



Arcadis developed concept rendering for US 71 overpass

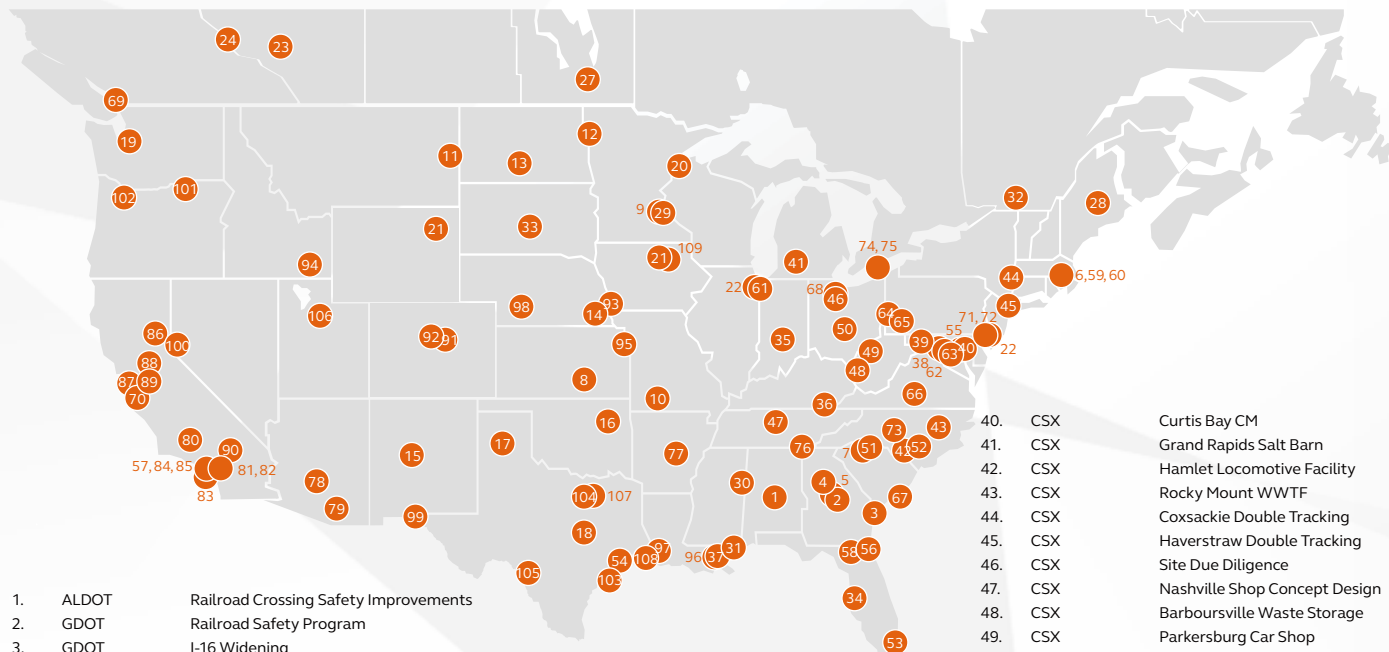
CONTRACT NO. 4400034051 / STATE PROJECT NOS: H.012008.5 AND H.012009.5

MARCH 18, 2026

US 71: ICG RAILROAD OVERPASS REHAB (HBI)
US 71: MARKET ST. BRIDGE OVER ICG RR (HBI)
ROUTE: US 71, CADDO PARISH

SECTIONS 1-11

The Arcadis Team has completed over **100** railroad coordination, railroad bridge design, railroad safety, railroad planning, track design, crossing modification designs, and environmental services for projects involving railroads throughout North America, including Louisiana.



1. ALDOT Railroad Crossing Safety Improvements
2. GDOT Railroad Safety Program
3. GDOT I-16 Widening
4. GDOT SR 42 Widening
5. Norfolk Southern Macon Operations Building
6. Amtrak Southampton Shops
7. BMW Facility Expansion
8. BNSF Newton Lube Oil Improvements
9. BNSF Northtown WWTP
10. BNSF Springfield IWW Improvements
11. BNSF Glendive Fueling
12. BNSF Grand Forks IWW Improvements
13. BNSF Mandan IWW Improvements
14. BNSF Lincoln WWTP
15. BNSF Belen IWW Improvements
16. BNSF Tulsa Fueling Platform
17. BNSF Amarillo WWTP
18. BNSF Temple Fueling Platforms
19. BNSF Interbay Fueling Platforms
20. BNSF Superior Oil Water Separator
21. BNSF Gillette IWW Improvements

22. Conrail Pavonia Yard
23. CPKC Alyth Yard IWWF
24. CPKC Golden IWW Improvements
25. CPKC Mason City WWTP
26. CPKC Bensenville Reefer Fueling
27. CPKC Weston Locomotive Fueling Platforms
28. CPKC Brownville Fueling Improvements
29. CPKC St Paul IWWF
30. CPKC Artesia Fueling
31. CPKC Gulf Port Locomotive Wash
32. CPKC St Luc Yard Sanitary Improvements
33. CPKC Pierre Fueling Facility
34. CSX Uceta Yard Pump Station
35. CSX Avon Sludge Beds
36. CSX Corbin WWTF
37. CSX Gentilly Yard Pond Liner Replacement
38. CSX Brunswick Stormwater Improvements
39. CSX Cumberland Locomotive Shop

40. CSX Curtis Bay CM
41. CSX Grand Rapids Salt Barn
42. CSX Hamlet Locomotive Facility
43. CSX Rocky Mount WWTF
44. CSX Cossackie Double Tracking
45. CSX Haverstraw Double Tracking
46. CSX Site Due Diligence
47. CSX Nashville Shop Concept Design
48. CSX Barbourville Waste Storage
49. CSX Parkersburg Car Shop
50. Delaware County, OH Orange Road Grade Separation
51. Enoda Manufacturing Facility
52. Fayetteville, NC Russell Street Bridge Replacement
53. Florida East Coast Hialeah Yard IWW
54. Houston, TX Conceptual Rail Connection
55. Howard County, MD CSX Shoofly
56. JAXPORT Intermodal Container Transfer Facility
57. LA Metro East San Fernando Valley Light Rail
58. Lake City, FL Bell Road Crossing
59. MBTA Green Line Trolley Traction Power
60. MBTA Reservoir Lower Yard Upgrades
61. Metra Western Avenue Yard IWW
62. Montgomery County, MD Resource Recovery Facility Study
63. Montgomery County, MD Transfer Station Study
64. Norfolk Southern East Palestine Fire & Hazmat Training Center
65. Norfolk Southern Flood Recovery

66. Norfolk Southern Lynchburg Stormwater Improvements
67. Palmetto Rail ICTF North Lead
68. Perstorp Industrial Rail Facility Rehab
69. Province of British Columbia Cross Fraser Tunnel Project
70. Santa Clara Unified School District Railroad Safety Study
71. SEPTA Chestnut Hill East Station Rehab
72. SEPTA Green Line Train Signal System
73. Siemens Railcar Manufacturing Facility
74. St. Thomas, ON Industrial Rail Yard
75. St. Thomas, ON At-Grade Crossing
76. TDOT I-24 Widening
77. Union Pacific North Little Rock IWW
78. Union Pacific Phoenix Auto Facility
79. Union Pacific Tucson Inspection Pit
80. Union Pacific Bakersfield Tank & Haul
81. Union Pacific Inland Empire Intermodal Terminal
82. Union Pacific Colton Yard IWW
83. Union Pacific ICTF Tank & Haul
84. Union Pacific Commerce Yard IWW
85. Union Pacific Dolores Yard IWW
86. Union Pacific Keddie Potable Water
87. Union Pacific Oakland IWW Concept
88. Union Pacific Roseville IWW
89. Union Pacific Stockton IWW Concept
90. Union Pacific Yermo Track Pan CS
91. Union Pacific Denver North Yard IWW
92. Union Pacific Winter Park IWW
93. Union Pacific Council Bluffs Yard IWW
94. Union Pacific Pocatello Yard Tank & Haul
95. Union Pacific Atchison Fueling Facility
96. Union Pacific Avondale Yard Track Pans
97. Union Pacific Lake Charles Service Pit
98. Union Pacific North Platte IWW
99. Union Pacific Santa Theresa IWW
100. Union Pacific Sparks IWW
101. Union Pacific Hinkle Yard Tank & Haul
102. Union Pacific Portland IWW
103. Union Pacific Wadsworth Industrial Lead
104. Union Pacific Fort Worth IWW
105. Union Pacific Spofford 10% Design
106. Union Pacific Roper Yard IWWF
107. USACE Cadillac Heights Flood Protection
108. USACE Port Arthur Flood Protection
109. Valero Main Line Crossover

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.

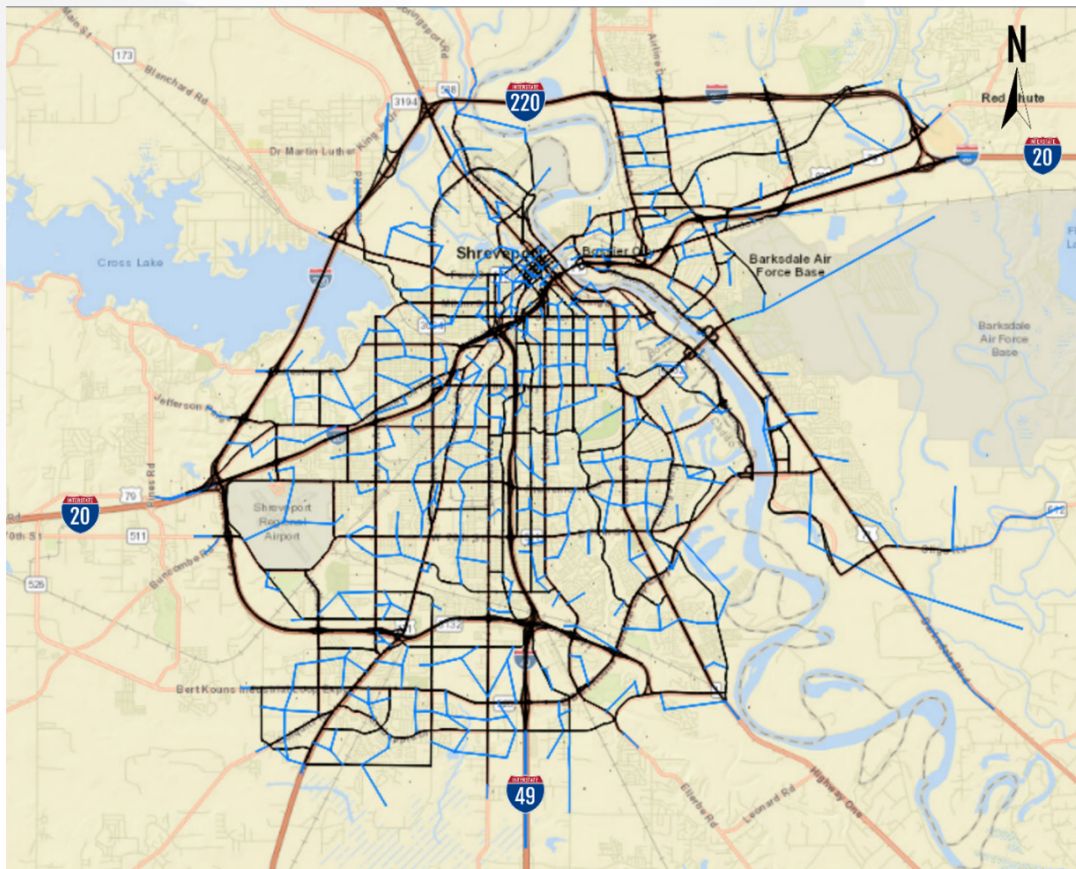
ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE.

1. Contract Name as shown in the advertisement	US 71: ICG RAILROAD OVERPASS REHAB (HBI) US 71: MARKET ST BRIDGE OVER ICG RR (HBI) ROUTE: US 71, CADDO PARISH
2. Contract Number(s) as shown in the advertisement	CONTRACT NO. 4400034051
3. State Project Number(s), if shown in the advertisement	STATE PROJECT NOS. H.012008.5 AND H.012009.5 F.A.P. NOS. H012008 AND H012009
4. Prime consultant name (name must match exactly as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; include screenshot from SOS at the end of Section 20)	 ARCADIS ARCADIS U.S., 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.0002808 DUNS 057690414
6. Prime consultant mailing address	6100 Corporate Blvd., Suite 325 Baton Rouge, LA 70808
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	6100 Corporate Blvd., Suite 325 Baton Rouge, LA 70808
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Osama Shahawy, PE Project Manager 469 865 9791 osama.shahawy@arcadis.com

9. Name, title, phone number, and email address of the official with signing authority for this proposal	Akhil Chauhan, PE, PTOE, PTP, PMP <i>Senior Vice President</i> 225 368 6563 akhil.chauhan@arcadis.com
10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response. 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.	Signature above shall be the same person listed in Section 9: Date: <u>March 18, 2026</u>
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): N/A

SECTIONS
12-14

Arcadis developed the mesoscopic model for the Shreveport area which can be used for modeling the Maintenance of Traffic (MOT) for the US 71 bridge project.



“Arcadis was an outstanding partner to LADOTD on this project. Arcadis helped facilitate discussions between LADOTD HQ and District 04, took meeting minutes when requested, and went above and beyond their duties to deliver the TMP. Several changes were incorporated into the project as design work progressed (due to requests from District), including changes to the limits of construction, adding ramp rehabilitation, and changes to final pavement types. Arcadis was able to incorporate all changes into the TMP in a timely manner and updated technical analysis (including re-running mesoscopic model) as required to satisfy LADOTD and FHWA requirements. This project also had the first use of new specifications for a “Smart Workzone” System. Arcadis offered technical expertise and a willingness to provide advice and guidance to LADOTD to help complete this portion of the design even though it was not part of their scope.”

- Hadi Shirazi, LADOTD Project Manager for I-20 Meso model and TMP project

Traffic Engineering IDIQ - I-20 TMP

Mesoscopic Model Developed using Dynameq

12 DISCIPLINE TABLE:

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

The only past performance evaluation disciplines to be used are listed in the drop down in each row (Appraiser, Bridge, CE&I/OV, CPM, Data Collection, Environmental, Geotech, ITS, Other (must specify), Planning, Right-of-Way, Road, Survey, and Traffic). Remove rows as needed.

Discipline(s)	% of Overall Contract	Arcadis	Ardaman	AFJM	NTB	Each Discipline must total to 100%
Bridge	61%	95%		5%		100%
Road	10%	100%				100%
Environmental	3%	100%				100%
Traffic	8%	100%				100%
Data Collection	1%	100%				100%
Survey	5%				100%	100%
Geotech	10%		100%			100%
Other (Bridge Lighting)	2%			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%	80%	10%	5%	5%	
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Firm name	DOTD Job Classification	Number of personnel <u>committed</u> to this contract*	Total number of personnel available in this DOTD Job Classification (if needed)
	Engineer	8	9
	Engineer - Other	4	6
	Engineer Intern	1	1
	Environmental Manager	1	1
	Environmental Pro	1	2
	Principal	3	3
	Supervisor - Eng	7	8
	Engineer	1	3
	Principal	1	2
	Senior Technician	1	3
	Supervisor - Eng	1	2
	Party Chief	1	3
	Principal	1	1
	Surveyor	2	5
	Engineer	4	5
	Principal	1	2

*For evaluation purposes only, and as referenced in the Scope of Services on page 2 of IDIQ advertisements only, the consultant shall assume the number of concurrently active task orders specified in the advertisement and shall identify the number of committed personnel accordingly.



Akhil Chauhan, PE, PTOE, PTP^{1}**

Principal - in - Charge



Osama Shahawy, PE^{1*}

Project Manager

Technical Advisors & QA/QC



Bob Beasley, PE (Bridge Design)^{1*}



Lloyd "Buddy" Porta, Jr., PE (Roadway Design)¹

Railroad Support



Sean Markey, PE¹



Eric Bullerman, PE¹



Bill Jansen, PE, ENV SP¹

Environmental Permitting



Jason Morrell, PWS¹



Catherine Bruns¹

Traffic Engineering



Ari Deitch, PE, PTOE, PTP, RSP^{1*}**



Kester Hollier, PE, PTOE^{1*}**



Max Aguirre, PhD, PE, PTOE, RSP^{1*}



Sridhar Basetty^{1}**

Mesosopic Modeling



Akhil Chauhan, PE, PTOE, PTP^{1}**



Shashank Shekhar, PE^{1*}



Weimin Jin, PE¹

Bridge Design



Victor Sanchez, PE^{1*}



Sharear Kabir, PE¹



Krishna Singaraju, PE¹



Sushil Dhungana, PE¹



Bryan Barnes, EI¹



Badre Enam, PE^{1*}

Bridge Rehabilitation



Badre Enam, PE^{1*}



Matthew Wallace, PE, SE⁴



Paul Cormier, PE⁴



J. Daniel Thompson, PE, SE⁴

Roadway/ Drainage Design



Jose L. Rodriguez, PE^{1}**



Gabriel Arias, PE¹



Garret Keller, PE¹



Colin Saratt, PE¹

Surveying



Bryan Bunch, PLS^{2*}



Mike King, PLS^{2*}



Patrick Staiano, PLS^{2}**



Belton Davis^{2*}

Geotechnical / Materials Testing



Megan Bourgeois, PE^{3}**



Jessica Litt^{3*}



Robert Jewell, PE^{3*}



Mark Woodward, PE³

Lighting



Robbin Cassity, PE⁴



Daniel Brown, PE⁴

LEGEND:

1 Arcadis

2 NTB

3 Ardaman

4 AFJ&M

* Meets TEPR Requirements

* MPR

* Workzone

SECTION
15-16

Arcadis' partner, Ardaman and Associates, Inc. will provide geotechnical services for this project. From their Shreveport office, Ardaman's local staff of engineers, technicians and drillers conducts field investigations, laboratory tests and engineering evaluations which span the entire spectrum of geotechnical engineering. Their onsite geotechnical laboratory is accredited by AASHTO and the LA Department of Environmental Quality and also validated by the US Army Corps of Engineers.



15 MINIMUM PERSONNEL REQUIREMENTS:

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/ certification & number (Ex: PE # - Civil)	State of license	License / cert exp.date
1	Osama Shahawy, PE (<i>>36 years' experience</i>)		PE. 35652 – Civil	LA	09/30/2026
	Robert Beasley (<i>>36 years' experience</i>)		PE. 34159 – Civil	LA	03/31/2027
2	Osama Shahawy, PE (<i>>36 years' experience</i>)		PE. 35652 – Civil	LA	09/30/2026
	Robert Beasley (<i>>36 years' experience</i>)		PE. 34159 – Civil	LA	03/31/2027
3	Osama Shahawy, PE (<i>>36 years' experience</i>)		PE. 35652 – Civil	LA	09/30/2026
4	Badre Enam, PE (<i>>21 years' experience</i>)		PE. 37647 – Civil	LA	09/30/2027
5	Bryan T. Bunch, PLS (<i>>32 years' experience</i>)		PLS # 5014 - Survey	LA	03/31/2026
	Michael J. King, PLS (<i>>21 years' experience</i>)		PLS # 5127 - Survey	LA	09/30/2027
	Patrick C. Staiano (<i>>32 years' experience</i>)		PLS # 5130 - Survey	LA	09/30/2027
6	Megan Bourgeois, PE (<i>>15 years' experience</i>)		PE. 36725 – Civil	LA	03/31/2028

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/ certification & number (Ex: PE # - Civil)	State of license	License / cert exp.date
7	Jessica Litt <i>(>12 years' experience)</i>		NICET / Generalist, Laboratory No. 141243	LA	10/01/2027
8	Jose L. Rodriguez, PE <i>(>26 years' experience)</i>		PE. 30492 – Civil	LA	03/31/2027
9	Ari Deitch, PE, PTOE, PTP, RSP <i>(>12 years' experience)</i>		PE. 41842 – Civil PTOE: 4346	LA, US	03/31/2026 11/2027
	Kester Hollier, PE, PTOE <i>(>20 years' experience)</i>		PE. 34304 – Civil PTOE: 3928	LA, US	03/31/2027 11/2027
	Sridhar Basetty, PE, PTOE <i>(>20 years' experience)</i>		PE. 38950 – Civil PTOE: 3682	LA, US	09/30/2026 08/2026
10	Akhil Chauhan, PE, PTOE, PTP, PMP <i>(>23 years' experience)</i>		PE. 33703 – Civil	LA	09/30/2026
	Shashank Shekhar, PE <i>(>20 years' experience)</i>		PE. 149479 – Civil	TX	06/30/2026
11	Victor Sanchez, PE <i>(>28 years' experience)</i>		PE. 33976 – Civil	LA	09/30/2026

Firm employed by.



