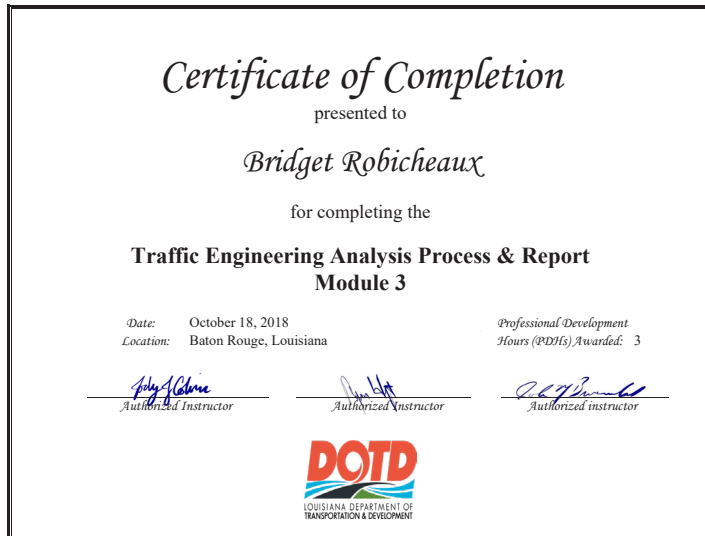
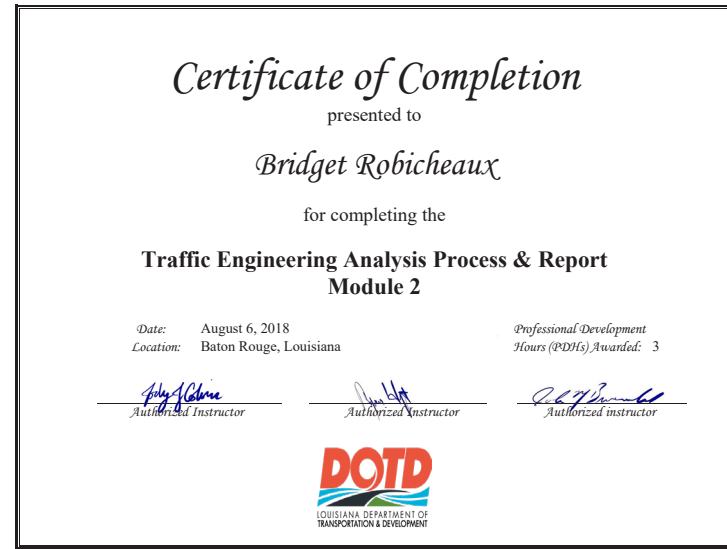
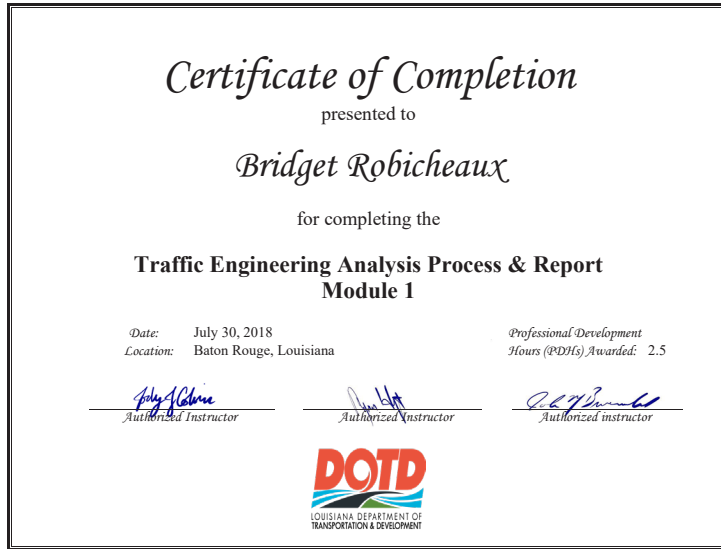
Completed: 14-MAR-2025
CEU (If Applicable): 0.75