Meets MPR Nos. 1, 2 & 3

Name	Osama Shahawy, PE		Years of relevant experience with this employer	6
Title	Bridge Practice Manager		Years of relevant experience with other employer(s)	30
Degree(s) / Years / Specialization			MS / 1991 / Civil (Structures), Florida State University BS/1983/Civil Engineering	
Active registration number / state / expiration date			PE.0035652 / LA / Exp. 09/30/2026	
Year registered	2001	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Project Manager / Structural Rehabilitation Lead	
Experience dates	Experience and qualifications relevant to the proposed contract			
	Mr. Shahawy has more than 36 years of structural bridge engineering experience working on a variety of different projects throughout Louisiana and the Southeast, including I-10 CMAR Bridge design, IJIA OSBR Program D02, and US 71 over Cross Bayou design. He served as PM or TL on 100+ projects, including extensive Plans, Specifications, and Estimates, complex bridge design, and bridge replacement and bridge preservation/rehabilitation. His experience includes Railroad over/underpass grade separation with different railway companies. As Project manager, he coordinates teams of engineers and other technical personnel on the preparation of bridge PS&E design, including rural/urban areas and multi-level interchanges with heavy utilities & complex TCP. Mr. Shahawy has strong construction capabilities—a benefit that guarantees constructible technical solutions and more complete construction documents. Leveraging his decades of experience, he will check accuracy, verify compliance to review comments, and will confirm that agency and stakeholder comments and concerns are addressed.			
10/20 – Ongoing	I-10: LA 415 to Essen Lane on I-10 and I-12, LADOTD West and East Baton Rouge Parish, LA. Project Bridge Engineer. A Construction Management at Risk (CMAR) project to improve I-10 through widening and reconstruction. This project involved bridge replacement and rehabilitation , interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include the design and details of the substructures for the Terrace-Washington mainline bridges and the I-110 ramp connecting to the EB mainlines. Also, the temporary and permanent bridge widening for the EB and WB mainlines. Design conversion of an existing ingress ramp to a bridge by extending the existing columns to provide sufficient widening to the existing WB mainlane. Design and size the drilled shaft foundation and develop the layout to incorporate the Greenway shared path beneath the mainline bridges. All designs are performed using AASHTO LRFD Bridge Design Specifications and BDEM criteria for live loads, dead loads, wind, seismic, and other applicable loads. Coordinated with a team of engineers on design tasks and planned production. Provided the QA/QC for widening and new mainlane structures and construction cost estimate at different submittal stages. Also, the design and detail of the Nairn Dr. Bridge for the RCP phase. Provide peer review for the City Lake Bridge oversight. Participate in meetings and work with the CMAR Contractor and the DOTD on the development of the preferred bridge concepts at completion.			
10/22-Ongoing	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Replacement (OSBR) Program, District 02, LADOTD, LA. Project Manager: Arcadis was selected by LADOTD to provide design support, topographic survey, hydraulics, and geotechnical engineering to develop the preliminary and final designs. The engineering responsibilities include the development of General Plans, foundation layouts , and super-elevation diagrams, as well as structural design, detailing, and load ratings for various bridge components such as slab spans, bent caps, approach slabs, etc., responsible for leading a			

	<i>group of engineers</i> and subconsulting firms to prepare preliminary and final plans of seven bridge replacement projects. Review the design criteria and bridge design criteria, and address the DOTD comments. Prepared and <i>maintained project schedule</i> . Reviewing and directing the plan development.
09/23- 01/26	Calton Road Overpass, Webb County, TX. Project Manager/ <i>Lead Bridge Designer</i> . Led final design of the Calton Road Overpass in Laredo, TX. The new grade separation <i>bridge crosses the Union Pacific (UP) main railroad track</i> and the Rio Grande turnaround railroad track. The bridge is a 5-span steel plate girder bridge with an overall length of 866 m, which meets and exceeds the TxDOT's and UPRR's minimum vertical clearance requirements at both locations. The bridge approaches are MSE wall supported. Responsibilities include <i>project administration, schedule development, stockholder coordination, and the EOR</i> for the bridge structure. Developed <i>Exhibit A and coordinated with UPRR</i> to obtain construction approval. Updated schedule and detailed <i>construction cost estimate</i> .
04/12 – 05/13	LADOTD, LA 1 over I-19 Bridge Rehabilitation, Rapides Parish, LA. Project Manager, Engineer of record to provide <i>professional inspection, rehabilitation design, and construction engineering services</i> . The Bridge is a four-span steel plate girder with uneven settlement and rotation at the abutments, requiring rehabilitation to stabilize movement and raise the bridge back to its original as-built elevation. Responsibilities include directing the team, and the overall task involves <i>preparing geometric layout plans, bridge design, and final plans, specifications, and estimates</i> for the LA 1 Bridge over I-49. Perform <i>QA/QC</i> , prepare <i>construction cost estimate</i> , review and revise plans based on Louisiana Department of Transportation and Development (LADOTD) comments.
07/11 – 05/13	LADOTD, MacArthur Drive Bridge Interchange, Rapides Parish, LA. Structure Technical Leader, Engineer of record for widening, revising, and redesigning the MacArthur Drive Interchange, completing phase 1. The design and plan production are related to the design changes required for Ramps 7 and 8. Design deck slab for 18 spans, which include Trapezoidal girders & Bulb-T girders. Design Bearing Pads for all proposed Trapezoidal and Bulb-T girders. Design Inverted-T Caps and special geometric columns for the three piers. Responsible for the <i>design and production of geometric and span layout modifications</i> , superstructures, and substructures. <i>Review for accuracy and completeness of the plans and related designs</i> prepared for the project. Ensures quality and adheres to <i>established design criteria, procedures, standards, and guidelines</i> in the preparation and review of all design products for compliance and good engineering practice as directed by a Project Quality Control Plan.
05/20 – 11/20	LADOTD, East Baton Rouge City-Parish, Alphonse Forbes B, City of Baton Rouge, Baton Rouge, LA. Structure Manager for the replacement of the Alphonse Forbes Road Bridge over Sandy Creek, located in Central, Louisiana, in East Baton Rouge Parish. The project will replace the existing bridge on Alphonse-Forbes Road over Sandy Creek with a new nine-span flat-slab bridge on pile bents. The project was <i>designed to fit within the existing right-of-way</i> and <i>meet the required hydraulic opening</i> . Reviewed final plan and calculations, <i>QC design analysis, and final bridge structure plans</i> for a five-span slab bridge. Provide guidelines and review comments on final plans and estimated quantities per LADOTD guidelines.
07/11– 05/13	Mississippi River Bridge at Vicksburg, LADOTD, Mississippi, LA. Chief Engineer, Vice President. Structure team leader, Engineer of Record for the four-lane continuous main steel-truss through-deck bridge covers a total length of 1,716 ft. and a width of 60 ft. The main truss consists of two symmetrical 640.5 ft. cantilever spans and one 435 ft. drop span. The approach spans consist of 101 prestressed concrete spans and reinforced concrete pier caps. Responsible for reviewing as-built plans.

Firm employed by.



Meets MPR Nos. 1 & 2

Name	Robert (Bob) Beasley, PE		Years of relevant experience with this employer	36
Title	Principal Bridge Engineer		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS / 1989 / Civil Engineering, University of Akron, Structures	
Active registration number / state / expiration date			PE. 0034159 / LA / Exp. 03/31/2027	
Year registered	2008	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Technical Advisor & QA/QC (Bridge Design)	
Experience dates	Experience and qualifications relevant to the proposed contract			



Mr. Beasley has more than 36 years of relevant design experience in management and design of bridges and structures. He has been exposed to a variety of projects working for many municipalities such as counties, cities, and park districts and other clients such as Departments of Transportation, the US Army Corps of Engineers, CSX Transportation, and Norfolk Southern. His varied project experience includes numerous railroad structures, highway underpass and overpass bridges, bridge rehabilitations, pedestrian bridges including cable-stayed, and retaining walls. Bob has inspected and load rated many bridges. Bob has inspected and load rated many bridges. Bob is a member of AREMA Subcommittee 8 – Concrete Structures & Foundations assisting with the development of structural specifications.

11/17 – Ongoing	I-10: Highland to LA 73 Design-Build: LADOTD, East Baton Rouge Parish, LA. <i>Independent Design Reviewer</i> for performing an independent design assessment and analytical check of the new interstate bridges over Highland Road (LA 42) as well as for the widening and rehabilitation of the interstate bridges over Bayou Manchac. The Highland Road bridge was 310'-0" long with a 190'-0" steel plate girder main span. The Bayou Manchac bridge was 200'-0" long with 25'-0" slab spans on pile bents. Arcadis completed separate, independent calculations of the deck, girders, slab spans, bearings, splices, and substructure using DOTD approved design software.
11/14 – 12/14	Dearborn Division Hawley Street Bridge Repairs, Norfolk Southern Corp., Toledo, OH. <i>Lead Bridge Engineer</i> for the repair of a three span, ballasted concrete deck rolled beam superstructure supported on concrete wall abutments and steel piers. The Hawley Street Bridge was hit and damaged by a snow plow. The emergency design included the replacement of a portion of the concrete deck, the sacrificial end plate girder and two interior rolled beams.
02/11 – 08/11	Dearborn Division Fixed Point Replacement, Norfolk Southern Corp., Cleveland, OH. <i>Lead Bridge Engineer</i> for the replacement of a fixed point structure spanning a 48" diameter water main to allow for ballast over the fixed point. A thick steel plate connected to and supported by precast concrete approach slabs was designed to span over the water main.
01/07 – 11/13	Gulf Intracoastal Waterway, West Closure Complex, US Army Corps of Engineers, New Orleans, LA. <i>Lead Bridge Engineer</i> This \$800 million project which was completed using the ECI (early contractor involvement) method. This method is the same as Construction Management at Risk (CMAR). Arcadis worked directly with the Corps and Contractor to reduce flood risk for residences and businesses in three parishes on the west bank of the Mississippi River. As a part of this project Arcadis developed an access bridge using precast, prestressed concrete voided slabs on pile bents with precast concrete piles. Portions of the access structure were supported on the pump station inlet walls. Numerous utilities going to and from the pump station were supported on the side and below the voided slabs.
09/12 – 11/15	Albany Division, River Subdivision Second Main – Cocksackie Phase 2, CSX Transportation, Cocksackie, NY. <i>Lead Bridge Engineer</i> for the design of two replacement bridges. Both bridges were constructed in phases to maintain one track in

	service at all times. Bridge 1 is a 107.8' single span, ballasted deck plate girder spanning over Cocksackie Creek. The pile cap was supported on two 72" drilled shafts for each abutment. Extensive temporary shoring was required to maintain the existing bridge in service because the rear abutment was failing. Bridge 2 is a 187.5' long, 3-span bridge carrying CSX over Hannacrois Creek. The ballasted deck plate girder superstructure has spans of 45'-97.5'-45'. Cap and column piers are supported on 78" or 84" drilled shafts. Wall abutments are supported on 9 5/8" micropiles. Bob lead the design effort on the 2 replacement bridges. Temporary shoring was critical on this bridge because the forward pier and abutment had settlement issues.
02/15 – 10/15	Florence Division, Orangeburg Subdivision Bridge at MP Ak 360.7, CSX Transportation, Creston, SC. <i>Bridge Review Engineer</i> for the replacement and rehabilitation of a 165' bridge over the Halfway Swamp Creek in Creston, SC. Superstructure design involved strengthening an existing 76' deck plate girder span and replacing 90' of timber trestle with new rolled beam spans. Substructure design involved replacing existing timber pile bents with new steel framed bents. Due to the environmental sensitivity of the stream, the proposed structure was designed to be constructed from the track, utilizing hi-rail cranes.
02/12 – 09/15	WOO-75-12.94 Third Lane Widening, ODOT, District 2, Ohio. <i>Project Manager and Lead Bridge Engineer.</i> Bridge project that was part of the reconstruction and widening of approximately nine miles of I.R.75. The project includes interchange acceleration and deceleration improvements as well as mainline bridge rehabilitations and/or replacements. During the initial phases of the project Arcadis evaluated the U.S. 6 interchange for design deficiencies and provided revised geometrics. Another key feature of the project utilized by ODOT was to replace the I-75 over U.S. 6 mainline bridge utilizing accelerated bridge construction (ABC) techniques. To provide the required vertical clearance, U.S. 6 was lowered. Duration of construction of the bridge was six months utilizing ABC instead of a typical two season project. The existing 4-span rolled steel beam bridge was replaced by a 2-span prestressed concrete beam structure. The substructure consisted of stub abutments behind MSE walls and a cap and column pier, all constructed underneath the existing bridge while maintaining traffic. The 200' long superstructure was constructed adjacent to the existing bridge. In one weekend an existing bridge was demolished, a new superstructure was pulled into position and all ancillary work was completed.
01/18 – 01/25	CSXT Clearance Improvement Project – Guilford Road, CSX Transportation, Baltimore, MD. Bob was the <i>lead bridge engineer</i> on this project and <i>project manager during construction</i>. The project consisted of replacing a deficient structure at the Guilford Road Bridge over CSX. The existing stone arch was replaced with 58' span, shallow depth plate girders to achieve the required vertical clearance while minimizing impacts to the roadway profile and adjacent homes. Maintenance of traffic included redesigning on-street parking on nearby streets to provide additional parking for residents due to parking loss due to construction. An existing fiber optic duct bank was designed to be supported during construction and then raised into position and supported on the new girders. The project was designed to MD SHA standards.
01/18 – 02/26	CSXT Clearance Improvement Project – Harford Road (This one is still in construction-to be completed this summer) CSX Transportation, Baltimore, MD. <i>lead bridge engineer / project manager during construction</i>. Project consisted of replacing a deficient structure where Harford Road spans over one CSX track. The existing stone arch was replaced with a 71' span, shallow depth plate girders to achieve the required vertical clearance. Soldier pile walls are constructed in front of the abutments to provide for 2 tracks. The City of Baltimore required two lanes of traffic in each direction and pedestrian access during construction. This resulted in 4 phases of construction in the tight urban setting.

Firm employed by.



Name	Lloyd "Buddy" Porta, Jr., PE	Years of relevant experience with this employer	15
Title	Principal Engineer	Years of relevant experience with other employer(s)	37
Degree(s) / Years / Specialization	BS / 1973 / Civil Engineering, Louisiana State University		
Active registration number / state / expiration date	PE.16425 / LA / Exp. 09/2027		
Year registered	1977	Discipline	Civil Engineering, Environmental Engineering
Contract role(s) / brief description of responsibilities	Technical Advisors & QA/QC (Roadway Design)		



Mr. Porta brings more than **50 years of experience in the transportation field**. During his 37-year career at LADOTD, he practiced highway design for 11 years with 8 of those years in responsible charge of a design squad. He spent the next 21 years of his career in project/program management. He managed the Off-System Bridge Replacement Program and the Urban System Program. Both programs replaced or constructed new bridges on parish and state routes. In 2001 he was tasked with being the LADOTD TIMED Program Manager. This \$5 billion program was developed to multi-lane over 500 miles of state highways as well as construct 3 new bridges, 2 of these bridges across the Mississippi River. He spent the last 5 years of his career at LADOTD as the **State Road Design Engineer Administrator**.

Experience dates	Experience and qualifications relevant to the proposed contract
11/14 – 10/15	Safety Studies IDIQ - LA 44 and Loosemore Road Roundabout, LADOTD, Ascension Parish, LA. Technical Advisor. Provided design oversight and technical advisory role for the Geometric and roadway design , preliminary subsurface utility investigation, and cost estimates for the replacement of an existing two-way stop-controlled intersection with either a single-lane roundabout or two single-lane roundabouts and right-in/right-out control at the existing intersection.
12/13 – 06/15	Safety Studies IDIQ - LA 3235 Corridor Safety Improvements, LADOTD, Lafourche Parish, LA. Technical Advisor. Provided design oversight and technical advisory role for the geometric layout of safety improvements including access management, restrictive intersections, and added turn lanes. Reviewed construction cost estimates for proposed improvements to assess feasibility of proposed alternatives.
07/15 – 05/19	Safety Design IDIQ - US 190B at Jefferson Ave. Roundabouts, LADOTD, Covington, Louisiana. QA / QC Reviewer. Supported the construction of a new roundabout in Covington as a quality assurance/quality control reviewer for roadway plans . Plans reviewed included the construction of sidewalk for use by pedestrians.
09/09 – 03/12	I-20 Garrett Road Connector Interchange Improvements, LADOTD, Ouachita Parish, LA. Technical Advisor. Provided design oversight and technical advisory role for the Geometry and roadway design of the new KCS Railroad overpass and connector between Kansas Lane and Garrett Road , including interstate interchange modifications to include two-lane roundabouts at ramp intersections, and three two-lane roundabouts outside of the interchange. Improvements to the pedestrian and bicycle facilities were included in accordance with the LADOTD Complete Streets Policy.
04/12 – 01/14	US 11 Norfolk Southern Railroad Overpass Replacement Environmental Assessment and Line and Grade Study, LADOTD, Slidell, Louisiana. Responsible for LADOTD design guideline compliance . Replacement and widening of the US 11 roadway overpass of the Norfolk Southern Railroad. The project included evaluating partial and full-access intersection options and bridge alignment and type alternatives for the heavily skewed and long steel span bridge in this urban area of Slidell, Louisiana. Key issues included the bridge's imminent historic status, commercial parking impacts and adapting to the Norfolk Southern right-of-way and travel pattern changes following the construction.