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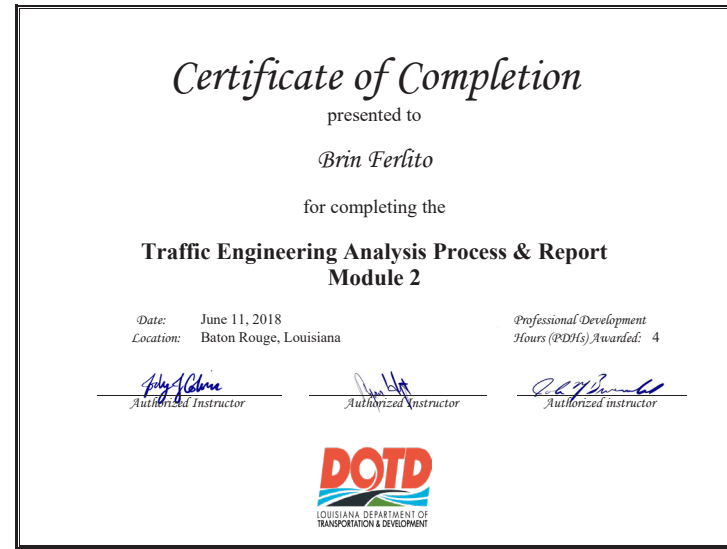
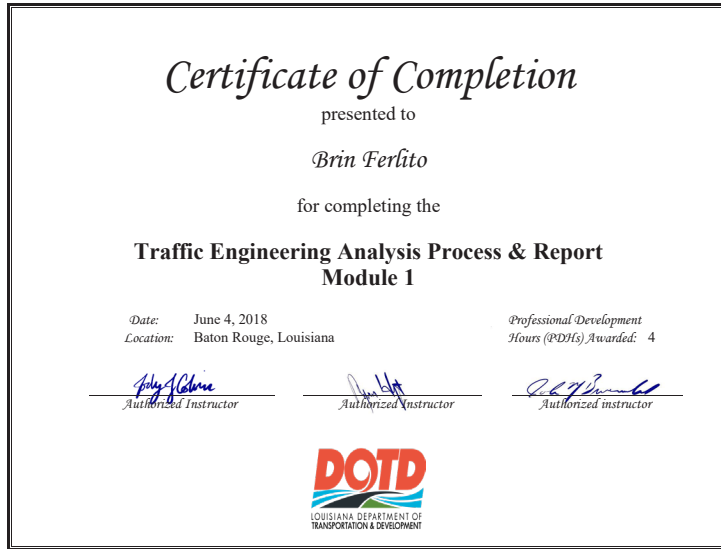
American Traffic Safety Services Association
ATSSA.com



20. CERTIFICATIONS/LICENSES:




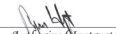
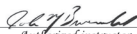
20. CERTIFICATIONS/LICENSES:




20. CERTIFICATIONS/LICENSES:

Certificate of Completion
presented to
Brin Ferlito
for completing the
**Traffic Engineering Analysis Process & Report
Module 3**




Date: September 10, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 3


 Authorized Instructor
  Authorized Instructor
  Authorized instructor


LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

Certificate of Completion
presented to
Laurence Lambert
for completing the
**Traffic Engineering Analysis Process & Report
Module 1**




Date: July 16, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 2


 Authorized Instructor
  Authorized Instructor
  Authorized instructor


LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

Certificate of Completion
presented to
Laurence Lambert
for completing the
**Traffic Engineering Analysis Process & Report
Module 2**


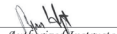

Date: July 23, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 3


 Authorized Instructor
  Authorized Instructor
  Authorized instructor


LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

Certificate of Completion
presented to
Laurence Lambert
for completing the
**Traffic Engineering Analysis Process & Report
Module 3**

Date: October 15, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 3

 Authorized Instructor
  Authorized Instructor
  Authorized instructor


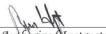


LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT



20. CERTIFICATIONS/LICENSES:

Certificate of Completion
presented to
Reece Rodrigue
for completing the
**Traffic Engineering Analysis Process & Report
Module 1**



Date: November 5, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 2

 Authorized Instructor
  Authorized Instructor
  Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

Certificate of Completion
presented to
Reece Rodrigue
for completing the
**Traffic Engineering Analysis Process & Report
Module 2**



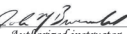
Date: November 26, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 3.5

 Authorized Instructor
  Authorized Instructor
  Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

Certificate of Completion
presented to
Reece Rodrigue
for completing the
**Traffic Engineering Analysis Process & Report
Module 3**

Date: December 3, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 3

 Authorized Instructor
  Authorized Instructor
  Authorized instructor




DOTD
LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT




20. CERTIFICATIONS/LICENSES:

Certificate of Completion
presented to
Kristen Gahagan
for completing the
**Traffic Engineering Analysis Process & Report
Module 1**




Date: July 30, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 2.5


 Authorized Instructor
  Authorized Instructor
  Authorized instructor


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 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 3


 Authorized Instructor
  Authorized Instructor
  Authorized instructor


LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

Certificate of Completion
presented to
Kristen Gahagan
for completing the
**Traffic Engineering Analysis Process & Report
Module 3**

Date: October 29, 2018 Professional Development
Location: Baton Rouge, Louisiana Hours (PDHs) Awarded: 3

 Authorized Instructor
  Authorized Instructor
  Authorized instructor


LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT



20. CERTIFICATIONS/LICENSES:



PROOF OF TRAINING
THIS CERTIFICATE HEREBY RECOGNIZES THAT

Brin Ferlito
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

4/29/2022 to 4/29/2026
Training Valid Through

Ranga Sult
Director of Training

Baton Rouge, LA
Location

Alice Teichner
President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.
This certificate provides proof of training, not certification.