01/14 – Ongoing	Pete’s Highway EA and Alternatives, LADOTD, Livingston Parish, Louisiana. Responsible for QAQC of roadway plans, line and grade, and <i>LADOTD design guideline compliance</i> . High-priority project completing an EA and traffic engineering services related to improving congestion and operations along Range Avenue in the vicinity of the I-12. Alternatives included two split diamond interchange options with roundabout, partial clover leaves, and c-d road components at both Range Avenue and the next existing, eastern overpass at Pete’s Highway (LA 16); and a diverging diamond interchange alternative at Range Avenue.
10/16 – 02/18	North Bayou Black Drive Bridge Off-System Highway Bridge Replacement Program, LADOTD, Terrebonne Parish, Louisiana. Reviewed plans for the replacement of an off-system highway bridge. Detailed designed effort included field surveying, right of way adjustments, crash barrier selection, hydraulic analysis, preliminary and final plan preparation and cost estimates.
09/12 – 12/15	US 165 Connector and Ouachita River Bridge - Environmental Impact Statement, Line and Grade and Toll Study, LADOTD, Monroe, Louisiana. Responsible for <i>QAQC of roadway plans, line and grade, and LADOTD design guideline compliance</i> . Three alternatives were developed and evaluated along with various tolling scenarios. All alternatives traverse substantial tracts of wooded wetlands associated with Chauvin Swamp near the Russell Sage Wildlife Management Area.
04/12 – 01/14	LA 434 Corridor Stage 1 Environmental Assessment, New Orleans Regional Planning Commission, Lacombe, Louisiana. Responsible for <i>LADOTD design guideline compliance</i> . EA for the widening and improvements of LA 434 between LA 36 and the anticipated new junction with LA 3241 near LaCombe, Louisiana in St. Tammany Parish.
10/90 – 10/01 10/05 – 10/10	Urban System Program MPOs & Urbanized Areas, Statewide, Louisiana. Responsible for the selection of the consultants, coordinating with the Metropolitan Planning Officials (MPOs) and the cities/parishes officials, <i>coordinating with the LADOTD Planning Section, developing the scope of services and fee</i> for the projects, <i>reviewing the construction plans</i> and providing comments to the consultants and cities / parishes, and approving all invoices. Mr. Porta was responsible for developing the Urban Systems Program Seminar, which provided information on the processes and procedures used in the program. He served as project manager for signal projects in St. Bernard and Orleans Parishes.
09/01 – 05/06	Transportation Infrastructure Model for Economic Development (TIMED) Program, LADOTD, Statewide, Louisiana. LADOTD <i>TIMED Program Manager</i> . Worked and coordinated on a daily basis with the TIMED Program Manager (LTM) to develop training, procedures, policies, and guidelines for the program. This \$5 billion program was developed to <i>multilane over 500 miles of state highways as well as construct three new bridges</i> ; two of these bridges across the Mississippi River. The program manager was required to monitor the progress of the program and had full invoice approval of the consultant’s monthly invoice. This position was a member of the TIMED Program Executive Committee and reported to the Secretary of the LADOTD. There were 16 projects that were recognized throughout the state. Bonds were sold to finance and, therefore, accelerate the program. Over 500 miles of state roadways were multilaned and three new bridge projects were designed.
05/06 – 07/10	Road Design Engineer Administrator, LADOTD, Statewide, Louisiana. Responsible for transitioning the focus of his section from project management back to <i>roadway design</i> as desired by the Chief Engineer. To support this mandate, brought in training from the FHWA Resource Center in Atlanta, GA to assist the development of a young group. Coordinated the training and provided through the Louisiana Transportation Training Education Center. Developed a Legal Seminar to address the lack of experience in Road Design and other LADOTD sections in depositions and representing the Department in court with the assistance of the Attorney General’s Office. Responsible for the <i>development of design criteria for Offset Left Turn Lanes and design guidelines for the replacement of bridges on state routes</i> .

Firm employed by.



Meet MPR No 11

Name	Victor Sanchez, PE		Years of relevant experience with this employer	2.5
Title	Principal Bridge Engineer		Years of relevant experience with other employer(s)	25
Degree(s) / Years / Specialization			MS / 2017 / Civil Engineering-Structures BS / 1991 / Civil Engineering with a major in Structures	
Active registration number / state / expiration date			PE.0033976 / LA / Exp. 09/30/2026	
Year registered	2008	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Bridge Design / Bridge Rehabilitation	
			Mr. Sanchez is the Lead Bridge and Structural Engineer for Arcadis’ Louisiana Operations. Victor is highly skilled with the design and detailing of structures using AASHTO-LRFD, the Louisiana Department of Transportation Bridge Design Manual, and software applications such as OpenBridge for the modeling and planning of bridges. Project applications include Stage 0 Feasibility Studies and design projects. He applies sound structural knowledge to perform hand calculations for bridge structural design and possesses strong management skills and a willingness to work collaboratively with different groups inside the organizational team, including clients, other disciplines’ engineers, and project managers within the project organization. His exceptional leadership skills, combined with his knowledge of the LADOTD policies, standards, and manuals, make him an ideal team builder to perform at its highest level of potential. Victor has taken LADOTD Historic Bridge Training.	
Experience dates			Experience and qualifications relevant to the proposed contract	
02/22 – Ongoing			I-10 Calcasieu River Bridge P3 (Calcasieu Parish, LA). Bridge Lead Engineer. The I-10 Calcasieu is one of the first Public-Private-Partnership projects in Louisiana and entails the replacement of several bridges, including the main structure crossing over the Calcasieu River. The project is divided into three segments. Arcadis is leading the design of segment 1. Segment 1 includes the replacement of an access ramp; the WB I-210 Ramp over the I-10. The bridge is a six-span bridge that consists of two units, each unit is a three-span continuous curved steel plate girder bridge, and the substructure consists of concrete hammer-head piers on concrete spread footing on precast concrete piles. Role as Bridge Lead Engineer and EOR is to guide a team of engineers and drafters to prepare plans, calculations, and quantity takeoff for the replacement of the WB I-210 Ramp over the I-10, and work along with other partners in coordination meetings with the owner and the contractor for this project.	
10/22 – Ongoing			Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Replacement (OSBR) Program, District 01, LADOTD. Bridge Lead Engineer. Prepared preliminary and final plans of six proposed bridges , which included plan and profile sheets, typical roadway sections and quantities, a general bridge plan, traffic detour and road closure details, and relevant signing plans, as well as channel cross-sections.	
04/23 – 01/25			Stage 0 Studies IDIQ – LA 22 Tchefuncte River Bridge, LADOTD, St. Tammany Parish, LA. Lead Bridge Design Engineer. Responsible bridge design for the Stage 0 Feasibility Study to develop and evaluate feasible alternatives for the replacement of the LA 22 Tchefuncte River Bridge in Madisonville, LA. The bridge has a high frequency of opening due to marine traffic and low elevation above the river. Arcadis developed several bridge alternatives, including fixed and movable bridge options . Alternatives were evaluated with respect to construction cost, ROW, traffic and safety, and environmental. All study methods and results were documented in a Stage 0 Feasibility Report with Preliminary Scope and Budget Checklist and an Environmental Checklist.	

06/14 – 07/15	I-10 Over Julia Street, Girder Rehabilitation Project, LADOTD, New Orleans, LA. <i>Bridge Design Engineer / Engineer of Record.</i> Led bridge design to address partial failure of connecting plates attaching girders to straddle bents on an I-10 exit ramp. Scope included replacing a steel cap beam at straddle bent 25w, all connecting plate elements at cap 26w, and analysis/rehabilitation of the affected three-span continuous structure (74'-132'-132'). Coordinated contract documents, plans, calculations, estimates, and provided QC/QA. Supported construction by reviewing and approving contractor shop drawings and calculations.
05/16 – 05/17	UP Railroad Overpass Near Tioga, LADOTD, Rapides Parish, LA. <i>Lead Bridge Design Engineer / Engineer of Record.</i> The total bridge length is 950' and consists of a main span using steel plate girders as superstructure elements over three continuous spans (210'-275'-210'); the bridge approaches to the main spans consist of two 85' AASHTO type III prestressed concrete continuous spans at the north side and one 85' AASHTO type III prestressed concrete span at the south side. The bridge substructure consists of concrete piers and caps supported on columns, which are supported on drilled shafts and spread footings on drilled shafts. Conducted bridge design as the Lead Engineer and Engineer of Record (EOR), responsible for the contract document preparation, including cost estimating, specifications, final plans preparation, structural calculations, load rating, and coordination for project delivery per Louisiana Department of Transportation policies.
04/16 – 12/16	Indian Bayou Bridge and Approaches, LADOTD, Calcasieu Parish, LA. <i>Lead Engineer and Engineer of Record.</i> The total bridge length is 675' and consists of 3 continuous span units with a length of 225', with each unit using precast prestressed concrete girders as superstructure elements over three continuous spans (75'-75'-75'). The bridge substructure consists of concrete piers and caps supported on precast prestressed concrete piles. Served as Lead Engineer and Engineer of Record (EOR), responsible for the contract document preparation, including cost estimating, specifications, final plans preparation, structural calculations, load rating, and coordination of project delivery per Louisiana Department of Transportation policies.
04/15 – 03/16	UP Railroad Bridge at Sicard, LADOTD, Ouachita Parish, LA. (LADOTD). <i>Lead Engineer.</i> This bridge consists of a main span using steel plate girders as main superstructure elements over three continuous spans (102'-175'-102'); the bridge approaches consist of three 84' continuous spans at the north side and to the south side, three 84ft continuous spans for a total structure length of 883' located in a straight alignment and skew of 68 degrees concerning a line normal to the center line of the bridge. The main superstructure elements of the approaches are prestressed concrete AASHTO Type IV girders, and the bridge substructure consisted of multi-column bents on concrete footing supported on prestressed concrete piles. Completed plan quality reviews, prepared the bridge load rating report, and assisted the environmental section of the LADOTD in completing the environmental clearance for the project. In addition, provided load rating and construction support, reviewing the shop drawings submitted by the general contractor.
05/18 – 11/19	I-485 from I-77 to US 74; I-485/Weddington Rd Interchange; and I-485 /East John St. - Old Monroe Rd. Interchange (design-and-build), Mecklenburg County, NC. <i>Led Structural Design and Project Management for the replacement of two bridges in the project.</i> STR#1 over Westinghouse Blvd. and widening of STR#12 over CSX railroads. STR#1 involves replacing the existing structure over I-485 with two prestressed concrete bridges of lengths 125ft and 132 ft, utilizing the 63" Florida-I Beam and integral end bents on steel piles. STR#12, over CSX railway, is a twin bridge on I-485 with a three-span continuous structure and a total length of 165ft. The substructure includes stub abutments on steel piles and multi-column bents on spread footings. Managed structural design, coordination, and local staff to maintain budget control and timely delivery to NCDOT.

Firm employed by. 				Meets MPR No. 4
Name	Badre Enam, PhD, PE		Years of relevant experience with this employer	18
Title	Bridge Engineer		Years of relevant experience with other employer(s)	7
Degree(s) / Years / Specialization			PhD / 2008 / Structural Engineering, Florida State University MS / 2001 / Structural Engineering, Bangladesh University of Engineering & Technology BS / 1998 / Civil Engineering, Bangladesh University of Engineering & Technology	
Active registration number / state / expiration date			PE.037647 / LA / Exp. 09/30/2027	
Year registered	2013	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Bridge Design	
Experience dates	Experience and qualifications relevant to the proposed contract			
	Dr. Enam has more than 21 years of experience as a Structural Engineer. His professional design experience includes (i) structural analysis and design of steel and concrete structures (using STAAD Pro, Sap 2000, RISA 3D etc.), (ii) deep foundation design using pile and drilled shaft (iii) Finite Element Analysis (using GTStrudl, ANSYS), (iv) concrete bridges as per Load and Resistance Factor Design (LRFD) specifications using pre-stressed box, bulb tees and American Association of State Highway and Transportation Officials (AASHTO) girders, (v) railroad bridge, (vi) steel plate girder bridges (LRFD) including moveable spans, (vii) dynamic effects from ship/barge impact on bridge piers (viii) hydraulic structures such as Sector gate, Vertical Lift Gate, T-wall, (ix) residential & commercial buildings (x) stability analysis of dams for seismic loading etc. His responsibilities have included structural design, FE analysis, P&S preparation, bid document preparation, shop drawing review, cost estimation, QA/QC etc.			
04/13 – 04/14	Louisiana Department of Transportation and Development (LADOTD), US 11 Norfolk Southern Railroad Overpass Replacement, St. Tammany Parish, LA. <i>Lead Bridge Engineer</i> for replacement and widening of the US 11 roadway overpass of the Norfolk Southern Railroad. Project included evaluating partial and full access intersection options and bridge alignment and type alternatives for the heavily skewed and long steel span bridge in this urban area of Slidell, Louisiana. A key feature of the project was preliminary design of a 380-ft long steel plate girder bridge span on an S curve over the Norfolk Southern right-of-way. Performed cost estimation and construction sequencing to minimize traffic delay during construction.			
08/19 – Ongoing	East Baton Rouge City-Parish, Alphonse Forbes Road at Sandy Bayou Bridge Replacement, Watson, LA. <i>Bridge Design.</i> The Alphonse Forbes Road bridge was closed and Arcadis was selected by the city-Parish to complete a design study, topographic survey, and preliminary and final designs. The engineering responsibilities include the development of General Plans, foundation layouts, super-elevation diagrams in addition to structural design, detailing and load ratings of various bridge components such as: slab spans, bent caps, approach slabs, etc.			
10/15 – 04/18	LADOTD Off-System Highway Bridge Replacement Program, North Bayou Black Drive / Hanson Canal Bridge, Terrebonne Parish, LA. <i>Designer of Record and Project Manager</i> responsible for providing all necessary engineering and related services required for developing plans for the replacement of an off-system highway bridge. Detailed designed effort included filed surveying, right of way adjustment, crash barrier selection, hydraulic analysis, preliminary plan preparation and quantity estimation.			

06/16 – 12/25	LADOTD, US 90 Business Signing Upgrade, Jefferson & Orleans Parishes, LA. <i>Senior Structural Engineer</i> responsible for designing the Standard overhead and roadside signing structures following LADOTD and AASHTO design standards for the US 90 Business corridor for a length of approximately 5 miles. Investigated the as-built plans for the types, sizes and clearances of existing bridge girders, barrier, parapets, and deck overhangs to specify the sign-support attachments. Responsibility also included design of steel structures, structural quantities estimation and preparation of structural drawings.
01/12 – 08/14	United States Army Corps of Engineers (USACE) – Memphis District, USACE IDIQ, LPV 145 Bayou Bienvenue Swing Span Bridge, St. Bernard Parish, LA. <i>Bridge Designer of Record</i> performed P&S level structural design of a 135-foot steel swing span bridge as per AASHTO LRFD specification and concrete approach slab spans (LADOTD standards) founded on pile bents. Responsible for LRFD based design of substructure items and foundation of the same bridge along with quantity takeoff.
01/14 – Ongoing	LADOTD, Pete’s Highway, I-12 Interchange EA, IMR and Alternatives, Livingston Parish, LA. <i>Bridge Engineer</i> design alternatives included two split diamond interchange options with roundabout, partial clover leaves, and collector-distributor road components at both Range Avenue and the next existing, eastern overpass at Pete’s Highway (LA 16); and a diverging diamond interchange alternative at Range Avenue. Performed preliminary design of a bridge spanning over I-12, which featured LADOTD LG girders. Worked on construction sequencing to widen Range Ave. under the I-12 overpass that introduced an additional lane by excavating and retaining the existing embankments and providing added vertical clearance under the bridge.
02/09 – 12/09	USACE, US 90 – WBV 73 Western Tie-In Crossing Lake Cataouatche Area, Jefferson Parish and St. Charles Parish, LA. <i>Project Structural Engineer</i> performed QC of design calculations and final construction plans for P&S level design of a 2,540-foot PPC girder/pile bent bridge and roadway approaches following AASHTO specifications for coastal regions.
7/10 – 12/10	State College Boulevard Grade Separation Rail Road Bridge, City of Fullerton, California. <i>Project structural engineer.</i> Performed analysis of 3-lane rail road bridge and checked the pre-stressed concrete girder design as per AASHTO LRFD and AREMA specifications including seismic loading using SAP2000.
04/08 – 11/08	Buffalo Speedway Southbound Bridge Replacement, Sims Bayou, Harris County Flood Control District, City of Houston, Texas. <i>Project engineer</i> for performing forensic investigation of TxDOT box girder bridge experiencing excessive deflection; identification of design deficiencies; validation of remedial action suggested.
3/10 – 9/10	SH 31 Bridge Design, TxDOT, Waco, Texas. <i>Project engineer</i> for performing structural design, plans preparation and quantity estimates as per LRFD spec. for six TxDOT bridges on Highway SH 31 (over Navasota river, overpasses over FM 1330 & FM 339). Bridge lengths varied from 130 – 240 ft and featured pre-stressed U beams & Type C girders on concrete bents founded on drilled shafts.
5/08 – 9/09	SH 195 Bridge Design, TxDOT, Williamson County, Texas. <i>Project engineer</i> for QA/QC of design calculations (LRFD), plans and cost estimates for a roadway overpass featuring twin-bridge structures with skewed spans set in a horizontal curve.
2/08 – 3/09	FM 1100 Bridge over Willow Creek, TxDOT, Austin, Travis County, Texas. <i>Project engineer</i> for performing QA/QC design calculations, quantity estimates and final design drawings for 150 feet long, two lane, 44 ft roadway replacement concrete bridge featuring Type A pre-stressed concrete girders as per AASHTO LRFD specification.

Firm employed by.



Name	Sharear Kabir, PE		Years of relevant experience with this employer	9
Title	Structural Engineer		Years of relevant experience with other employer(s)	8
Degree(s) / Years / Specialization			MS / 2008 / Civil Engineering, Louisiana State University BS / 2000 / Civil Engineering / Khulna University of Engineering and Technology	
Active registration number / state / expiration date			PE.37169 / LA / Exp. 09/30/2026	
Year registered	2012	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Bridge Design / Bridge Rehabilitation	
Experience dates	Experience and qualifications relevant to the proposed contract			
	Mr. Kabir is experienced in bridge design and analysis for LADOTD to construction management and field supervision for private industries. He possesses good understanding of Louisiana Department of Transportation and Development (LADOTD), American Association of State Highway and Transportation Officials (AASHTO), American Society of Civil Engineers, American Conference Institute, and American Institute of Steel Construction design standards and has a demonstrated proficiency in bridge design and load rating, structural design, calculation, and documentation.			
08/19 – 11/20	Alphonse Forbes Bridge at Sandy Bayou Replacement, East Baton Rouge City-Parish, Watson, LA. Bridge Design Engineer. For the structural design and analysis for the replacement of an existing bridge structure with a 9-span, 180-foot-long and 30'-6" wide concrete slab span bridge supported by 18-inch square prestressed concrete piles and cast-in-place concrete pile bents. Responsibilities included the development of General Plans, foundation layouts, superelevation diagrams in addition to structural design, detailing and load ratings of various bridge components.			
07/16 – 04/18	North Bayou Black Drive Bridge over Hanson Canal, LADOTD, Terrebonne Parish, LA. Project Structural Engineer. Completed structural design and prepared CAD drawings for a 28 ft wide and 80 ft long slab span bridge to replace the structurally deficient North Bayou Black Drive Bridge under the Off-System Bridge Replacement program of LADOTD.			
04/14 – 07/16	LA 63 Pigeon Creek Bridge, LADOTD, St. Helena Parish, LA. Bridge Design Engineer for replacing the existing bridge with a 32-ft by 140-ft precast slab bridge using phased construction. Completed final design plans, including precast components and foundation layout, and coordinated with road design, environmental, and survey team to finalize alignment and ROW.			
04/16 – 07/16	LA 506 Castor, Castor Relief, & Drain Bridges, LADOTD, Caldwell Parish, LA. LADOTD Bridge Design Representative. Responsible for replacing six existing bridges with new cast in place slab span bridges in accordance with the most current and applicable LADOTD and AASHTO bridge design specifications. Developed General Plans, foundation layouts and super elevation diagrams. Designed guard rails and conducted structural design and load ratings of various bridge components including slab spans, bent caps, and approach slabs.			
04/14 – 10/15	US 165 Bridges Near Fenton, LADOTD, Jefferson Parish, LA. Structural Engineer. Four new bridges were proposed to be constructed on US-165 to replace the existing bridges. Among the four bridges, Bridge 1 and 2 were proposed to be precast slab span bridges. The concrete slab panels, approach slab panels, bent cap sections for slab panel bridges were fabricated off-site and brought to the site ready to be erected in-place to form the whole structure gradually. Conducted structural design and load rating of the precast slab panels, bents, and approach slab panels for Bridges 1 and 2.			