PROOF OF TRAINING
THIS CERTIFICATE HEREBY RECOGNIZES THAT

Laurence Lambert
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

4/29/2022 to 4/29/2026
Training Valid Through

Ranga Sult
Director of Training

Baton Rouge, LA
Location

Alice Teichner
President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.
This certificate provides proof of training, not certification.




PROOF OF TRAINING
THIS CERTIFICATE HEREBY RECOGNIZES THAT

Reece Rodrigue
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

3/10/2023 to 3/10/2027
Training Valid Through

Donna M. Clark
Vice President of Education and Technical Services

New Orleans, LA
Location

Alice Teichner
President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.




This is to affirm that

Sheelagh Ferlito
has satisfied the requirements to be designated as a
CERTIFIED FLAGGER

Issue Date 5/9/2023 ATSSA


Exp. Date 5/8/2027 Instructor Name *Donna M. Clark*

State Issued LA Instructor Signature *Donna M. Clark*

A1000126216 Verify at Flagger.com



20. CERTIFICATIONS/LICENSES:

		COMMERCIAL DIVISION 225.925.4704	
		Fax Numbers 225.932.5317 (Admin. Services) 225.932.5314 (Corporations) 225.932.5318 (UCC)	
Name	Type	City	Status
WAGGONER ENGINEERING, INC.	Business Corporation (Non-Louisiana)	JACKSON	Active
Previous Names			
Business: WAGGONER ENGINEERING, INC.			
Charter Number: 34954531F			
Registration Date: 6/16/2000			
Domicile Address			
143A LEFLEURS SQUARE JACKSON, MS 39211			
Mailing Address			
143A LEFLEURS SQUARE JACKSON, MS 39211			
Principal Business Office			
143A LEFLEURS SQUARE JACKSON, MS 39211			
Registered Office in Louisiana			
450 LAUREL STREET, 8TH FLOOR BATON ROUGE, LA 70801			
Principal Business Establishment in Louisiana			
450 LAUREL STREET, 8TH FLOOR BATON ROUGE, LA 70801			
Status			
Status: Active			
Annual Report Status: In Good Standing			
Qualified: 6/16/2000			
Last Report Filed: 6/11/2024			
Type: Business Corporation (Non-Louisiana)			

		COMMERCIAL DIVISION 225.925.4704	
		Fax Numbers 225.932.5317 (Admin. Services) 225.932.5314 (Corporations) 225.932.5318 (UCC)	
Name	Type	City	Status
ARDAMAN & ASSOCIATES, INC.	Business Corporation (Non-Louisiana)	ORLANDO	Active
Previous Names			
Business: ARDAMAN & ASSOCIATES, INC.			
Charter Number: 34396031F			
Registration Date: 12/13/1991			
Domicile Address			
8008 SOUTH ORANGE AVENUE ORLANDO, FL 32809			
Mailing Address			
3475 E. FOOTHILL BLVD. PASADENA, CA 91107			
Principal Business Office			
8008 SOUTH ORANGE AVENUE ORLANDO, FL 32809			
Registered Office in Louisiana			
3867 PLAZA TOWER DR. BATON ROUGE, LA 70816			
Principal Business Establishment in Louisiana			
316 HIGHLANDIA DR. BATON ROUGE, LA 70816			
Status			
Status: Active			



20. CERTIFICATIONS/LICENSES:



STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
Effective Date: July 1, 2025
316 Highlandia Dr, Baton Rouge, Louisiana 70810-5904
Certificate Number: 02052


Ardaman & Associates Inc
AI Number: 30726
Activity No. ACC20250001
Expiration Date: June 30, 2026