Firm employed by.



Name	Krishna Singaraju, PE	Years of relevant experience with this employer	4
Title	Project Structural Engineer	Years of relevant experience with other employer(s)	5.5
Degree(s) / Years / Specialization	MS / 2018 / Structural Engineering, University of Maryland College Park BE / 2014 / Civil Engineering, Birla Institute of Technology and Sciences		
Active registration number / state / expiration date	PE.0048911 / LA / Exp. 09/2026, PE.151559 / TX / Exp. 12/2026		
Year registered	2024	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Bridge Design		
	Mr. Singaraju has experience in bridge structure design, plan production, detail review, and construction engineering methods for miscellaneous highway structures. His design responsibilities include LRFD structural analysis and design, detailing, shop drawing review, and plan production in accordance with Texas Department of Transportation (TxDOT), Louisiana State Department of Transportation (LADOTD), Oklahoma Department of Transportation (ODOT), and American Association of State Highway and Transportation Officials (AASHTO) specifications. His experience includes bridge superstructure and substructure design, review, construction engineering and methods, bridge construction, cost estimate preparation, and quality control.		
Experience dates	Experience and qualifications relevant to the proposed contract		
01/22 – Ongoing	I-10 CMAR, Louisiana Department of Transportation, East Baton Rouge Parish, LA. Project Bridge Engineer. A Construction Management at Risk (CMAR) project to improve I-10 through widening and reconstruction. This project involved bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities included bridge substructure design, plan production, and quality control (QA/QC) for bridge widening and new mainlane structures. Participated in design meetings and provided guidance for CAD support for plan production at multiple CMAR submittal levels for LADOTD. Prepared the temporary and permanent widening substructure drawings of existing westbound I-10 for the 90% submittal level. The permanent widening consisted of 13 bents and temporary widening consisted of 41 bents. Performed multiple design iterations using Open Bridge Designer software to come up with the cap and column design. Worked on sketching rebar layout for aesthetic flared columns for mainlanes and ramp substructure. Calculated bent cap control elevations and top of shaft elevations based on riser elevation data from the superstructure designer and the substructure geometry. Checked the required riser thickness based on checking the framing plan for different beam types used in superstructure. Prepared markups using Bluebeam Revu software program and shared with CAD engineers for sheet updates.		
04/22 – 03/23	US 90 Bridge Assessment, Texas Department of Transportation, Caldwell/Gonzales County (West Limit) to Louisiana State Line (East Limit), TX. Staff Bridge Engineer. US 90 bridge assessment project which included 246 miles corridor from Caldwell/Gonzales County (west limit) to Louisiana State Line (east limit). This project involved filtering the list of existing bridges using TxDOT bridge database (.CSV file) for US 90 bridge to create bridge reports for each TxDOT district with bridge index of existing bridges and calculated deck area of functionally obsolete bridge overpass and underpass based on TxDOT bridge inspection manual definitions. Worked on creating summary of bridge count filtered by vertical clearance less than 16.5 feet, between 16.5 feet to 18.5 feet and greater than 18.5 feet. Prepared a Google Earth .KMZ file using coordinates		

	from the TxDOT bridge database with US 90 existing bridges identified and sorted by each district within the project limits. Performed QA/QC review of the TxDOT filtered data to validate the information shown in bridge summary reports.
08/22 - Ongoing	Calton Road, Railroad Grade Separation, Texas Department of Transportation, Webb County, TX. Staff Bridge Engineer. Project involves grade separation work at Union Pacific Railroad crossing which includes constructing 7 span overpass bridge with steel plate girders. Worked on modifying steel superstructure girder detail drawings for camber diagram and fabrication notes. Prepared bridge layout, cross section and modified as per comments from DOT review. Created submittal package with set of applicable TxDOT standards. Calculated bridge quantities and created quantity table on summary sheet with required bid item codes.
01/23 – 06/24	FM 740/ FM 548, Schematic & Environmental, Texas Department of Transportation, Kaufman County, TX. Staff Bridge Engineer. A new proposed bridge widening for the existing FM 548 Mustang Creek Bridge. This bridge widening project involved reviewing existing bridge as-built drawings in metric system and preparing bridge layout for widening structure in U.S. customary units. Phased construction guidelines by TxDOT were utilized while creating typical sections for bridge widening. Responsibilities included performing design check for additional load due to curb and rail on the existing superstructure using Texas Optional Girder Analysis. Created Bridge layout and typical section using MicroStation. Calculated quantities and prepared summary of required bid item codes as per available TxDOT bid history.
02/23 – 01/25	Cross Bayou Bridge Replacement / Feasibility Study, Louisiana Department of Transportation, Caddo Parish, LA. Staff Bridge Engineer. A US 71 Northbound (NB) – Spring Street and US 71 Southbound (SB) – Market Street bridge alternatives for Cross Bayou bridge replacement – Route US 71. Responsibilities included preparing bridge quantity calculations for prestressed concrete girder bridge with simple spans alternative and three-span continuous steel girder alternatives for Market Street bridge. Prepared bridge quantity calculations for prestressed concrete girder bridge alternative, and three-span and four-span continuous steel girder alternatives for Spring Street bridge. Performed superstructure design using LG girder and reviewed LaDOTD manual to optimize design. Worked on feasibility study report and created supporting drawings and design recommendations.
03/23 – 05/23	Bridge Replacement at Shelby Ave, Texas Department of Transportation, Hunt County, TX. Staff Bridge Engineer. New bridge design of prestressed concrete slab beam bridge with single span. Responsibilities included preparing cost estimate for the bridge using TxDOT bid history average cost for the Paris District, performing QA/QC review of the bridge geometry input in BGS software program and bridge layout, and extracting slab beam (5SB12) step elevations. Prepared 3D model using OpenBridge Modeling software and designed slab beam span.
03/19 – 05/21	TxDOT PS&E IH-35 Shiloh UPRR Overpass NB & SB in Webb County, Laredo, TX. Bridge Engineer. This project involved designing twin bridges with prestressed concrete girder approach spans and a 3-span continuous steel unit crossing existing UPRR railroad. Modelled complex bridge geometry with skew, curvature, multiple girder type and roadway superelevation using BGS software program to extract bent and beam geometry reports for tables in bridge sheets. Reviewed the Exhibit-A white paper for Union Pacific railroad (UPRR) and AREMA guidelines on bridge vertical clearance since the steel unit is crossing an existing UPRR railroad. Worked on the cross-frame layout for the steel unit and created multiple options to space the cross frames based on AASHTO & National Steel Bridge Alliance (NSBA) guidelines on staggered cross frames for high skew bridges. Coordinated with CAD engineer to check BGS output plot by referencing it in the bridge plan master design file created using MicroStation software program. Modelled the steel unit with 3 span continuous plate girders in MDX software program as per the framing plan and ran analysis with all applicable load combinations.

Firm employed by.

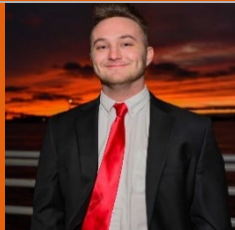


Name	Sushil Dhungana, PE	Years of relevant experience with this employer	4
Title	Project Structural Engineer	Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization	MS / 2018 / Civil Engineering (Structural), University of Texas at Arlington BS / 2014 / Civil Engineering, Tribhuvan University		
Active registration number / state / expiration date	PE.0047291 / LA / Exp. 03/2027; PE.143443 / TX / Exp. 09/2026		
Year registered	2022; 2021	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Bridge Design		
	Mr. Dhungana has more than 8 years of experience in bridge engineering working on various PS&E and Design-Build Projects. His experience involves bridge design, replacement, widening and retaining wall design. He is skilled at designing and analyzing concrete and steel bridges as well as various drainage structures. He is proficient in QA/QC and constructability reviews, ensuring designs are accurate, practical and feasible for construction. With a strong design background, he understands complex projects and understands importance of quality designs to meet project requirements. He has hands-on experience with design-bid-build, design-build and CMAR projects.		
Experience dates	Experience and qualifications relevant to the proposed contract		
08/22 – Ongoing	I-10 CMAR, Louisiana Department of Transportation, East Baton Rouge Parish, LA. Bridge Engineer. Project involves improving I-10 through widening and reconstruction of the main lane from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Designed and detailed single and multi-column aesthetic flared column bents of I-10 main lane bridge, ramp bridge, temporary and permanent widenings using Open Bridge Designer software. Calculated foundation loads and coordinated with geotechnical engineers to design drilled shafts, optimizing shaft diameter and length for capacity, settlement, and constructability. Calculated control elevations, performed QA/QC on designs, plans and estimated quantities per LaDOTD standard and guidelines. Provided CAD guidance and support throughout the production of plans at various stages of submittal.		
08/22 – Ongoing	Calton Road, Railroad Grade Separation, Texas Department of Transportation, Webb County, TX. Bridge Engineer. Project involves grade separation work at Union Pacific Railroad crossing which includes constructing 7 span overpass bridge with steel plate girders. Developed “Exhibit A” for UPRR approval. Reviewed steel plate girder design calculation. Performed steel plate girder camber analysis and developed web cutting table. Designed and detailed Abutment and bent cap per TxDOT guidelines. Calculated Bearing seat Elevations and quantities. Updated shoring diagram sheet per UPRR and BNSF guidelines for Railroad live load surcharge. Reviewed bridge plans per TxDOT bridge design and detailing guide.		
03/23 – 05/23	Bridge Replacement at Shelby Ave, Texas Department of Transportation, Hunt County, TX. Bridge Engineer. Project involves replacement of an off-system bridge, Shelby Ave at Farber Creek branch with 40’ prestressed slab (5SB12) beam span. Proposed bridge was designed using TxDOT standard bridge elements. Designed slab beam span, developed 3D model using Open Bridge Designer software, drafted bridge sheets, calculated slab beam step elevation using BGS software and quantities. Specified location of soil boring for the design of the bridge foundation. Selected applicable TxDOT standard and included them in the bridge package. Reviewed final bridge plans as per TxDOT guidelines.		

02/23 – 01/25	Cross Bayou Bridge Replacement / Feasibility Study, Louisiana Department of Transportation, Caddo Parish, LA. Bridge Engineer. Project involves identifying practical alternatives to replace US 71 Northbound (Spring Street) and US 71 Southbound (Market Street) bridges in District 04 over Cross Bayou. Designed 3 span curved steel Plate girder and 8 span Prestressed concrete LG 45 girder bridge options for Spring Street bridge replacement. Designed 4 span Prestressed concrete LG54 girder and 3 span Steel plate girder options for Market Street bridge replacement. Reviewed LADOTD Maximum Span length charts to optimize LG girder design options. Performed cost estimate for each alternative and summarized them. Drafted bridge layouts and typical section for all feasible bridge alternatives. Prepared feasibility study report and provided recommendation.
01/23 – 06/24	FM 740/ FM 548, Schematic & Environmental, Texas Department of Transportation, Kaufman County, TX. Bridge Engineer. Project involves developing design schematics to widen existing two lanes urban section to divided four lanes urban section from IH 20 to US 80. Existing 7 span Mustang creek bridge with Type C beams was widened using Tx40 girders in both directions. Analyzed existing spans of Type C for additional load due to center median and rails using Texas Optional Girder Analysis (TOGA). Designed proposed Tx40 girders using Bridgeline software and developed strand patterns. Drafted bridge layout, typical section and calculated quantities/cost per TxDOT standard. Reviewed final schematic per TxDOT guidelines.
07/21 – 08/22	BNSF Underpass at 4th Street, Oklahoma Department of Transportation, City of Moore, OK. Bridge Engineer. Project to design railroad bridge over SE 4th street in city of Moore, Oklahoma and develop the track layout per AREMA and BNSF guidelines. Proposed 2 span railroad bridge was designed using prestressed concrete TY IV beams. Designed beams, developed strand patterns and prepared detailed plans for railroad bridge per ODOT and BNSF guidelines. Designed drilled shaft using Lpile software. Reviewed final bridge, railroad track layout and drilled shaft retaining wall package to meet BNSF and AREMA standards.
03/21 – 08/21	Crossroads I35/I240, Oklahoma Department of Transportation, Oklahoma City, OK. Bridge Engineer. Project involves replacing 2 existing railroad bridges and developing a track layout for reconstructing the I35/I240 interchange in Oklahoma City as per AREMA and BNSF guidelines. Designed and prepared detailed plans for steel plate girders railroad bridges with ballasted deck. Developed layouts and structural details for tieback drilled shaft walls. Reviewed final bridge plans per BNSF and AREMA standards.
02/21 – 11/21	Bitter Creek at FM707, Texas Department of Transportation, Taylor County, TX. Bridge Engineer. Project involves bridge replacement and reconstruction of approaches for Abilene district. Existing bridge was replaced with 3 spans of Tx28 girders. Proposed bridge was designed using TxDOT standard bridge elements. Analyzed TxDOT standard bent and span sheet for Tx28 girders using Leap Bridge and Bridgeline software. Prepared bridge plan, profile and typical sections, calculated bearing elevations, quantities and construction cost estimate. Specified location of soil boring for the design of the bridge foundation.
09/20 – 08/22	Southeast Connector, Texas Department of Transportation, Tarrant County, TX. Bridge Engineer. Design-build project in Fort Worth district which includes improvements/widenings to I-20 (from Forest Hill Drive to Park Springs Boulevard), I-820 (from I-20 to Brentwood Street Road) and US 287 (from Bishop Street to Sublet Road). Designed super and substructure bridge elements for two bridges, I-20 Overpass at Hartman and I-20 Underpass at Anglin Drive. Prepared bridge layout and detail sheets. Calculated bearing seat elevations using BGS software. Designed and detailed CIP, soil nails and MSE retaining walls along the I-20 corridor. Attended weekly Task Force meetings and involved in coordination with various design disciplines. Reviewed final bridge and retaining wall package per TxDOT guidelines.

Firm employed by.



Name	Bryan D. Barnes, EI		Years of relevant experience with this employer	3
Title	Structural Engineer		Years of relevant experience with other employer(s)	4.5
Degree(s) / Years / Specialization			BS / 2021 / Civil Engineering	
Active registration number / state / expiration date			EI.0034967 / LA / Exp. 3/31/2026	
Year registered	2021	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Bridge Design	
 Mr. Barnes is a Bridge Engineer with experience in design and detailing of structures as per AASHTO LRFD, the Louisiana Department of Transportation Bridge Design Manual, as well as using OpenBridge Modeler and Civil3D. He is familiar with the LADOTD policies, standards, and has the ability to work cohesively within a team alongside other engineers. Alongside using the design tools available, he also uses structural knowledge to perform hand calculations for bridge structural design when necessary. His responsibilities include plans preparation, structural design for bridges, as well as CAD drawing and quantities collection.				
Experience dates Experience and qualifications relevant to the proposed contract				
08/22 – Ongoing		I-10 CMAR in Baton Rouge, East Baton Rouge Parish. Bridge Engineer. Responsible for part of the bridge design in all sections of the project, doing <i>structural design calculations for substructure components, creating plans, CAD drawings, updating quantites</i> , and coordinating with the project management section of the Department for the delivery of the project, per the Louisiana Department of Transportation and Development project delivery policies. The complete bridge project has several separate components including the west bound main lanes, the east bound main lanes, the east bound ramp, and the permanent widening portions of the bridge. The superstructure consists of either prestressed concrete girders, steel plate girders, or rolled steel beams. The bridge substructure consists of concrete piers supported on columns which are supported on drilled shafts and spread footings on drilled shafts.		
04/24 – 04/24		I-10 Calcasieu in Lake Charles – Calcasieu Parish. Bridge Engineer. Responsible for preparing plans, calculations, and quantities for the replacement of the WB I-210 Ramp over the I-10, and work along with other partners in coordination meetings with the owner and the contractor for this project.. The I-10 Calcasieu is one of the first Public-Private-Partnership projects in Louisiana and entails the replacement of several bridges, including the main structure crossing over the Calcasieu River. The project is divided into three segments. Arcadis is leading the design of segment 1. Segment 1 includes the replacement of an access ramp; the WB I-210 Ramp over the I-10. The bridge is a six-span bridge that consists of two units, each unit is a three-span continuous curved steel plate girder bridge, and the substructure consists of concrete hammer-head piers on concrete spread footing on precast concrete piles.		
04/24 – 04/24		Stage 0 Studies IDIQ – LA 22 Tchefuncte River Bridge, LADOTD, St. Tammany Parish, LA. Bridge Engineer. Responsible for helping <i>develop and create feasible alternatives</i> for the bridge replacement. Provided <i>modeling and plans</i> for the Stage 0 Feasibility Study for the different alternatives. The bridge has a high frequency of opening due to marine traffic and low elevation above the river. Arcadis developed several bridge alternatives including fixed and moveable bridge options. Alternatives were evaluated with respect to construction cost, ROW, traffic and safety, and environmental.		

16 STAFF EXPERIENCE:

Firm employed by:  AILLET, FENNER, JOLLY,
& MCCLELLAND INC.

Name	Matthew J. Wallace, PE, SE	Years of relevant experience with this employer	31
Title	Structural Engineer President/CEO	Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization	BS / 1989 / Civil Engineering		
Active registration number / state / expiration date	PE.0025922 / LA / 9-30-27		
Year registered	1994, 2016	Discipline	Structural
Contract role(s) / brief description of responsibilities	Structural design		
Experience dates	Experience and qualifications relevant to the proposed contract		



Mr. Wallace's key areas of expertise include structural design in structural steel, precast concrete, cast-in-place concrete, masonry, light gage steel, and timber. Additional areas of expertise include computer modeling, wind load analysis, and seismic analysis. Mr. Wallace has extensive experience modeling structural systems using three-dimensional computer modeling software. AFJMc currently uses state of the art computer technology for design assistance such as ENERCALC-SEL, RISA-3D, RISAFoundation, Adapt-PT, AUTOCADD, AutoCAD Revit Suite, and Bluebeam Revu.

06/23 - Present	LADOTD, Jimmie Davis Design Build, Caddo & Bossier Parishes. This project will construct a new 4-lane bridge over the Red River, convert LA 511 from a five-lane roadway to a 4-lane median divided roadway with turn lanes, and construct full-access interchange connections with LA 511 at both Arthur Ray Teague Parkway and Clyde Fant Memorial Parkway with associated roadway drainage systems, lighting and the conversion of the existing Jimmie Davis Bridge into a linear park. AFJMC was tasked with the design of at grade and elevated portions of the shared use trails on both sides of the Red River to connect at the existing Jimmie Davis Bridge. AFJMc is also responsible for the drainage for the west portion of the roadway design of LA 511 and its connections to Clyde Fant Parkway, and the electrical/lighting design for the project.
01/26 - Present	LADOTD, Kings Highway Healthcare Corridor, Caddo Parish, LA. Structural Designer. 1.6-mile corridor improvement project. The project includes the reconstruction of the existing roadway and sidewalks, signal improvements, lighting design and the incorporation of a Bus Rapid Transit (BRT) route.
2017	Caddo Parish Commission, Linwood Avenue Bridge Replacement, Caddo Parish, LA. Responsible for the design of the replacement of a 12-span two-lane timber bridge with a 13-span, two-lane precast concrete bridge. AFJMc compiled bid documents including technical specifications, typical details and general requirements, as well as a summary of estimated quantities and costs.
06/21–12/21	Natchitoches Parish Public Works, Off-System Parish Bridges, Natchitoches Parish, LA. Field investigation and rating of five off-system Parish bridges in Natchitoches Parish. AFJMc provided the load ratings to the Parish for these bridges. Bridges to be rated were inspected by AFJMc to assess their condition and analyzed for load posting per LADOTD requirements.
2013	Natchitoches Parish Police Jury, Off-System Parish Bridges, Natchitoches Parish, LA. Field investigation and rating of thirteen off-system Parish bridges in Natchitoches Parish. AFJMc provided the load ratings to the Parish for these bridges.