LELAP

Analysis	Method Name	Method Code	Type	AB
Air Emissions				
Non Potable Water				
Solid Chemical Materials				
1730 - Amount Of Soil Finer Than The No. 200 Sieve	ASTM D1140	3550	AASHTO	AAP
1731 - Laboratory Compaction Of Soils (Proctor Density)	ASTM D1557	3551	AASHTO	AAP
1731 - Laboratory Compaction Of Soils (Proctor Density)	ASTM D698	3561	AASHTO	AAP
1732 - Unconsolidated Compressive Strength Of Soil	ASTM E2166	3552	AASHTO	AAP
1734 - Classification Of Soils For Engineering Purposes (Unified Soil Classification System)	ASTM D2487	3554	AASHTO	AAP
1735 - Soil Classification Visual - Manual (FHWS)	ASTM D2488	3555	AASHTO	AAP
1736 - Unconsolidated, Undrained Triaxial Compression	ASTM D2850	3556	AASHTO	AAP
1739 - Particle Size Analysis Of Soils	ASTM D422.63 (7)	30030854	AASHTO	AAP
1739 - Atterberg Limits Of Soils	ASTM D4318	3559	AASHTO	AAP
1740 - Liquid Limit	ASTM D4318	3559	AASHTO	AAP
1741 - Plastic Limit	ASTM D4318	3559	AASHTO	AAP
1742 - Plasticity Index	ASTM D4318	3559	AASHTO	AAP
1743 - Specific Gravity Of Soils	ASTM D854	3562	AASHTO	AAP
1744 - Hydraulic Conductivity (Flexible Wall Permeometer)	ASTM D584	3563	AASHTO	AAP
1800 - pH	ASTM D4972	3560	AASHTO	AAP
1919 - Hydraulic Conductivity	ASTM D5034	3834	AASHTO	AAP
1954 - In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth)	ASTM D6938	3854	AASHTO	AAP
2073 - Dry Preparation of Samples	ASTM D421	3972	AASHTO	AAP
2088 - One-Dimensional Consolidation Properties of Soils	ASTM D2435	3994	AASHTO	AAP
2439 - Hydraulic Conductivity (granular material)	ASTM D2434	3834	AASHTO	AAP
2844 - Particle Size Distribution	ASTM D6913	4324	AASHTO	AAP
3835 - Moisture content	ASTM D2216-10	30023106	AASHTO	AAP
7987 - Organic Content of Soil by Ignition	ASTM D2974-07A	30030430	AASHTO	AAP

Client and Customers are urged to verify the laboratory's current certification status with the Louisiana Environmental Laboratory Accreditation Program.
Page 1 of 1

20. CERTIFICATIONS/LICENSES:



ATSSA
Safer Roads Save Lives



Megan Bourgeois
has attended
Louisiana Traffic Control Supervisor Refresher

Completed: 21-JUN-2024

CEU (If Applicable): 0.75

ATSSA provides training and certification but neither constitutes employment by ATSSA.
This certificate provides proof of training, not certification.

American Traffic Safety Services Association
ATSSA.com

ATSSA
Safer Roads Save Lives


Robert Jewell
has attended
Louisiana Traffic Control Supervisor Refresher

Completed: 23-AUG-2024

CEU (If Applicable): 0.75

ATSSA provides training and certification but neither constitutes employment by ATSSA.
This certificate provides proof of training, not certification.

American Traffic Safety Services Association
ATSSA.com




ATSSA
Safer Roads Save Lives


Megan Bourgeois
has attended
National Flagger Certification Training Course

Completed: 15-AUG-2024

CEU (If Applicable): 0

ATSSA provides training and certification but neither constitutes employment by ATSSA.
This certificate provides proof of training, not certification.

American Traffic Safety Services Association
ATSSA.com

ATSSA American Traffic Safety Services Association
Safer Roads Save Lives

This is to affirm that

ROBERT JEWELL

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Issue Date 7/31/2025 Instructor Name Debbie Purcella

Exp. Date 7/31/2029 *Debbie Purcella*

State Issued LA Instructor Signature

V0000394058

Verify at Flagger.com



20. CERTIFICATIONS/LICENSES:



20. CERTIFICATIONS/LICENSES:



20. CERTIFICATIONS/LICENSES:



<p>State of Louisiana Secretary of State</p>		<p>COMMERCIAL DIVISION 225.925.4704</p> <p>Fax Numbers 225.932.5317 (Admin. Services) 225.932.5314 (Corporations) 225.932.5318 (UCC)</p>	
Name	VECTURA CONSULTING SERVICES, LLC	Type	Limited Liability Company
City	BATON ROUGE	Status	Active
Previous Names			
Business:	VECTURA CONSULTING SERVICES, LLC		
Charter Number:	41994609K		
Registration Date:	8/24/2015		
Domicile Address	4467 BLUEBONNET BLVD. SUITE A BATON ROUGE, LA 708099639		
Mailing Address	PO BOX 14269 BATON ROUGE, LA 70898		
Status	Active		
Annual Report Status:	In Good Standing		
File Date:	8/24/2015		
Last Report Filed:	7/26/2024		
Type:	Limited Liability Company		



21. QA/QC 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.**

Waggoner Engineering, Inc.
(formerly Sigma Consulting Group, Inc.)

Quality Assurance/Quality Control Plan for Bridge Design Projects

**Contract for Engineering and Related Services for
Downing Pines Road: Roundabout at Mane Street**

Entity Contract No. 4400032380 | State Project No. H. 016019.5 | Federal Aid Project No. H016019

This document is a supplement to Waggoner's Quality Assurance/Quality Control Plan dated August 2020

September 2025



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I. Introduction

At Waggoner Engineering, Inc. (formerly Sigma Consulting Group Inc.), we emphasize good communication as the key component in achieving excellence. This communication begins with our firm's mission, and continues with goals, company procedures, and then periodic feedback for making changes.

The procedures are what guide our day to day quality efforts. They are organized into company procedures and project procedures. Our method for assuring quality over the long term is addressed in our mission, quality goal, and feedback.

This document establishes the minimum requirements for the Quality Control (QC) and Quality Assurance (QA) for all LADOTD bridge design projects, with specific references to this project.

Waggoner is fully responsible for the QC/QA of our work, and the work of all subconsultants. All subconsultants are to adhere to these guidelines also.

LADOTD is not responsible for performing QC/QA of Waggoner's or their subconsultants' work.

II. References

- Quality Control/Quality Assurance Plan. 2020. Waggoner Engineering, Inc.
- LADOTD Bridge Design and Evaluation Manual, Part I - Policies and Procedures, Chapter 3: Policy for QC/QA
- Policy on Quality Control and Quality Assurance. 2012. Louisiana Department of Transportation and Development, Bridge Design Section
- Guidance on Quality Control and Quality Assurance (QC/QA) in Bridge Design. 2011. Federal Highway Administration.

III. Definitions

Quality Control (QC) - Procedures of checking the accuracy of the calculations and consistency of the drawings, detecting and correcting design omissions and errors before the design plans are finalized, and verifying the specifications for the load-carrying members are adequate for the service and operation loads.

Quality Assurance (QA) - Procedures of reviewing the work to ensure the quality controls are in place and effective in preventing mistakes, and consistency in the development of bridge design plans and specifications.

Designer - An individual directly responsible for the development of design calculations, drawings, specifications and contract documents, and review of shop drawings related to a specific bridge design with a level of technical skills and experience commensurate with the complexity of the subject structure or structures being designed. The designer must be licensed by the State of Louisiana as an engineer intern or a professional engineer.

Detailer - The detailer is the individual directly responsible for the creation of CAD drawings.

Checker - An individual responsible for performing a full technical review of the structural design calculations, drawings, specifications, and contract documents. The checker must be licensed by the State of Louisiana as an engineer intern or a professional engineer. If the designer is an engineer intern, then the checker must be a professional engineer.

Reviewer - An individual responsible for performing QA procedures for assuring that QC procedures have been performed. The reviewer must be licensed by the State of Louisiana as a professional engineer and have substantial experience in the design of similar structures.

Engineer of Record - An individual responsible for all bridge structural aspects of the design of the structure including the design of all of the bridge's systems and components. The EOR must be licensed by the State of Louisiana as a professional engineer and must have commensurate experience in the design of similar structures. The EOR can be the designer, the design checker, the reviewer, or the supervisor/team leader who is directly involved in the project development. The Engineer of Record normally seals and signs the final contract plans and specifications.

Area	Role	Team Member	Responsible For
Project Management	Project Manager/ Point of Contact	Alex Farr, PE	Determining appropriate staff to assign work. Overall project delivery in conformance with established scope, schedule, and budget.
Bridge Design	Designer	Joshua Gonya, PE	Design of structural elements that are not covered by existing LADOTD standard details.
	Checker	Joshua Olivier, PE	In-depth check of the designer's calculations and plans. Independent or review designer's calculations.
	QA Review	Andrew Windmann, PE	Confirms that all calculations and plans have corresponding documents and that these documents were adequately checked in conformance with Waggoner's and LADOTD's QA/QC policies. Performs high-level review for project biddability and constructability and ensures any identified modifications are incorporated.
Bridge Hydraulics	Designer	Steven Gilliam, PE	Creation of hydraulic model for unrestricted, existing, and proposed crossings at the body of water. Creation of report summarizing hydraulic data and requirements along with any scour analysis and mitigation.
	Checker	Bryan Harmon, PE	In-depth check of the HEC model(s) and hydraulics report. Ensures analysis was performed in conformance with LADOTD Off-System Bridge Hydraulics Manual and other governing FHWA Circulars as specified by AASHTO.
	QA Review	Robert Lear, Jr, PE, LSI	Confirms the hydraulic analysis and report following Waggoner's internal QA/QC procedures and that plans match the report.
Roadway & Drainage	Designer	Kelsie Bankston, PE	Design of proposed/adopted roadway and bridge geometry, established design typical sections and limits of construction, determines roadway drainage needs and provides adequate open or closed drainage systems to ensure adverse affects are avoided or minimized.
	Checker	Alex Farr, PE	In-depth check of the designer's use of correct minimum guidelines, horizontal and vertical geometries, and drainage calculations.
	QA Review	Robert Lear, Jr., PE, LSI	Confirms that all decisions made have justification and back-up. Ensures full QA/QC process is performed and adhered to. Performs high-level review for project biddability and constructability along with any fatal flaws in the design and construction plans.