	Bridges to be rated were inspected by AFJMc to assess their condition and analyzed for load posting per LADOTD requirements.
03/21–04/21	Natchitoches Parish Policy Jury, Bridge over Middle Creek on Shady Grove South Road, Natchitoches Parish, LA - Repair for Off-System Bridge Recall No. 600132.
2013 to 2014	City of Bossier, Arthur Ray Teague Pedestrian Bridge, Bossier City, LA. Steel-framed connector spanning over the north and south lanes of Arthur Ray Teague Parkway to connect the Red River trail on the river side of AR Teague Parkway to the Walker Place Park west of the AR Teague Parkway. The multi-use elevated trail is 14-ft x 300-ft and is supported by structural steel trusses spanning between column bents framed with round structural steel sections.
5/11 to 2/20	LADOTD, I-49 North, I-220 to LA 1, Caddo Parish, LA – Project Engineer providing structural support. This segment includes the I-49/I-220 Interchange.
9/12 to 12/17	LADOTD, Sale Road Bridge, Lake Charles, LA - 0.375 mile urban bridge replacement project, Widening of Sale Road and bridge from two lanes to a four-lane road with curb, subsurface drainage, 7 span bridge, sheet pile retaining walls, guard rails and sanitary sewer relocation.
3/12 to 6/12	Bossier Parish Police Jury, Palmetto Road Bridge, Bossier Parish, LA. Structural lead for widening of a slab span bridge.
2/04 to 6/10	LADOTD, U.S. 425, Bastrop-Log Cabin, Morehouse Parish - Structural Lead for final design of one five-lane and one two-lane highway bridges.
1996	City Of Shreveport, Ockley Street Bridge Replacement, Shreveport, LA. Structural engineer for new two lane bridge with sidewalks required when Ockley Ditch was widened. Prestressed concrete beam with concrete deck and concrete pile.
6/04 to 7/04	Bossier Parish Police Jury, Willow Chute Bridge, Parish Hwy No. 3105, Bossier Parish, LA. Structural Lead for final design of a precast prestressed slab span replacement bridge.
1999	Fort Polk, R-1 Railway Bridge, Vernon Parish, LA. Project Management, Bridge design for the replacement of R-1 railway bridge.
1/03 to 11/06	City Of Bossier, LA 3, Benton Road Overpass, Bossier City, LA - Project Supervision for a five-lane urban realignment of LA 3 over the Kansas City Southern Railroad.

16 STAFF EXPERIENCE:

Firm employed by:  AILLET, FENNER, JOLLY,
& MCCLELLAND INC.

Name	Paul Cormier, PE	Years of relevant experience with this employer	19
Title	Structural Engineer	Years of relevant experience with other employer(s)	18
Degree(s) / Years / Specialization	BS / 1989 / Civil Engineering ME / 1994 / Civil Engineering		
Active registration number / state / expiration date	PE.0027019 / LA / 3-31-27		
Year registered	1996	Discipline	Civil, Structural
Contract role(s) / brief description of responsibilities	Structural Design		
Experience dates	Experience and qualifications relevant to the proposed contract		
	Mr. Cormier's key areas of expertise foundation analysis and design for various commercial and residential buildings; Structural steel and concrete analysis and design for all types of commercial buildings, schools, churches, etc.; Structural finite element analysis and design; Crane/lifting equipment analysis and design; Billboard/sign analysis and design. Mr. Cormier is a member of ASCE and LES.		
08/18	Caddo Parish Commission, Linwood Avenue Bridge Replacement, Caddo Parish LA. Responsible for the design of the replacement of a 12-span two-lane timber bridge with a 13-span, two-lane precast concrete bridge. AFJMc compiled bid documents including technical specifications, typical details and general requirements, as well as a summary of estimated quantities and costs.		
12/18 to 07/21	Caddo Parish Commission, Linwood Avenue Bridge Replacement II, Caddo Parish LA. AFJMc provided comprehensive engineering services for the replacement of the existing 13-span, two-lane timber bridge over Boggy Bayou with a new 13-span, two-lane precast concrete bridge. Services included preliminary and final design, hydraulic analysis, geotechnical coordination; structural design and roadway design to meet current design criteria. AFJMc prepared Plan, Specifications, and Estimates (PS&E), including detailed bidding documents and technical specifications. During construction, AFJMc provided bid-phase assistance, shop drawing review, responses to RFIs and coordination with the Parish and contractor.		
6/13 to 8/13	LADOTD, I-49 North, I-220 to LA 1, Caddo Parish, LA. Check concrete structures for inverted siphon.		
2011	Bossier Parish Police Jury, Palmetto Road, Bossier Parish, LA. The Bossier Parish Police Jury selected AFJM to conduct a Line and Grade Study to three lane of a narrow two lane road. Having completed the study AFJM worked on the 1st phase of the Preliminary Plans to widen the road and an existing two lane bridge.		
08 to 02/20	LADOTD, Sale Road Bridge, Lake Charles, LA. 0.375 mile urban bridge replacement project, widening a two-lane asphalt road to a four-lane concrete road.		
11/20 to 8/21	LADOTD, Mound Rest Area Improvements, Route I-20, Madison Parish, LA. Responsible for structural design which includes foundation design for overhead structures such as pavilions, covered walkways and the design of wood bridges and bulkhead at pond edges.		

16 STAFF EXPERIENCE:

Firm employed by:  AILLET, FENNER, JOLLY,
& MCCLELLAND INC.

Name	J. Daniel Thompson, PE, SE	Years of relevant experience with this employer	20
Title	Structural Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BS / 2006 / Civil Engineering MS / 2010 / Engineering & Technology Management		
Active registration number / state / expiration date	PE.0035628 / LA / 9-30-26		
Year registered	2006, 2016	Discipline	Civil; Structural
Contract role(s) / brief description of responsibilities	Civil and Structural design		
Experience dates	Experience and qualifications relevant to the proposed contract		
	Mr. Thompson key areas of expertise include structural design in structural steel, precast concrete, cast-in-place concrete, masonry, light gage steel, and timber. Additional areas of expertise include computer modeling, wind load analysis, vibration analysis, and seismic analysis. Mr. Thompson has extensive experience modeling structural systems using three-dimensional computer modeling software such as RISA-3D and Revit. Mr. Thompson also utilizes AUTOCADD 2022, RISA Foundation, ENERCALC SEL, ADAPT PTRC, and MathCad on a daily basis. Mr. Thompson currently serves on the Civil Engineering Advisory Board at LA Tech.		
2013	Willis Knighton Health System, WK North Parking Garage Connector, Shreveport, LA. Steel-framed connector spanning Hearne Ave from a proposed parking garage to the WK North Main Tower Building. The elevated, enclosed pedestrian connector was designed to be 20-ft x 120-ft elevated pedestrian way supported by two steel tube arches reaching a height of 60-ft above Hearne Avenue. The connector spanned between stair and elevator towers at each end to facilitate pedestrian movement between the proposed parking garage to the WK North.		
2014	Willis Knighton Health System, WK North Heart Institute Connector, Shreveport, LA. Steel-framed connector spanning between the Heart Institute building at WK North and the OR/ICU facility. This elevated, enclosed pedestrian connector is 20-ft x 55-ft spanning over access to the hospital's main loading dock.		
2013 to 2014	Willis Knighton Health System, WK South Medical Office Building Connector, Shreveport, LA. Steel-framed connector spanning between the Parking Garage at WK South and the Medical Office Building. This elevated, enclosed pedestrian way is 10-ft x 50-ft spanning over an access drive at WK South's campus.		
2013 to 2015	Willis Knighton Health System, WK South Atrium Connector, Shreveport, LA. Steel-framed connector spanning between the WK South main entry atrium and the Behavioral Health facility. This elevated, enclosed, multi-story pedestrian connector is a 10-ft x 75-ft three-story structure linking WK South's main hospital building with the Behavioral Health facility.		
5/20	City of Taylor, Taylor Tiger Track, Taylor, AR. Design a Shared Use Trail beginning at Pope Street and extending east along the abandoned railway for approximately 3/4 miles. Mr. Thompson is providing coordination and preparation of bid documents and contract administration.		
1/07 to 12/08	Bossier Parish Police Jury, Linton Road, Bossier Parish, LA. Geometric realignment of a curve which did not meet design standards and the rehabilitation of the remainder of the road.		

2006	LADOTD, I-49 North, I-220 to LA 1, Caddo Parish, LA. Built templates, decision tables and superelevation for ramps over I-220 and MLK Drive. Also calculated and set right of way for mainline 49 as well as the ramps from I-220, MLK Drive and LA 1.
2006	LADOTD, US Highway 425, Bastrop – Log Cabin, Morehouse Parish, LA - Designed subsurface drainage and storm sewer systems with the use of Inroads Storm and Sanitary and LADOTD Hydraulics programs. Built templates, decision tables and superelevation for mainline US 425 and the side roads that connect. Performed design for all returns for the side roads and created all Typical Sections for the project.
2006	City of Bossier, LA 3, Benton Road Overpass, Bossier City, LA. Final construction plans and documents for a five lane urban realignment of LA 3 over the Kansas City Southern Railroad, including parcel calculations and right-of-way maps and construction phase services.
2006	City of Bossier, Arthur Ray Teague Parkway, Bossier City, LA. Project Designer for the continuation of the existing parkway along the Red River in Bossier City.

Firm employed by.



Meets MPR No. 8

Name	Jose L. Rodriguez, PE		Years of relevant experience with this employer	3
Title	Senior Roadway Engineer		Years of relevant experience with other employer(s)	24
Degree(s) / Years / Specialization			BS / 1992 / Civil Engineering, University of New Orleans	
Active registration number / state / expiration date			PE.0030492 / LA / Exp. 03/31/2027	
Year registered	2003	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Roadway/ Drainage Design	
 Mr. Rodriguez has more than 26 years of experience with roles of progressive responsibility as a civil engineer performing roadway design, bridge design, project management, hydraulic analysis, utility coordination, construction supervision, cost estimating, and project implementation for various clients in the states of Louisiana, Texas, Georgia, and North Carolina. Worked in close relationship with the Louisiana Department of Transportation, City of New Orleans Department of Public Works, New Orleans Sewer and Water Board, Plaquemines Parish, Jefferson Parish, St. Bernard Parish, U.S. Army Corps of Engineers, New Orleans Regional Planning Commission. Experience includes a wide range of project applications including Stage 0 feasibility and safety studies, safety design, environmental assessments, and design projects. Extensive experience in Inroads, Autodesk Civil 3d, Leap Bridge for Concrete Bridge Design, and Excel Spread Sheets. Served on the American Concrete Institute (ACI) Louisiana Board, becoming president of the Louisiana Chapter in 2010.				
Experience dates				
Experience and qualifications relevant to the proposed contract				
02/07 – 10/09				
John James Audubon Bridge Approach (Design-Build [DB]), LADOTD, New Roads, LA. Roadway Designer. Responsible for the geometric horizontal and vertical alignment for five approach bridges to the John James Audubon Cable Stay Bridge. The longest cable-stayed bridge in the Western Hemisphere consisting of 1,583’ main span. Also in charge of the quality control for all bridge approaches and the design of all precast concrete girders for the project.				
02/22 – 04/25				
I-10 Calcasieu River Bridge P3 (Calcasieu Parish, LA). Senior Roadway Engineer for the I-10 Calcasieu Bridge Replacement P3 project to replace the existing I-10 bridge over the Calcasieu River with a new bridge north of I-10. The project also includes the construction of several new bridge structures within the project limits, both inside and outside widening of I-10, improvements and modifications to existing interchanges, and improvements to other associated roadways within the project limits.				
04/21- 04/22				
Lee Drive (Highland Road to Perkins) Final Design Study Report, MOVEBR Baton Rouge, LA. Senior Roadway Engineer. Designer, Responsible for coordinating and developing concept drawings to evaluate the geometric feasibility of different roadway alternatives, proposed improvements, and anticipated right-of-way needs . Provided technical guidance to help identify green infrastructure opportunities along the project. Also assisted in the implementation of Complete Street regulations for the corridor. During the alternative’s selection process, conducts cost estimates to evaluate and select the preferred alternative.				
04/23 – 01/25				
LA 22 Tchefuncte River Bridge, LADOTD, St. Tammany Parish, LA. Lead Roadway Engineer. Responsible for preliminary roadway and drainage design for a Stage 0 Feasibility Study to develop and evaluate feasible alternatives for the replacement of the LA 22 Tchefuncte River Bridge in Madisonville, LA. The bridge has a high frequency of opening due to marine traffic and low elevation above the river. Arcadis developed several bridge alternatives including fixed and moveable bridge options. Alternatives were evaluated with respect to construction cost, ROW, traffic and safety, and environmental.				

	All study methods and results were documented in a Stage 0 Feasibility Report with Preliminary Scope and Budget Checklist and Environmental Checklist.
01/08 – 05/08	I-12 to Bush Corridor Study Phase III, LADOTD, St. Tammany Parish (STP), LA. Roadway Designer. Responsible for evaluating environmental issues and <i>developing design alternatives in accordance with the National Environmental Policy Act (NEPA)</i> for transportation improvements.
05/12 – 12/15	Earhart Boulevard Causeway Interchange, LADOTD, New Orleans, LA. Roadway Designer. Responsible for the <i>geometric design and roadway plan preparation</i> for the Earhart Boulevard-Causeway Interchange. The Earhart Boulevard Causeway Interchange purpose was to assist in traffic congestion relief for the east-west flow in traffic for the New Orleans Metro Area. It consisted of the <i>development roadway and bridge ramps for the creation of an elevated signal-controlled interchange.</i> The estimated construction cost for this project was approximately fifty-nine million dollars. Responsible for the <i>development of all horizontal and vertical alignments for this project as well as roadway plan preparation, developing all roadway cross sections</i> , drainage design, utility conflict resolution and cost estimating for the project. Bentley InRoads was used for the development of the roadway plans for this project.
02/10 – 06/11	I-10 from Veterans to Clearview, LADOTD, Metairie, LA. Roadway Designer. Responsible for <i>roadway plan preparation</i> for widening 1.2 miles of I-10 from three lanes to five lanes in each direction. The project also included bridge work to accommodate the new roadway widening. Jose was also <i>responsible for the alignment and design</i> of concrete sound walls along the corridor. He helped implement an innovative two-sided concrete stamp process for the noise wall precast concrete panels.
07/09 – 07/15	Peters Road Expansion, Phases I, II and III, LADOTD, Plaquemines, LA. Roadway Designer. Responsible for the <i>geometric design, plan preparation</i> and wetland delineation of Peters Road Phases I, II and III. The projects consisted of a new roadway, elevated crossing over the Intracoastal Waterway, approach roadways in Jefferson and Plaquemines Parishes to tie Peters Road to Louisiana 23 near Barrier Road. The projects were prepared in coordination with Plaquemines, DOTD and the U.S. Army Corps of Engineers.
10/17 – 03/18	Traffic Turn Lanes on Highway LA 3127, Yuhuang Chemical Inc., St. James, LA. Quality Control (QC). Review for the design of two turn lanes into the Yuhuang Chemical Methanol plant in St. James Louisiana. During construction, Jose provided the owner, with construction design services for the duration of the construction phase.
12/15 – 01/16	Magnolia Ridge Levee Project, City of New Orleans, St. Charles Parish, LA. Quality Control (QC). QC review and plan preparation for the Magnolia Ridge Levee project for St. Charles Parish.
06/04 – 01/11	Causeway Boulevard Interchange Improvements Phase I and II, LADOTD, Metairie, LA. Roadway Designer. For the project, which consisted of widening Causeway Boulevard elevated structure at Veterans Boulevard and the construction of new at grade and elevated ramps to provide better access, improve safety and ease congestion at this heavily travel interchange. Responsible for evaluating existing girders, the design of new precast concrete girders and the <i>roadway plan preparation for this project.</i> Also, responsible for evaluating and design of new sewer and water lines for the project as well as coordinating the removal and replacement of all utilities affected by the new roadways or/and structure foundations.

Firm employed by:



Name	Gabriel Arias, PE	Years of relevant experience with this employer	4
Title	Transportation Engineer	Years of relevant experience with other employer(s)	8
Degree(s) / Years / Specialization	BS / 2013 / Civil Engineering, Auburn University		
Active registration number / state / expiration date	PE. 0042599 / LA / Exp. 09/30/2027		
Year registered	2018	Discipline	Civil Engineer
Contract role(s) / brief description of responsibilities	Roadway/ Drainage Design		



Mr. Arias has more than eight years' experience performing complex geometric design on roadway including horizontal and vertical (H&V) alignment, hydraulic design cross drain pipes (CDP's) and open ditches, turn lane design, striping/signage, structural design analysis and QC, traffic management plans, and roadway plan production. As a roadway design engineer, Gabriel has direct experience utilizing DOTD's Roadway Design Procedures and Details Manual.