IV. Project Procedure

A. Development of Project Design Criteria

Design criteria (bridge) must be developed and submitted for LADOTD for review and approval. Though the design criteria may change throughout the project, a current list of the criteria shall be maintained at all times. Any design assumptions made, or design exemptions obtained shall be listed in the design criteria and referenced in the calculations and drawings as appropriate. A design criteria checklist is included in the Appendix.

B. Design Process

During the design process, the designer must follow the design criteria established for the project. A bridge type, size and location (TS&L) study must be developed first and approved by the supervisor or team leader prior to proceeding with the design of structural components. The design calculations shall be organized and maintained in a standard calculation book format.

- The designer has the responsibility to ensure that his calculations or drawings have been checked and signed by a checker.
- All project calculations will be filed as directed by the Project Manager. Except for very small projects, the calculations should be maintained in a 3-ring binder/folder with a Table of Contents and page numbers.
- All calculations will be prepared neatly. These calculations will always be checked by an independent checker and signed by both the designer and the checker. Calculations performed on CAD, such as quantities, will be documented on printouts or drawings (preferably half-size), and checked independently. If such documentation is not readily available from the software, calculations shall be manually documented or performed using other methods.
- The calculations or drawings should be readable without the designer explaining the content. It may be necessary for the designer to explain the philosophy behind the design to the checker.
- All assumptions used in the calculations shall be listed, verified and approved by the Project Manager. Where code dictates a requirement, the code, code date, section number and applicable table will be listed. Where information is obtained from other calculations, disciplines or reference material, the source shall be identified.
- During development of design calculations, the designer should keep in mind that proper sketches and details should be presented as others may use these calculations in developing construction drawings.
- Computer programs (both commercial and in-house) are a great time-saver to the design process. However, it is the designer's responsibility to be familiar with the program, and its design assumptions and internal design routines and methods to the extent that he could duplicate a given result.
- Compute and document input for the computer programs, as you would design calculations. These should be attached to the computer printout when passed to checking. It is not necessary to copy (for checking) lengthy computer printouts.
- The checking of calculations shall be on a copy of the original and shall be retained with the original. After all corrections have been made, the checker shall sign the original. The checker shall sign every page of the calculations to ensure that pages are not added to the end of what he checked. No erasing is permitted after the checker has signed the original calculations.
- All drawings prepared in CAD will be plotted by the technician and checked for correctness and accuracy (by the technician) prior to delivering the drawing to the designer/engineer. It is the CAD technician's responsibility to ensure that the drawing is drawn correctly. The drawing designated as the check print should be in the format of the final deliverable.
- As a general rule, all engineers and technicians should review the plans, specifications and calculations during the development process not only for accuracy, but also that the elements fit together. This is especially true with inter-discipline projects. Checks should also be made on how revisions to one element of a project might affect other portions of the project.
- Each submittal should include a QC/QA certification that the process is being followed and the plan documents and information presented is accurate and meets the requirements of the submittal.

C. Checking Process

The checker may begin the checking process at the completion of the entire design/detail process or may check components of the designer/detailer's work as it is completed. Likewise, the checker may provide feedback at the completion of the entire checking process or as each component of check is completed.

During the design check process, the design checker must verify the accuracy of the designer's calculations, pay items, quantities, special provisions including Non-Standard items, and cost estimate. Regardless of the checking method employed, the designer's calculations are the calculations of record and must be updated to correct any errors or omissions discovered by the design checker. The design checker should also ensure that the drawings adequately and accurately present the design information.

During the detail check process, the detail checker must ensure the drawings are in accordance with the design information and CAD standards. All dimensions and quantity calculations must be verified. The following stamp should be applied to every Check Print drawing.

No: _____	Date: _____
CHECK PRINT	
Dwg. Checked against calcs. And calc check confirmed	
by: _____	Date: _____
Checked: _____	Date: _____
Backchecked: _____	Date: _____
Corrected: _____	Date: _____
Verified: _____	Date: _____

Any discrepancies that arise should be resolved between the designer/detailer and the checker, and the calculations and plan details should be corrected accordingly. If the designer/detailer and the checker are unable to resolve their discrepancies, the issue should be brought to the attention of the supervisor or team leader.

The checker shall be free to follow his own procedure for checking; however, the following must be adhered to regardless of his/her other methods.