Experience dates	Experience and qualifications relevant to the proposed contract
06/16 – 02/17	LA 435 to LA 40/LA 41, LADOTD, St. Tammany Parish, LA. Project Engineer. The project calls for the construction of a new four-lane highway connecting I-12 to Bush, Louisiana, in St. Tammany Parish. The new roadway is approximately 19.8 miles in length and begins at LA 434, north of the existing LA 434 interchange with I-12, and traverses in a northeasterly direction until encountering an abandoned rail corridor. It then follows the rail corridor terminating at the LA 21/LA 41 intersections near Bush, Louisiana. Assisted with roadway geometric design including H&V alignment , hydraulic design for storm drains, CDP's and open ditches, structural design analysis and QC, Traffic management plans and roadway plan production for the new 5.5 mile 4-lane RA-3 roadway from LA 435 to Bush, LA.
07/13 – 06/16	Bayou Mercier Road/Berard Canal Bayou, LADOTD, St. Martin Parish, LA. Project Engineer. Performed topographic field surveying and assisted with bridge design, hydraulic analysis and roadway design for the replacement of the existing off-system bridge timber structure with a quad-beam concrete structure.
07/13 – 02/17	Derrick Road Bridge, LADOTD, Iberville Parish, LA. Project Engineer. Performed topographic field surveying and assisted with bridge design, hydraulic analysis and roadway design for the replacement of the existing off-system bridge timber structure with a slab span, concrete structure.
07/13 – 02/17	Jude & Placide Road Bridges, LADOTD, Vermilion Parish, LA. Project Engineer. Performed topographic field surveying and assisted with bridge design, hydraulic analysis and roadway design for the replacement of the existing off-system bridges timber structures with slab span, concrete structures.
06/18 – 10/19	Mid-Barataria Diversion Design, Plaquemines Parish, LA. Project Engineer. Planning, engineering and design services for the creation of the Mid-Barataria sediment diversion basin to strategically reintroduce sediment and freshwater inputs into the Barataria Basin. Assisted with detour roadway alignment creation/selection, TTC planning, and plan preparation.
07/13 – 10/16	City of Thibodaux Overlay Projects, LADOTD, Lafourche Parish, LA. Project Engineer. Project required chip sealing, joint & crack sealing, resurfacing and complete pavement replacement for four separate locations in the city of Thibodaux, LA. The goal was to prolong the life of the existing pavements by preventing future deterioration and/or rehabilitating the existing

	pavements. Assisted with roadway geometric design including horizontal alignments , selection of treatment type for pavements, hydraulic design for storm drains, CDP's and open ditches and roadway plan production.
09/13 – 02/17	Pecan Island Road Bridge Over The Chenal, LADOTD, Pointe Coupee Parish, LA. Project Engineer. Performed topographic field surveying and assisted with bridge design, hydraulic analysis and roadway design for the replacement of the existing off-system bridge timber structure with a customized slab span, concrete structure.
07/13 – 02/17	Gracie Lane Bridge, LADOTD, Iberville Parish, LA. Project Engineer. Performed topographic field surveying and assisted with bridge design, hydraulic analysis and roadway design for the replacement of the existing off-system bridge timber structure with a slab span, concrete structure.
04/14 – 02/17	Lajaunie Rd/Lateral 1 Bayou St. LADOTD, Clair, Lafayette Parish, LA. Project Engineer. Performed topographic field surveying and assisted with bridge design, hydraulic analysis and roadway design for the replacement of the existing off-system bridge timber structure with a slab span, concrete structure.
11/15 – 02/17	Babin Rd./Bayou Narcisse, LADOTD, Ascension Parish, LA. Project Engineer. Performed topographic field surveying and assisted with bridge design, hydraulic analysis and roadway design for the replacement of the existing off-system bridge timber structure with a slab span, concrete structure.
09/13 – 02/17	West 15th Avenue/Mile Branch, City of Covington, St. Tammany Parish, LA. Project Engineer. Performed topographic field surveying and assisted with bridge design, hydraulic analysis, and roadway design for the replacement of the existing bridge timber structure with a customized slab span, concrete structure. Included an integral pedestrian/bicycle path and custom barrier to separate pedestrians and vehicles.
02/18 – 04/18	US 377 Cresson Relief Route, TXDOT, TX. Project Engineer. TXDOT will construct a three-mile relief route west of the city of Cresson. The relief route will be a new four-lane divided highway on US 377 beginning one mile south of the intersection of US 377 and SH 171 and ending one mile north of the same intersection. Assisted with plan creation including H&V alignment review , TTC plans, construction quantity estimation and roadway plan production for the realigned roadway.
06/17 – 10/17	Hwy 270 Widening Connecting Arkansas Program (CAP), CA0607, Garland County, AR. Project Engineer. Contracted by AHTD, as part of their Connecting Arkansas Program (CAP), to assist with the design of widening approximately three miles of Hwy 270 in Garland County. The proposed roadway is 4 lanes with a painted median from Hwy 270 to Black Snake Road, then 5 lanes curb & gutter from Black Snake Road to Hwy 227. Responsibilities include the drainage design and plan production , wetland delineation and maintenance of traffic plans . Tasks include preliminary site visits, developing hydraulic and hydrologic models for the pipes, submittal of Hydraulic Report, drainage ditch design, maintenance of traffic plan submittals and wetlands report.

Firm employed by:  **ARCADIS**

Name	Garret Keller, PE	Years of relevant experience with this employer	11
Title	Design Engineer	Years of relevant experience with other employer(s)	0

Degree(s) / Years / Specialization	MS / 2011 / Transportation Engineering; Louisiana State University BS / 2003 / Civil Engineering; Louisiana State University		
Active registration number / state / expiration date	PE.040977 / LA / Exp. 03/31/2027		
Year registered	2012	Discipline	Civil Engineer
Contract role(s) / brief description of responsibilities	Roadway/Drainage Design		

Experience dates	Experience and qualifications relevant to the proposed contract		
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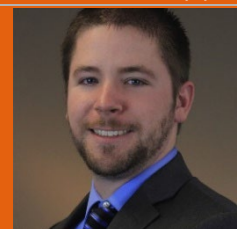
Mr. Keller is a civil design engineer who has spent his entire tenured career at Arcadis. He has been involved with several Louisiana Department of Transportation and Development (LADOTD) projects and has **direct experience utilizing DOTD's Roadway Design Procedures and Details Manual**. His responsibilities have included roadway and structural detailing and design, civil design, geometrics, and cost estimating. He also oversees implementation of CAD **systems and standards for Louisiana** including MicroStation, InRoads, and CAD conform for LADOTD work.

07/15 – 06/17	US 190B at Jefferson Avenue Roundabout Design, LADOTD, St. Tammany Parish, LA. Roadway Engineer: Responsible for geometric and roadway design for replacing an existing four-lane signalized intersection with a single-lane roundabout. The project also included a Context Sensitive Solutions study to optimize benefit to the adjacent real estate and community needs.
02/19 – Ongoing	NDRC Ohio Creek Watershed Project, City of Norfolk, VA. Lead Civil Engineer: Project consists of earthen berms, reinforced concrete floodwalls, and internal stormwater pump stations, as well as, upgraded existing transportation infrastructure to provide better mobility and safety for pedestrians and bicyclists. These features include elevated roadways, new shared use paths, upgraded culverts with stormwater closure structures, and various green infrastructure treatments.
09/12 – 04/14	US 165 Connector and Ouachita River Bridge EIS, LADOTD, Ouachita Parish, LA. Roadway Designer: Responsible for roadway design support on a project that provides needed transportation system linkage in the north Monroe region.
11/12 – 04/13	LA 594 (Millhaven Rd.) Alternatives, I-20 Economic Development Corporation, Ouachita Parish, LA. Primary Designer: Roadway intersection and roundabout improvement alternatives for a LADOTD Stage 0 study . Two roundabouts were evaluated in compliance with LADOTD EDSM V.1.1.5 (Analysis) and EDSM V.1.1.6 (Design).
08/11 – 09/13	Chef Menteur Bridge and Approaches EA, LADOTD, Orleans Parish, LA. Roadway Designer: Responsible for geometry and roadway design for a high-priority bridge replacement . Key issues included minimizing impacts to Bayou Sauvage National Wildlife Refuge, Fort McComb, the existing bridge that is eligible for the NRHP, and compliance with Complete Streets Policy.
02/09 – 02/13	US 90 WBV 73- Western Tie-In Crossing Lake Cataouatche Area (Bridge/Roadway Approach/T-walls), USACE - New Orleans District, Jefferson & St. Charles Parishes, LA. Project Designer: Preparation of Plans and Specifications for new floodwall and highway bridge in St. Charles Parish. Design of floodwalls, four-lane highway bridge, and detour roads to maintain traffic traveling on US Highway 90. The project involved improvement layout and quantity calculations in support of cost estimates.

Firm employed by:



Name	Colin C. Sarratt, PE	Years of relevant experience with this employer	10
Title	Senior Hydraulics Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BS / 2015 / Civil Engineering		
Active registration number / state / expiration date	PE.0046542 / LA / Exp. 09/30/2026		
Year registered	2022	Discipline	Civil Engineer
Contract role(s) / brief description of responsibilities	Roadway/ Drainage Design		



Mr. Sarratt has 10 years of experience on transportation projects with a focus on stormwater hydrology and hydraulics and roadway engineering. His expertise includes hydraulic analysis and hydrologic feasibility studies, open and closed conveyance system design, culvert and cross-drain design, post-construction stormwater and water quality best management practices (BMP) design, and 2D bridge hydraulic bridge analysis. He has been responsible for leading hydrology and hydraulics design for schematics, design build, and complete plans, specifications, and estimate (PS&E) plan sets. He is proficient in Microstation, GEOPAK Subsurface utilities, Inroads ,OpenRoads, StormCAD, SMS, and SRH2D.

Experience dates	Experience and qualifications relevant to the proposed contract
09/21 – 04/25	Calton Road Overpass, Webb County, City of Laredo, TX. <i>Project Manager and Drainage Lead</i> for the Calton Road Overpass project located in the City of Laredo Texas to construct a railroad overpass over Santa Maria Avenue, the Union Pacific Railroad mainline, and turnaround tracks. The project also includes widening of Calton Rd to maintain access to Santa Maria Avenue due to the proposed overpass. As project manager, kept close coordination between multiple design disciplines and stakeholders including the City of Laredo, TxDOT, and UPRR. The project also included the design of a closed drainage system with additional storage capacity in order to mitigate impacts to the existing drainage system downstream of the project site and still meet hydraulic grade line requirements .
10/22 – Ongoing	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Replacement (OSBR) Program, District 01, LADOTD. <i>Senior Drainage Engineer.</i> Prepared preliminary and final plans of six proposed bridges, which included plan and profile sheets, typical roadway sections and quantities, a general bridge plan, traffic detour and road closure details, and relevant signing plans, as well as channel cross-sections. As senior drainage lead for this program, oversaw and prepared all Hydraulic analysis and design .
08/25—Ongoing	LADOTD IDIQ Contract for Hydraulics Section Support, Statewide, Louisiana. <i>Project Manager.</i> Task under this IDIQ contract includes Hydraulics Section manuals updating, HEC-RAS 1D and 2D watershed modeling, performance and technical review of NFIP no-rise applications, CLOMR and LOMR applications for highway and bridge projects, 2D bridge hydraulic modeling and scour analysis utilizing Aquaveo's SMS software, and general hydrologic and hydraulic analysis.
06/17 – 03/22	Ogeechee River Bridge Replacement (Effingham County, GA). <i>Drainage Lead</i> for the roadway realignment and bridge replacement for 2 bridges at the SR 119 and Ogeechee River bridge crossing (1 main channel and 1 of 2 overflow bridges) in Effingham County, GA. The project involved the creation of a 2D hydraulic model utilizing SMS and SRH-2D in order to design the proposed multiple bridge configuration along SR 119 in order to determine proposed bridge lengths and elevations in order to meet both GDOT bridge design standards and GDOT hydraulic design studies requirements for the proposed configuration.
02/22 – 04/25	I-10 Calcasieu River Bridge P3 (Calcasieu Parish, LA). <i>Drainage Lead</i> Segment 1 of the I-10 Calcasieu Bridge Replacement P3 project to replace the existing I-10 bridge over the Calcasieu River with a new bridge north of I-10. The project also includes the construction of several new bridge structures within the project limits, both inside and outside widening of I-10, improvements and modifications to existing interchanges, and improvements to other associated roadways within the project limits. Project

	involves the design of both open and closed conveyance systems for Segment 1 between Prater Rd and PPG drive, culvert and cross-drain analysis and design, and outfall analysis utilizing LADOTD HYDR design software.
12/15 – 04/25	GDOT MS4 Permit Compliance (State-wide, GA). <i>Drainage Lead</i> for an ongoing contract to provide program assistance and help GDOT provide public education and outreach on stormwater impacts, public involvement/participation, illicit discharge detection and elimination, construction site stormwater runoff control, post-construction stormwater management , pollution prevention/good housekeeping for municipal-type operations, and water quality monitoring and total maximum daily load. Responsibilities include the research and development of GDOTs post-construction stormwater BMP details and example plan sheets for state-wide, creation and development of MS4 related standards and specifications, assisting with the development of GDOT MS4 policy, and MS4 related GDOT Drainage Report revisions.
11/16 – 04/18	FY-17 Bridge Bundles (Polk County, GA). <i>Drainage Lead</i> for replacement at Mountain Loop Road over Little Cedar Creek in Polk County, GA as part of the GDOT FY-17 Bridge bundles project. The project involved the creation of a 2D hydraulic model utilizing SM and SRH-2D in order to design the proposed bridge crossing due to the sever skew of the creek under the existing bridge. Responsibilities included the design of the proposed bridge lengths and elevations in order to to meet GDOT Bridge design standards and GDOT hydraulic design study requirements for the proposed configuration, H&H report creation , and a bridge deck drainage analysis.
02/23 – 05/23	Shelby Avenue Off-System Bridge Replacement (Hunt County, TX). <i>Drainage Lead</i> for the Shelby Avenue Bridge Replacement Project located in Hunt County Texas to replace the existing bridge over Faber Creek as part of the Paris District Off-System bridge PS&E replacement project. Responsibilities included leading the H&H analysis for the bridge crossing for both the existing and proposed conditions, determined and verified peak flows at the existing crossing, performed an impact assessment due to changes in water surface elevations, developed HEC-HMS and HEC- RAS models, and prepared a comprehensive drainage report to document findings.
06/21 – 12/22	TDOT I-65 Widening (Sumner & Robertson Counties, TN). <i>Drainage Engineer</i> for Segment 2 of the I-65 widening project located in Sumner and Robertson Counties to widen I-65 to three lanes from Highway 31w to south of New Hall Rd that included both inside and outside widening. Project involved the design of numerous closed drainage systems in OpenRoads due to proposed inside widening, determining pre-developed and post-developed peak flows for project outfalls, open conveyance system design, and the design and analysis of multiple culvert and cross-drains crossings throughout the project.
03/22 – 04/24	FM 1209 at FM 969 Intersection Improvements (Bastrop County, TX). <i>Project Manager and Drainage Lead</i> for the FM 1209 at FM 969 Intersection Improvements Project located in Bastrop TX to reconstruct the existing Y-intersection into a T-intersection, provide full depth reconstruction for both roadways within the project limits, construction of a right-hand turn lane along FM 1209 EB with additional widening for a future left-hand turn lane, and the construction of a flashing beacon with the anticipation of a future signalized intersection and through lane. Project involved the multiple planning considerations due to future developments adjacent to and within close proximity to the project site including SpaceX and The Boring Company. The drainage design primarily included both cross-drain and open channel design.
07/22 – 04/25	Grant Rd Widening – Segment 4 (Harris County, TX). <i>Project Manager</i> for the study phase to widen Grant Rd from 2 to 4 lanes with a raised median and south-side sidewalk (Cypress Rose Hill Rd to Telge Rd). Led coordination with Harris County and stakeholders on shared outfall design, stormwater channel expansion, and permitting. Managed subconsultants, traffic studies, and study phase reporting.

16 STAFF EXPERIENCE.

Firm employed by. 			Meet MPR No. 10
Name	Akhil Chauhan, PE, PTOE, PTP, PMP		Years of relevant experience with this employer
Title	Principal Traffic Engineer		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		MS / 2003 / Transportation Engineering, Massachusetts Institute of Technology BS / 2001 / Civil Engineering, Indian Institute of Technology	
Active registration number / state / expiration date		PE. 0033703 / LA / Exp. 09/30/2026; PTOE 2544 / USA / Exp. 11/2026 PTP 246 / USA / Exp. 12/2027; PMP 1444676 / USA / Exp. 08/2026	
Year registered	2008	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		Principal-in-Charge & Traffic Engineering / Mesoscopic Modeling	
		Mr. Chauhan is a principal traffic engineer with 23 years of applied research and industry experience in the fields of traffic engineering, traffic modeling and simulation, transportation planning, demand modeling/forecasting, intersection/corridor analysis, safety studies, and access management. Akhil has successfully led, managed, and mentored numerous projects related to transportation modeling, simulation, and planning for public agency clients located across the nation including several state Departments of Transportation. He is proficient in the use of many macro-, meso-, and microscopic traffic simulation software programs such as HCS, Vistro, Synchro, SIDRA, Vissim, MITSIM, Dynameq, DynaMIT, TransCAD, Visum, and OREMS.	
Experience dates		Experience and qualifications relevant to the proposed contract	
8/01 – 5/02		Mesoscopic Traffic Model for Irvine (California) Network, FHWA, MIT ITS Lab, Cambridge, MA. Research Assistant. Research team member of a FHWA-funded project to develop mesoscopic traffic model in DynaMIT (Dynamic Network Assignment for the Management of Information to Travelers) software, a real-time and planning-level mesoscopic traffic prediction and guidance software system. Processed and analyzed very detailed traffic sensors data and used it for the calibration of DynaMIT, for the Irvine network in California. Contact: Prof. Moshe Ben-Akiva, MIT, mba@mit.edu.	
5/02 – 8/03		Mesoscopic Traffic Model for Lower Westchester County New York) Network, FHWA, MIT ITS Lab, Cambridge, MA. Research Assistant. Research team member of a FHWA-funded project to develop mesoscopic traffic model in DynaMIT software for the Lower Westchester County (LWC) in New York. The objective of the project was to apply DynaMIT's dynamic traffic assignment (DTA) capabilities to the LWC ITS subsystem and to use calibrated system to perform illustrative analyses of incident response strategies . First, DynaMIT was calibrated in order to estimate traffic conditions in the LWC network. The results of a case study, focusing on the evaluation of the diversion response strategy in case of an incident on the LWC network, illustrate the functionality and potential of the system. Evaluated equipment placement options and diversion strategies for incident response and generated guidance to drivers by Variable Message Signs (VMS) and Highway Advisory Radio (HAR). Contact: Prof. Moshe Ben-Akiva, MIT, mba@mit.edu.	
8/01 – 8/03		Integrated Mesoscopic-Microscopic Framework for Real-time Traffic Estimation and Prediction System, MIT ITS Lab, Cambridge, MA. Research Assistant. Research team member to assist testing an integrated framework where MITSIM (Microscopic Traffic SIMulation) software was used to estimate real-time traffic condition, and DynaMIT (mesoscopic DTA-	

	based model) software was used for traffic prediction and guidance system. Boston's Central Artery/Tunnel (Big Dig) project was used as a test bed. Contact: Prof. Moshe Ben-Akiva, MIT, mba@mit.edu.
08/18 – 12/19	Mesoscopic Traffic Model for I-10 Widening, LADOTD, Baton Rouge, LA. Principal Engineer. Responsible for supervising development of mesoscopic traffic model used for this project. The object of the study was to develop an existing conditions model . Responsibilities included defining study area, assessing data needs, developing data collection plan, preparing calibration documentation, and preparing model documentation. Contact: Ryan Hoyt, LADOTD, ryan.hoyt@la.gov.
01/18 – 05/21	I-20 Mesoscopic Traffic Model and TMP, LA 3 to LA 3105, LADOTD, Bossier City, LA. Principal Engineer. Responsible for supervising development of mesoscopic traffic model to predict queueing, delay and alternate travel patterns due to planned construction on I-20 to replace pavement. The project is anticipated to disrupt traffic in this critical portion of I-20. The project scope includes development and calibration of mesoscopic model, analysis of alternative routes, safety analysis, operational analysis, assistance with public outreach, development of a Level 4 TMP, and development of work zone mitigation strategies. Contact: Ryan Hoyt, LADOTD, ryan.hoyt@la.gov.
06/20 - Ongoing	I-10 CMAR Mesoscopic Models and TMP, LADOTD, Baton Rouge, LA. Principal Engineer. Responsible for supervising development of mesoscopic traffic models for work-zone management strategies needed to minimize motorists delays during construction without compromising safety or quality of work. Contact: Ryan Hoyt, LADOTD, ryan.hoyt@la.gov.
07/19 – 06/21	Traffic Study and Mesoscopic DTA model for Sustainable Mobility Alternatives for Regional Transportation, TxDOT, Houston, TX. Technical Advisor. Guiding the team in the development of a sub-area mesoscopic DTA model capable of modeling innovative technology such as connected/autonomous vehicles and mobility as a service (Uber/Lyft, bike share, etc). Also responsible for review of model development and calibration procedures. Contact: Brenda Bustillos, TxDOT, Brenda.Bustillos@txdot.gov.
02/12 - 12/13	Mesoscopic (Integrated Macroscopic-Microscopic Model Framework) Traffic Model for Evacuation Time Estimate Studies, TVA, CN 5749, TN & AL. Project Manager. Development of large-scale, mesoscopic traffic models (integrated macroscopic-microscopic model) of the ten-mile surrounding area of nuclear power plant sites. The models provided an evacuation time estimate for the area should the nuclear facility sustain an accident requiring the evacuation. Responsibility included: estimating vehicle demand for various trip types within the study area, estimating the vehicular capacity of major highways within and surrounding the study areas, coding the highway network (especially intersection-node lane dependency information) based on data obtained from field survey, development of departure time curves for trip tables based on local conditions for the population within the study areas, performing simulation of background and evacuation traffic using dynamic traffic assignment algorithms and determining protection zone clearance times based on more realistic queues and spill-back provided by the model. Contact: Walt Lee, TVA, whlee@tva.org.
09/09 – 03/12	I-20 Garrett Road Connector Interchange Improvements, LADOTD, Ouachita Parish, LA. Principal Engineer. Provided design oversight and technical advisory role for the Geometry and roadway design of the new KCS Railroad overpass and connector between Kansas Lane and Garrett Road , including interstate interchange modifications to include two-lane roundabouts at ramp intersections, and three two-lane roundabouts outside of the interchange. Improvements to the pedestrian and bicycle facilities were included in accordance with the LADOTD Complete Streets Policy.

Firm employed by. 				Meets MPR No. 9
Name	Ari Deitch, PE, PTOE, PTP, RSP1		Years of relevant experience with this employer	11
Title	Senior Transportation Engineer		Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization			BS / 2012 / Biological Engineering, Louisiana State University	
Active registration number / state / expiration date			PE.0041842 / LA / Exp. 03/31/2026; PTOE #4346 / USA / Exp. 11/2026 PTP #690 / USA / Exp. 07/2028; RSP #37 / USA / Exp. 12/2027	
Year registered	2018	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Traffic Engineering	
		Mr. Deitch is a Senior Traffic Engineer specializing in traffic engineering and design, safety, transportation management, and conceptual roadway design. Mr. Deitch has experience managing and working on projects for LADOTD and the City of Baton Rouge, as well as other DOTs across the country, pertaining to NEPA studies, interchange modification / justification reports, Stage 0 feasibility studies, transportation management plans, traffic, and safety studies pedestrian and bicycle improvements, access management, signal design, and signing and marking design. He has experience and proficiency in IHSDM, SYNCHRO, VISTRO, VISSIM, SIDRA, GuidSIGN, HCS and MicroStation software. Mr. Deitch has completed LADOTD Traffic Engineering Process and Report Training.		
Experience dates		Experience and qualifications relevant to the proposed contract		
07/14 – Ongoing		Pete's Highway Traffic Study and Environmental Assessment, LADOTD, Denham Springs, LA. Traffic Engineer. Responsible for traffic analysis of proposed alternatives using Vissim software. Played a key role in the development of preliminary roadway design drawings incorporating Complete Streets. Work involved completing an Environmental Assessment and Line and Grade and providing <i>traffic engineering services related to improving operations and safety</i> along Range Avenue at the I-12 interchange. Developed an Interchange Modification Report including traffic study results and FHWA Policy Points.		
04/22 – Ongoing		LA 30 (I-10 to EBR Parish Line) Environmental Assessment, LADOTD, Ascension Parish, LA. Senior Traffic Engineer. Responsible for technical advisory of <i>traffic engineering</i> tasks including traffic data collection, peak period observations, volume projections and Highway Capacity Analysis (multi-period analysis using Highway Capacity Software) and ensuring conformance with LADOTD TEPR Requirements.		
03/17 – Ongoing		I-49 Supplemental Environmental Impact Statement, LADOTD, St. Mary Parish, LA. Senior Traffic Engineer. Responsible for traffic engineering tasks including data collection, volume development, Vissim microsimulation model calibration, and alternative development and analysis. The purpose of the project is to conduct a <i>Supplemental Environmental Impact Statement (SEIS)</i> study to quantify the impacts of converting US-90, which has numerous existing access connections, to a control of access interstate (future I-49) facility. Arcadis developed a unique volume development methodology to estimate the redistribution of traffic that would result from the conversion of US-90 to I-49.		
07/14 – Ongoing		US 11 Environmental Assessment, LADOTD, St. Tammany Parish, LA. Traffic Engineer. Responsible for crash analysis, operating speed tabulations, intersection and corridor analysis, alternative development, and noise modeling for the proposed widening of US 11 between US 190 (Gause Blvd) and I-12 in Slidell, LA. The proposed improvements include replacing a bridge crossing the Norfolk Southern Railroad. This project includes analyzing several <i>innovative alternatives for the proposed corridor, including “superstreets” and J-turn concepts.</i>		

02/22 – Ongoing	I-10 Calcasieu River Bridge P3 (Calcasieu Parish, LA). <i>Traffic Engineer</i> for the I-10 Calcasieu Bridge Replacement P3 project to replace the existing I-10 bridge over the Calcasieu River with a new bridge north of I-10. The project also includes the construction of several new bridge structures within the project limits, both inside and outside widening of I-10, improvements and modifications to existing interchanges, and improvements to other associated roadways within the project limits. Ari's role in the project involves traffic engineering, including the development of a Transportation Management Plan (TMP) and the design of permanent signage, signals, and pavement markings.
11/20 – Ongoing	I-10 CMAR, LADOTD East Baton Rouge Parish, LA. <i>Traffic Engineer.</i> Project includes improvements on Interstate 10 through widening and reconstruction of the mainline from 3 to 4 lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsible for wide range of traffic engineering tasks including development of permanent signing plans, Interchange Modification Reports , and Transportation Management Plans for the widening of I-10 from LA 415 to Essen Lane and improvements to interchanges along this segment.
01/19 – 05/20	US 90 Ramps at LA 88 Roundabouts, Iberia Parish, Louisiana. <i>Transportation Engineer.</i> Assisted with permanent signing and striping components of roadway safety design plans for proposed roundabouts.
02/23 – 05/24	District 04 Pedestrian Safety Improvements, LADOTD, Caddo and Bossier Parish, LA. <i>Project Manager.</i> Responsible for contract management and technical advisory for this Stage 0 Feasibility study to develop and evaluate safety countermeasures to address pedestrian safety needs on 7 corridors within Caddo and Bossier Parish. The study methodology was similar to that of a Road Safety Assessment, and included historical crash analysis and on-site field reviews to identify pedestrian safety needs. Countermeasures were developed in close coordination with project stakeholders including City of Bossier, City of Shreveport, NLCOG, Downtown Development District, and District 04. Stakeholders also participated in virtual and on-site field reviews. Study data, methods, and results were documented in a Stage 0 Feasibility Reports were completed for all 7 study corridors with Preliminary Scope and Budget Checklist and Environmental Checklist. Performed benefit-cost analysis to aid in prioritizing the implementation of countermeasures.
04/16 – 09/18	New Orleans Pedestrian Safety Improvements, LADOTD, Orleans Parish, LA. <i>Project Manager.</i> Responsible for assessing existing and future safety deficiencies related to pedestrian and bicycle modes and selecting safety countermeasures for 20 high-risk locations. Developed design drawings for proposed short-term and long-term improvement phases and conducted benefit-cost analysis to inform project prioritization. Conducted safety analysis using Highway Safety Manual predictive methods. Organized and led project stakeholder meetings to review alternatives, obtain feedback, and develop context sensitive solutions. Completed Stage 0 documentation including Preliminary Scope and Budget and Environmental Checklists for all 20 intersections.
04/16 – 10/19	I-12 Hard Shoulder Running Feasibility Study and Preliminary Design, LADOTD, East Baton Rouge and Livingston Parishes, LA. <i>Traffic Engineer.</i> Conducted traffic analysis using a calibrated microsimulation model to evaluate the operational performance of HSR and HOV lane alternatives. Developed conceptual drawings and construction cost estimates to evaluate the feasibility of proposed alternatives.
02/17 – 02/18	I-49 Interchange Safety Improvements, LADOTD, Lafayette Parish, LA. <i>Traffic Engineer.</i> Responsible for data collection and analysis, traffic analysis, and conceptual design drawings. The purpose was to identify feasible improvement alternatives to address safety issues along the I-49 corridor at 3 interchanges. Participated in meetings with LADOTD HQ and District 03 team members to understand project needs and develop context sensitive solutions.

Firm employed by.



Meets MPR No. 9

Name	Kester Hollier, PE, PTOE	Years of relevant experience with this employer	4
Title	Senior Transportation Engineer	Years of relevant experience with other employer(s)	16
Degree(s) / Years / Specialization	BS / 2004 / Civil Engineering, Louisiana Tech University		
Active registration number / state / expiration date	PE.034304 / LA / Exp. 03/31/2027; PTOE #3928 / USA / Exp. 11/2027		
Year registered	2009	Discipline	Civil Engineer
Contract role(s) / brief description of responsibilities	Traffic Engineering		
	Mr. Hollier has 20 years of experience in the field of transportation engineering including traffic engineering, signal timing and design, roadway design, complete street improvement projects, roadway safety analysis and design, and construction management and inspection. Working on a wide variety of projects from the planning and conceptual phases to the design and construction phases, has given him the experience to help identify the needs and requirements for projects. This experience allows him to understand stakeholders ranging from local public agencies to state DOTs and helps provide expertise in achieving successful solutions for a variety of projects. He has experience and proficiency in traffic engineering and safety analysis software including IHSDM, SYNCHRO, VISTRO, VISSIM, SIDRA, GuidSIGN, HCS and MicroStation software.		
	Experience dates	Experience and qualifications relevant to the proposed contract	
	09/12 – 02/16	Stage 1 EA for Replacing Belle Chasse Tunnel and Bridge, LADOTD, Plaquemines Parish, LA. Traffic Engineer. Responsible for the feasibility study and traffic analysis along LA 23 (Belle Chasse Highway) between LA 428 (Behrman Highway) and LA 406 (Woodland Highway) for multiple 6-lane bridge alternatives proposed to replace the existing Belle Chasse Tunnel and lift bridge over the Intercoastal Waterway. These alternatives included 3%, 4%, and 5% bridge grades that modified roadway geometry and intersection location. Responsible for the review of roadway design and costs for the Line and Grade Study along with the review of the construction sequencing and traffic maintenance of the constructability review.	
	11/20 – Ongoing	I-10 CMAR, LADOTD, East Baton Rouge Parish, LA. Project Manager. Responsible for traffic engineering tasks including development of permanent signing plans, traffic signal plans, interchange modification reports, and transportation management plans for the widening of I-10 from LA 415 to Essen Lane and improvements to interchanges along this segment. Extensive historical crash and safety analysis is being performed in support of the IMR and TMP. One critical component of the project is maintaining traffic during the construction of new bridge structures. Multiple scenarios are being evaluated using a calibrated mesoscopic model to determine the impacts during construction and mitigations that will be necessary to minimize delay.	
	12/17 – 11/19	Causeway Boulevard Widening, Jefferson Parish, LA. Project Manager / Traffic Engineer. Responsible for the traffic and safety study for the proposed widening of Causeway Boulevard between Metairie Rd. and West Esplanade Blvd. in Jefferson Parish, LA. Tasks included data collection, traffic volume redistribution, left-turn placement and turn bay storage length, and existing traffic analysis and future traffic analysis of a preferred alternative.	
	11/17 – 07/20	LA 466 (5th Street) Improvements Traffic Study, City of Gretna, Jefferson Parish, LA. Project Manager / Traffic Engineer. Responsible for the traffic study and impacts for the proposed complete streets improvements along the LA 466 corridor between LA 23 and Richard St. in Gretna, Louisiana. Tasks included data collection along the corridor and at designated	

	intersections, safety and crash analysis along the corridor, trip generation/land use and performing existing traffic analysis and future traffic analysis for proposed final alternative . The traffic study was prepared to follow the Louisiana Department of Transportation and Development's Traffic Engineering Process and Report Guidelines. The project also included a stand alone pedestrian study along the corridor at designated intersection and the design of accessible pedestrian signals at signalized intersections.
07/21 – 07/22	US 61: Cardinal Drive to Bert Street Safety Improvements, LADOTD, St. John the Baptist Parish, LA. Traffic Engineer. Assisted with the development of a Stage 0 Feasibility and Safety Study for the US 61 Corridor in LaPlace, LA. Responsible for traffic and safety analysis tasks for existing, no-build, and build conditions. Analysis was performed using HCS. Purpose of the study was the develop and evaluate feasible alternatives that would address operational and safety needs along the corridor .
06/13 – 04/14	US 190 Roundabout and Ped Improvements, LADOTD, St. Tammany, LA. Traffic Engineer. Responsible for roundabout geometric design and pedestrian and bike path design along the US 190 corridor in the City of Slidell and St. Tammany Parish to improve safety for motorized and non-motorized roadway users.
05/14 – 08/20	Causeway Blvd. at Earhart Expwy. Interchange, LADOTD, Jefferson Parish, LA. Traffic/Civil Engineer. Responsible for the design of traffic control and construction sequencing, pavement marking layout, quantity analysis, cost estimates, and quality control for a new interchange at LA 3139 (Earhart Expwy.) and LA 3046 (Causeway Blvd.) in Jefferson Parish, LA. Provided review for the interchange traffic sign and traffic signal timings and design. Identified all necessary design waivers and design exceptions required for LADOTD approval. Provided geometric layout design, typical section design and review, and joint layout design for several interchange ramps and underpasses.
10/18 – 01/19	LA 22 Traffic Circulation and Corridor Analysis, NORPC, St. Tammany Parish, LA. Traffic Engineer. Responsible for the development of three future alternatives along Northshore Boulevard between I-12 and US 190 in Slidell, LA. Managed the data collection process and peak period observations to determine existing traffic patterns as well as the safety analysis along the corridor. Developed three alternatives that used a combination of traffic signal retiming, J-turns, and roundabouts to provide better access management along Northshore Boulevard as well as improve traffic flow in the corridor for current and proposed future conditions with consideration given to proposed future developments using trip generation and land use analysis.
05/09 – 07/13	LA 23 Widening (Lapalco Blvd. – Engineers Rd.), LADOTD, Jefferson and Plaquemines Parishes, LA. Traffic/Civil Engineer. Responsible for the roadway design and geometrics for the widening of LA 23 in Jefferson and Plaquemines Parishes between Lapalco Blvd. (LA 428) and Engineers Rd. (LA 3017). Developed traffic analysis for the traffic signal timing and required turn bay lengths at intersections. Developed traffic signing plans, pavement marking layouts and temporary traffic control plans.
10/10 – 7/15	Barriere Road Feasibility Study/Traffic Study, US Department of Defense, Plaquemines Parish, LA. Civil/Traffic Engineer. Responsible for the geometric layout and design of the realignment alternatives of Barriere Rd. between LA 23 to the US Naval Air Station. Developed and reviewed traffic analysis for arrival and departure patterns for the South US Naval Air Station entrance gates.

Firm employed by.



Meets MPR No. 9

Name	Sridhar Basetty, PE, PTOE	Years of relevant experience with this employer	20
Title	Principal Transportation Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	MS / 2004 / Civil Engineering, University of Dayton BS / 2002 / Civil Engineering, Osmania University		
Active registration number / state / expiration date	PE. 38950 / LA / 09/30/2026; PTOE 3682 / USA / Exp. 08/2026		
Year registered	2010	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Traffic Engineering		
	Mr. Basetty is a Senior Traffic Engineer with over 20 years of experience in a wide range of traffic engineering applications including traffic modeling and analysis, intersection and corridor studies, signal warrant analysis, signal design, and signing design. His project experience includes stage 0 feasibility studies, freeway and arterial corridor studies, IMR and IJR studies, transportation management plans, environmental assessments and traffic impact studies. He is highly proficient with traffic modeling and analysis tools that include Highway Capacity Software, Synchro / SimTraffic, TRANSYT 7F, CORSIM, Vissim, Sidra, Visum, CUBE, and TransCAD.		
Experience dates	Experience and qualifications relevant to the proposed contract		
04/16 – 09/18	Safety Studies IDIQ - New Orleans Pedestrian Stage 0 Safety Feasibility Study, LADOTD, Orleans Parish, LA. Senior Traffic Engineer. Responsible for traffic data collection and volume projects for motorized and non-motorized transportation modes. Assisted in traffic operations analysis for existing and future year conditions and build scenarios. Purpose of the project was to improve pedestrian and bicycle safety for 20 high-risk locations in Orleans Parish.		
08/14 – 06/15	Safety Studies IDIQ - LA 3235 Stage 0 Safety Feasibility Study, LADOTD, Lafourche Parish, LA. Traffic Engineer. Responsible for review of existing crash data and traffic operations analysis , development of safety countermeasures , conceptual drawings, and Stage 0 documentation . Purpose of the project was to develop access management strategies and roadway improvements that will maintain and improve mobility, improve safety, support existing and future development along the corridor. Safety performance of alternatives were estimated using Highways Safety Manual predictive methods .		
01/14 – 09/18	Traffic Engineering IDIQ - US 71 Corridor Traffic Study - Phases 1-3, LADOTD, Rapides Parish, LA. Senior Traffic Engineer. Preparation of a traffic studies for the purpose of enhancing mobility and safety. Main tasks include traffic data collection , signal warrant studies , traffic analysis , safety data analysis, and development of conceptual layouts. Data collection efforts include automated one-week counts, manual turning movement counts, intersection approach counts, travel time runs, and spot speed studies. Responsibilities include conducting signal timing optimization , signal warrant analysis at all major intersections and developing a preliminary cost estimate and conceptual layout drawings of alternatives including U-turns, J-turns, restricted turns, one-way frontage roads, slip ramps, and service road islands (right-out only). Responsibilities also include developing Vissim model animations of the proposed alternatives for high- and low-volume scenarios.		
02/15 – 01/18	Traffic Engineering IDIQ - LA 3105 (Green Acres to LA 72) Corridor Traffic Study, LADOTD, Bossier Parish, LA. Senior Traffic Engineer. Responsible for overseeing the development/evaluation of existing and future year conditions using a calibrated Vissim model . Designed alternatives for phased implementation based on identified needs and input from local stakeholders including medians, restricted intersections, roundabouts, roadway widening, and signal timing enhancements . Responsible		

	for development and quality control of all project deliverables including traffic modeling , public involvement, and traffic study documentation .
03/17 – Ongoing	I-49 South (Ricochoc to Berwick) Supplemental Environmental Impact Statement (SEIS), LADOTD, St. Mary Parish, LA. Senior Traffic Engineer. Responsible for overseeing traffic engineering components of the supplemental environmental impacts statement. Study elements include data collection, microsimulation model development and calibration, travel forecasting memorandum , evaluation of interchange locations and types to support the conversion of US 90 to Interstate-49.
01/14 – Ongoing	Pete's Highway Traffic Study and EA, LADOTD, Livingston Parish, LA. Senior Traffic Engineer. Traffic study preparation to analyze three Stage 0 build alternatives to relieve traffic congestion and improve traffic operations on LA 3002 (S. Range Avenue) and its intersections in the vicinity of the I-12 interchange. Responsibilities include performing a traffic study based on LADOTD microsimulation guidelines and FHWA Traffic Analysis Toolbox Volume III guidelines. Main tasks include traffic data collection, Vissim model calibration and simulation , alternative traffic analysis, technical documentation, signal timing, signal warrant analysis , conceptual layouts development, preliminary cost estimates, and public outreach.
02/15 – 11/17	Traffic Engineering IDIQ - Intersection Feasibility Study, Evangeline Thwy, Johnston St, & Louisiana Ave, LADOTD, Lafayette Parish, LA. Senior Traffic Engineer. Responsible for overseeing all scope elements including data collection , development of calibrated Vissim model , development of operational and safety improvements, signal warrant analysis , and study documentation. Proposed improvements included a continuous flow intersection alternative and restricted intersection alternatives. A Vissim animation was created to demonstrate the operational characteristics of proposed alternatives.
11/14 – 10/15	Safety Studies IDIQ - LA 44 and Loosemore Road Roundabout Safety Study, LADOTD, Ascension Parish, LA. Senior Traffic Engineer. Responsible for traffic data collection and analysis . The project intersection was an unsignalized intersection located south of Gonzales, Louisiana. The purpose of the study was to investigate the viability of converting this intersection into a roundabout based on right-of-way limitations. The intersection is situated between several utility pipelines that potentially present construction problems with a roundabout design. Three different roundabout alternatives were evaluated - roundabout at current location, roundabout south of intersection, and dual roundabouts.
12/13 – 05/15	Safety Studies IDIQ - Joe Sevario/Roddy Road Roundabouts Stage 0 Safety Study, LADOTD, Ascension Parish, LA. Senior Traffic Engineer. Responsible for project management, public outreach and stakeholder interaction, review of traffic and safety analysis , conceptual layout development, and Stage 0 documentation . Study to address the safety needs along the corridor and evaluate the feasibility of roundabouts at various intersections between US 61 and LA 42. The corridor accommodates both local residential traffic and regional traffic due to the presence of intersecting state routes. In addition, presence of narrow, higher speeds side-streets introduced an additional factor influencing safety along the corridor. Arcadis' evaluation methodology ensured that all project-related safety issues were identified and appropriate mitigation measures in the form of roundabout and/or lane treatments were proposed to address anticipated issues.
10/15 – 06/19	US90 Business Signing Upgrades, LADOTD, Orleans and Jefferson Parish, LA. Engineer of Record. Responsible for development of transportation management plans and permanent signing plans for segments of US 90 Business and I-10 through New Orleans' Central Business District and surrounding areas. The project replaced all standard and overhead signing within the project limits. Project scope included inventory of existing signs, development of proposed sign layouts, structural details development, and production of 4 construction plan sets for distinct segments of the project limits.