- The checking of calculations shall be on a copy of the original and shall be retained with the original. After all corrections have been made, the checker shall sign the original. The checker shall sign every page of the calculations to ensure that pages are not added to the end of what he checked. No erasing is permitted after the checker has signed the original calculations.
- Checker is to show all additions or changes (noted in red) in sufficient detail for a draftsman's complete understanding. Avoid verbal instructions. Checker should initial and date each drawing as it is checked.
- If reasons for errors are not clearly apparent, consult draftsman before making change.
- Various checklists (both department and client) exist and should be used where applicable.
- To minimize the number of marked-up drawings being circulated, only the stick file or a clearly designated "Check Print" set should be used for corrections.
- The checker of both the calculations and the drawings should compare the two. They must match.
- After drawings have been checked, notify disciplines concerned, of additional requirements, omissions, or changes.
- After checking is completed the check print should be returned to the original designer for his/her back-check and pick-ups. The original designer shall initial and date each sheet as back-checked.

- Any markups not completely addressed shall be indicated and discussed with Checker before the Back-Check print is returned.
- After Back-Check pickups are made, the drawings should be returned to the checker for final review. The CAD technician shall initial and date each sheet as corrected. After a final review, the checker shall initial and date each sheet as verified.
- All changes or approvals to checked design package shall be color coded as described in the Waggoner drafting standards. Below is a list of colors and intent for use:

YELLOW	indicates checked and complete
RED	indicates addition
GREEN	indicates "remove the item in green"
BLUE	indicates checkers comments are picked-up and complete
BLACK	to be used to write specific instructions or comments
CIRCLED AREA	indicates "not satisfactory" with a pencil comment explaining why, be specific.

The drawings should be locked when the checking process begins and then locked again when complete. This keeps unauthorized changes from occurring and ensures that the entire project team is using accurate and up-to-date information.

After the designer, design checker, detailer, and detail checker are satisfied with the state of the design calculations, drawings, special provisions, and cost estimate as appropriate, the design and detail check shall be considered complete. This shall be no later than the 95% Final Plans stage.

D. Quality Assurance/Review Process

Upon completion of the design and detail check, the designer is responsible for preparing a QA information package. A QA information package checklist is included in the Appendix. This QA package is given to a reviewer; the reviewer is the engineer responsible for ensuring that the QC process was followed and is complete.

During quality assurance process, the reviewer shall perform a cursory review of all documents in the QA information package submitted by the designer. This review should focus on the constructability of the plan details; areas of critical structural importance; areas where, based on the reviewer's experience, mistakes may be typically found; and areas that may be new to the design practice. The reviewer may, but need not, produce independent calculations to verify submitted information. The reviewer shall provide feedback to the designer and resolve all issues. The QA process shall be completed no later than the 98% final plans stage. At this point, the QC/QA certification (included in Appendix) shall be signed by the designer, design checker, detailer, detail checker, and reviewer.

E. Responsibilities of the EOR

- Ensure the QC/QA certification is signed by all responsible parties. Ensure the geotechnical design information shown on bridge plans is co-stamped by a Geotechnical Engineer and the hydraulic information shown on bridge plans is co-stamped by a Hydraulic Engineer.
- Assemble design calculations from all designers, finalize the calculation book, and seal the cover sheet of the calculation book.
- Ensure the names of the designer, design checker, detailer, detail checker, and reviewer are correctly shown on the title block of each plan sheet. Stamp all plan sheets or designate a designer, design checker, or reviewer who shall be licensed by the State of Louisiana as a professional engineer to stamp the sheets developed under their supervision. The EOR must stamp the general note sheets.
- Ensure all special provisions are accurately shown on the construction proposal. The special provisions are typically stamped by the Specification Engineer as part of the construction proposal; however, if the Specification Engineer is not qualified or not willing to stamp the special provisions, the EOR must stamp these provisions.

F. Responsibilities of the LADOTD Bridge Task Manager:

The LADOTD bridge task manager will participate in the following:

- Initiate a design kick-off meeting as soon as the project is awarded to discuss project expectations, design criteria, submittal schedule, implementation of QC/QA plan document, as well as to become familiar with the consultant's design team members who are identified as the designers, design checkers, and reviewers.
- Review and approve design criteria and TS&L and ensure the design criteria is updated as the project progresses.
- Review consultant's submittals - **LADOTD Bridge Task Managers shall not perform QC/QA of consultants' work.** However, they will selectively check the plans for constructability, consistency, and clarity.

V. Plan Development

The following procedures help with our quality in the production of drawings and specifications:

- Use department-generated CADD standards and CADD drafting manual, as required.
- Each drawing has an automatic date stamp, along with a correct title block.
- Each drawing should always have a status stamp (Preliminary, For Review, For Approval, etc.) that also identifies the Engineer-of-Record.
- Dimensions and data should be shown only once, to reduce possible discrepancies.
- Cross referencing should be as simple and as clear as possible.
- Coordinate the drawings and specifications with each other.
- Use LADOTD standard specifications and standard plans when appropriate.
- When specifying products, use the LADOTD accepted Qualified Products List when possible.
- If the Qualified Products List does not contain the desired product, document the decision process for approving a product along with any relevant codes.
- Document for the files: relevant communications, alternatives, and reasoning for picking an alternative.

Appendix

- Design Criteria Checklist
- QA Information Package Checklist
- Consultant Submittal QC/QA Certification
- QC/QA Certification (Final)

Appendix Design Criteria Checklist

Design criteria for each project shall include, but not limited to, the following sections:

Cover Sheet

The following information must be included on the cover sheet:

- LADOTD project number
- Project name
- Revision date
- The Supervisor or Team Leader's signature and date

Governing Design and Construction Specifications and Other References

A list of governing design and construction specifications and other references used for the project shall be included in this section. The edition number, interim revisions, and/or publication date must be specified for each reference.

Design Assumptions and Design Exceptions

All design assumptions and design exceptions received must be included in this section along with supporting documents.

General Information

The general information as listed below should be included in this section:

- Bridge information (number of bridges, bridge clear width, length, number of lanes, lane width, shoulder width, etc.)
- Road information (roadway classifications, design speed, traffic data, etc.)
- Vertical datum
- Vertical and horizontal clearances
- Hydraulic design information (design water elevations, scour depth and scour elevation, etc.)
- Other relevant information

Hydraulic Design Criteria

All hydraulic design criteria (design year, design water elevations, scour depth and scour elevation, etc.) shall be included in this section and the information shall be provided by the Hydraulic Engineer.

Design Factors

The ductility factor, redundancy factor, and operational importance factor shall be listed in this section.

Design Loads

All design loads (dead load, live load, wind load, thermal loads, vessel collision loads, seismic load, wave loads, etc.) used for the project shall be included in this section.

Limit States

All applicable limit states for this project shall be listed in this section.

Bridge Barrier

The design criteria, types, and test levels for bridge barriers shall be listed in this section. Standard plans and special details should be listed if they are utilized.

Guardrail

The design criteria, types, and test levels for guardrails shall be listed in this section. Standard plans and special details should be listed if they are utilized.

Approach Slab

Design criteria for approach slab shall be included in this section. Standard plans and special details should be listed if they are utilized.

Deck and Deck Drainage

All design criteria for deck and deck drainage design shall be included in this section. Standard plans and special details should be listed if they are utilized.

Bearing

All bearing types and design criteria for each bearing type shall be included in this section. Standard plans and special details should be listed if they are utilized.

Joint

All joint types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.

Superstructure

All superstructure types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.

Substructure

All substructure types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.

Piles and Drilled Shafts

All pile types, sizes, and structural design criteria shall be included in this section. Standard plans and special details should be listed if they are utilized.

Geotechnical Design

All geotechnical design criteria shall be included in this section. Standard plans and special details should be listed if they are utilized.

Mechanical Design

All mechanical design criteria shall be included in this section if applicable. Standard plans and special details should be listed if they are utilized.

Electrical Design

All electrical design criteria shall be included in this section if applicable. Standard plans and special details should be listed if they are utilized.

As-Designed Bridge Rating Criteria

All as-designed bridge rating criteria shall be included in this section.

Software

All software used for design and check shall be included in this section.

**Appendix
QA Information Package
Checklist**

Project No:

Project Description:

___ Calculation Book

___ Plans

___ Special Provisions

___ Cost Estimates

___ Other Documents

**Appendix
Consultant Submittal QA/QC Certification**

Project No:
Project Description:

I, the undersigned Supervisor or Team Leader for this project, certify that the information included in this submittal has been prepared in accordance with the QA/QC plan documents and the information presented is accurate and meets the requirements of this submittal.

Submittal Description

Supervisor or Team Leader Name

Signature

Date



22. SUB-CONSULTANT INFORMATION:

Firm Name (Name must match <u>exactly</u> as registered with Louisiana's Secretary of State (SOS): <u>including</u> <u>punctuation, include screenshot(s)</u> <u>from SOS at the end of Section 20</u>)	Address	Point of Contact and Email Address	Phone Number
Ardaman & Associates, Inc.	8008 South Orange Avenue Orlando, FL 32809	Robert Jewell Branch Manager rjewell@ardaman.com	225.752.4790
Vectura Consulting Services, LLC	4467 Bluebonnet Blvd., Suite A Baton Rouge, LA 70809	Sheelagh Brin Ferlito, PE Partner bferlito@vecturacs.com	225.223.6685

23. LOCATION:

If location is an evaluation criterion for this advertisement (see page 2) 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 Evaluation Criteria section of the advertisement.**



We do more than plan and design infrastructure.
We transform communities.