Firm employed by: 

Name	Max Aguirre, PhD, PE, PTOE, RSP2I	Years of relevant experience with this employer	6
Title	Transportation Engineer	Years of relevant experience with other employer(s)	1

Degree(s) / Years / Specialization	PhD / 2018 / Engineering Science, LSU MS / 2015 / Construction Management, LSU BS / 2013 / Civil Engineering, LSU
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Active registration number / state / expiration date	PE. 47579 / LA / 09/30/ 2027; PTOE #5291 / USA / Exp. 7/2028; RSP2I #182 / USA / Exp. 7/2027
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Year registered	2023	Discipline	Civil Engineer
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Contract role(s) / brief description of responsibilities	Traffic Engineering
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	Dr. Aguirre is a Professional Engineer specializing in traffic engineering studies and design . Dr. Aguirre has experience working on projects for Louisiana Department of Transportation and Development (LADOTD) pertaining to traffic and safety studies, Stage 0 feasibility studies, pedestrian and bicycle improvements, permanent signing design, signal design , and NEPA studies. He is also familiar with the Highway Capacity Manual, Highway Safety Manual, MUTCD, and AASHTO "Green Book". Dr. Aguirre is also knowledgeable in the application of several software programs including Interactive Highway Safety Design Model, SYNCHRO, Highway Safety Software (HSS), GuidSIGN, HCS and MicroStation software.
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Experience dates	Experience and qualifications relevant to the proposed contract
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02/23 – Ongoing	Cross Bayou Bridge Replacement, LADOTD, Caddo Parish, LA. Traffic Engineer. Conducted feasibility study to develop and evaluate alternatives for the replacement of two existing bridges over Cross Bayou. Developed Stage 0 Documentation including Preliminary Scope and Budget and Environmental Checklists. The next phase of the project will be conducted under the same contract and will include the development of construction plans.
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11/20 – Ongoing	I-10 CMAR, LADOTD, East Baton Rouge Parish, LA. Traffic Engineer. Assisting in traffic engineering tasks including development of permanent signing plans, Interchange Modification Reports, and Transportation Management Plans for the widening of I-10 from LA 415 to Essen Lane and improvements to interchanges along this segment. Assisted in the development of existing condition safety analysis including tasks such as crash data analysis, collision diagrams, and crash report documentation.
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09/19 – Ongoing	I-49 (Ricohoc to Berwick) Supplemental Environmental Impact Assessment, LADOTD, St. Mary Parish, LA. Traffic Engineer. Assist in project tasks involving planning and evaluation of different interchange alternatives and their geometric design , socio-economic impacts, mobility impacts, and environmental impacts.
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12/19 – Ongoing	MoveBR Bluebonnet Blvd (Perkins Road to Picardy Avenue), City of Baton Rouge, East Baton Rouge Parish, LA. Traffic Engineer. The purpose of the project is to widen Bluebonnet Blvd from 4 lanes to 6 lanes between Perkins Road and Picardy Avenue. Responsible for assisting with the development of a traffic design study to develop proposed improvements and project design to maximize operational and safety benefits. Responsible for assisting with the development of signal design and timing plans at 7 intersections within the project limits.
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01/21 – Ongoing	MoveBR Lee Drive (Highland Road to Perkins Road), City of Baton Rouge, East Baton Rouge Parish, LA. Traffic Engineer. The purpose of the project is to provide capacity improvements and ped/bike accommodations along Lee Drive. Responsible for assisting with developing a traffic design study to evaluate and identify the preferred alternative , and developing signal design at the intersections of Highland Road, Boone Drive, and Hyacinth Avenue.
10/19 – 07/21	I-10 New Orleans to Slidell Hard Shoulder Running Feasibility Study, LADOTD, Orleans Parish, LA. Traffic Engineer. Purpose of the project was to evaluate the feasibility of implementing HSR lanes along I-10 to alleviate existing bottlenecks and congestion along critical segments of the corridor. Developed conceptual drawings and typical sections, crash analysis, and predictive safety analysis for proposed Hard Shoulder Running (HSR) alternatives on I-10 between New Orleans and Slidell. Developed benefit-cost analysis for Preliminary Scope and Budget and Environmental Checklists.
02/23 – 05/24	District 04 Pedestrian Safety Improvements, LADOTD, Caddo and Bossier Parish, LA. Traffic Engineer. Responsible for conducting all traffic and safety tasks needed for this Stage 0 Feasibility study to develop and evaluate safety countermeasures to address pedestrian safety needs on 7 corridors within Caddo and Bossier Parish. The study methodology was similar to that of a Road Safety Assessment, and included historical crash analysis and on-site field reviews to identify pedestrian safety needs. Countermeasures were developed in close coordination with project stakeholders including City of Bossier, City of Shreveport, NLCOG, Downtown Development District, and District 04. Stakeholders also participated in virtual and on-site field reviews. Study data, methods, and results were documented in a Stage 0 Feasibility Reports were completed for all 7 study corridors with Preliminary Scope and Budget Checklist and Environmental Checklist. Performed benefit-cost analysis to aid in prioritizing the implementation of countermeasures.
10/18 – 03/21	LA 3040 Corridor Improvements, LADOTD, Houma, LA. Traffic Engineer. Study to identify safety and/or operational issues along 2.5 miles of Martin Luther King Boulevard (LA 3040) in Houma, LA to evaluate reasonable alternatives to address safety and operational needs . Responsible for performing traffic analysis using Highway Capacity Software in accordance with LADOTD TEPR Requirement.
09/19 – 06/21	Baton Rouge Pedestrian and Bicycle Safety Action Plan and Road Safety Assessments, LADOTD, East Baton Rouge Parish, LA. Traffic Engineer. Assisted with the assessment of existing and future safety deficiencies related to pedestrian and bicycle modes at identified high-risk intersections and segments in East Baton Rouge Parish. Assisted with the development of screening criteria to identify high priority locations with a history of pedestrian and/or bicycle crashes. Assisted in the development of Road Safety Assessments (RSAs) at 10 priority locations to identify and evaluate safety deficiencies and develop safety countermeasures to improve safety for pedestrians and bicyclists. Evaluated alternatives to determine and document the feasibility of proposed countermeasures . Developed benefit-cost analysis to prioritize implementation of proposed improvements.
08/19 – 02/20	US 61 Access Management and Corridor Improvements (Airline Hwy), LADOTD, East Baton Rouge Parish, LA. Traffic Engineer. Project purpose was to evaluate the effectiveness of proposed access management improvements along US 61 and identify feasible alternatives to maximize operational and safety benefits. Evaluated the need for pedestrian and bicycle accommodations based on historical crash data and adjacent land use . Assisted in conducting traffic analysis and the development of benefit-cost analysis to compare the effectiveness of the proposed alternatives.

Firm employed by: 			Meets MPR No. 10
Name	Shashank Shekhar, PE	Years of relevant experience with this employer	8
Title	Principal Transportation Engineer	Years of relevant experience with other employer(s)	12
Degree(s) / Years / Specialization	MS, Civil Engineering, North Carolina State University at Raleigh, 2005 BS, Civil Engineering, IIT Kharagpur, India, 2002		
Active registration number / state / expiration date	PE. 149479 / TX / Exp. 06/30/2026; PE. 036244 / NC / Exp. 12/2026		
Year registered	2009	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Modeling Lead		
	Mr. Shekhar is a Principal Transportation Engineer with Arcadis and has 20 years of experience in transportation planning, travel demand modeling, traffic forecasting and traffic operations analysis. He is a licensed Professional Engineer in Texas (TX PE 149479) and North Carolina (NC PE 36244). He brings a holistic approach to transportation decision-making process through use of modeling and analytics. As a project manager or modeling lead, he has completed several planning, feasibility, traffic, IAJR, and forecasting studies for multiple state DOTs and MPOs. He is experienced in mesoscopic modeling, microscopic modeling, travel demand modeling, and development of traffic projections. He is proficient in DynusT, TransCAD, HCS, Synchro/SimTraffic, Vistro, Vissim, TransModeler, CAP-X, and CORSIM.		
Experience dates	Experience and qualifications relevant to the proposed contract		
06/18 – 06/21	SMART Study, TxDOT Houston District, DPM and Task Lead. Developed “first of a kind” methodology that seamlessly integrated vision, drivers, plausible scenarios, 3-tier modeling (land use modeling, travel demand modeling and mesoscopic modeling) and outlook for southwest Houston sub-regional planning Study. Identified major drivers (factors) that are relevant to the sub-region and formulated scenarios around CAV, transit, tele-commuting, e-commerce and high growth. He led the calibration and validation of the 8-county regional DynusT mesoscopic model for the study. The performance measures from the mesoscopic model, tied to study goals and objectives, were translated into tangible scenario planning outcomes. This helped in better understanding of emerging issues facing the sub-region and evaluate effect of different policy and project choices. Contact: Brenda Bustillos, TxDOT Houston District, brenda.bustillos@txdot.gov		
07/21 – 08/22	Subregional Mesoscopic EMAT Study, TxDOT Houston District, DPM and Task Lead. Responsible for development of subarea mesoscopic model in DynusT for Fort Bend County and part of Harris County. Utilized FHWA’s Exploratory Model Analysis Tool (EMAT) for which several mesoscopic scenarios were run to quaitatively evaluate the subarea transportation network under a range of potential future uncertanities. Led development of dashboards to evaluate transportation system performance for robust risk-based planning under uncertainty. Contact: Brenda Bustillos, TxDOT Houston District, brenda.bustillos@txdot.gov		
04/23 – 03/25	I-10 Feasibility Study, TxDOT Houston District, DPM and Modeling Lead. Responsible for overseeing update of the regional mesoscopic model in DynusT including network and demand update to 2023 existing conditions, validation of existing year network, coding 2045 projects in the future year network and future year demand matrix conversion from travel demand model. Utilized the mesoscopic model to evaluate future year I-10 corridor performance with planned and programmed projects, identify existing and potential future bottlenecks. Contact: Brenda Bustillos, TxDOT Houston District, brenda.bustillos@txdot.gov		
03/25 – 12/25	I-10 Resiliency Scenarios, TxDOT Houston District, Modeling Lead. Responsible for mesoscopic modeling of seven scenarios focused on major disruption on I-10 corridor within the Houston region. The scenarios included partial or full freeway closure		

	for a prolonged period of time either due to a major incident or weather / flooding. Developed insights on I-10 corridor's economic impact to the region, diversion routes and system resiliency recommendations. Contact: Brenda Bustillos, TxDOT Houston District, brenda.bustillos@txdot.gov
08/25 – Ongoing	H-GAC FIFA World Cup 2026 Scenario Planning Services, Houston-Galveston Area Council (H-GAC), DPM and Modeling Lead. Responsible for scenario planning and transportation modeling for the seven FIFA 2026 games hosted in Houston. Defined scenarios around game day demand, travel demand management, transit service enhancement, and network operational improvement. Utilized DynusT mesoscopic model to evaluate scenarios, identify bottlenecks and recommend improvements. Developed insights from transportation modeling to inform key stakeholders including TxDOT, City of Houston, TranStar, METRO and NRG Stadium to finalize their game day operational plan and readiness. Contact: Heng Wang, H-GAC Data Analytics and Research, heng.wang@h-gac.com
08/20 – Ongoing	I-10 CMAR Project, Baton Rouge, LADOTD, Modeler. Responsible for modeling No Build and Build alternatives in the CRPC regional travel demand model in TransCAD. Performed model runs and assisted in development of traffic volumes for Interchange Justification Report (IJR). Developed reports, performed select-link and select-zone analyses, and responded to questions from LADOTD and other stakeholders on modeling results. Contact: Ryan Hoyt, LADOTD, ryan.hoyt@la.gov
08/20 – 01/25	I-35 Segment 3 & Segment 4 IAJRs, TxDOT Design Division. <i>Deputy PM</i> for the project and is leading traffic operations analysis and traffic safety analysis. Arcadis, as a prime consultant to TxDOT Design Division, is developing two IAJRs in Webb County in Laredo District. Projects would widen I-35 to six lanes, add a new interchange, replace deficient interstate bridges, improve existing interchanges, and extend frontage roads. Coordinated early on with the Design Division, Laredo District, TPP and FHWA to define a streamlined alternatives analysis approach. The simplified approach was clearly defined in the Methodology and Assumptions (M&A) document and received quick approval from all stakeholders. The streamlined approach cut down in unnecessary alternatives analysis scenarios and allows an expedited IAJR development while meeting all the requirements and focusing on the key issues. Utilized traffic count data from several sources to develop existing AADT and peak hour volumes as traffic count was uncertain due to impact of Covid-19. Our approach to data collection and traffic volume development allowed the project to move forward without relying on uncertain traffic count data during the pandemic. Contact: Eddie Espinoza, TxDOT Design Division, eddie.espinoza@txdot.gov
04/24 - Ongoing	2024 Traffic Forecasting On-call, Transportation Planning Division, NCDOT. <i>Project Manager.</i> Project Manager for current 2024 on-call and two previous on-calls (2018 and 2021) with North Carolina Department of Transportation (NCDOT) for development of project-level traffic forecasts statewide. Managed projects from scoping through final forecast delivery and completed over 25 traffic forecasts for NCDOT. The forecasts included all three categories – Category A (Regional Forecasts requiring the use of Regional Travel Demand Models), Category B (Other Modeled Forecasts requiring use of a non-regional Transportation Travel Demand Models), and Category C (Other Forecasts not utilizing Transportation Travel Demand Models). Managed multiple work authorizations concurrently and led the Arcadis team to complete each project on schedule. Developed traffic projections for diverse areas - from high growth urban areas with regional TDM to negative growth rural areas without any TDM and areas in-between. Applied suitable analysis approach to meet each project's unique requirements – managed lanes, new bypass route, route re-location, proposed large future developments, innovative interchange and intersections, etc. Contact: Keith Dixon, NCDOT Transportation Planning Division, kgdixon@ncdot.gov

Firm employed by:



Name	Weimin Jin, PE, PhD		Years of relevant experience with this employer	5
Title	Project Transportation Engineer		Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization			PhD / 2021 / Civil Engineering – Transportation Systems, Clemson University MS / 2015 / Transportation Planning and Management, Tongji University BS / 2012 / Transportation, Southwest Jiaotong University	
Active registration number / state / expiration date			PE. No. 157977, Texas, 6/30/2026	
Year registered	2025	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Traffic Engineer/ Traffic Analysis & Modeling	
		Dr. Jin has over nine years of professional experience in transportation engineering, specializing in traffic modeling, data analytics, and operational performance evaluation. He has extensive experience developing mesoscopic and microscopic traffic simulation models to analyze corridor and network performance, identify operational bottlenecks, and evaluate future traffic conditions. His expertise includes traffic data analysis, model calibration and validation using traffic counts and speed data, and development of performance measures such as travel time, speed, delay, and queue length. Dr. Jin also regularly conducts traffic impact and detour analyses to evaluate roadway disruptions caused by construction activities, incidents, or special events to support data-driven decision-making.		
Experience dates		Experience and qualifications relevant to the proposed contract		
04/23 – 03/25		I-10 Feasibility Study, Texas Department of Transportation (TxDOT) Houston District, Traffic Engineer. Responsible for developing both existing year (2023) and future year (2045) mesoscopic models for the Houston region covering eight counties. Updated the DynusT mesoscopic model to reflect 2023 existing conditions by incorporating roadway network updates and vehicle trip demand changes based on recent regional developments. Conducted model validation using traffic count and speed data. Developed the future year model by incorporating planned and programmed transportation projects and updated travel demand forecasts. Utilized the mesoscopic model to evaluate I-10 corridor performance under both existing and future conditions, identifying operational bottlenecks and potential mobility constraints, and providing recommendations to support corridor planning and decision-making. Contact: Brenda Bustillos, TxDOT Houston District, brenda.bustillos@txdot.gov, 713-802-5302		
03/25 – 12/25		I-10 Resiliency Scenarios, TxDOT Houston District, Traffic Engineer. Responsible for developping seven mesoscopic models for testing scenarios focused on major roadway disruption on I-10 corridor within the Houston region and evaluating the impact on the region. The scenarios included partial or full freeway closure for a prolonged period of time due to a major incident such as construction activities, major crash or weather / flooding. Incorporated user behavior based on historical, and en-route information, enabling detailed tracking of vehicle trips by vehicle type and user behavior. Modeled the deployment of congestion warning systems by coding variable message signs (VMS) along I-10 to reflect real-time incident responses. Developed performance measures such as travel time, speed, and user cost were thoroughly evaluated. Assessed impacts on the surrounding roadway network, including congestion bottlenecks, detour traffic patterns, and trip disruptions to and from activity and freight centers. Contact: Brenda Bustillos, TxDOT Houston District, brenda.bustillos@txdot.gov, 713-802-5302		

08/25 – Ongoing	H-GAC FIFA World Cup 2026 Scenario Planning Services, Houston-Galveston Area Council (H-GAC), Traffic Engineer. Responsible for developing five mesoscopic simulation models to evaluate transportation system performance during FIFA World Cup 2026 games hosted in Houston. Developed multiple scenario models to assess traffic impacts in and around the stadium and fan festival locations. Utilized the DynusT modeling platform to simulate event-day traffic demand and lane closure scenarios. Developed and evaluated system performance measures including travel time between key origin-destination pairs, corridor speeds, congestion levels around event venues, and traffic volume changes on surrounding facilities. Assessed impacts to the regional roadway network including freeway congestion, arterial traffic increases, and potential detour routes. Provided modeling insights to support coordination among regional stakeholders including TxDOT, the City of Houston, Houston TranStar, METRO, and NRG Stadium to inform event transportation planning and operational readiness. Contact: Heng Wang, H-GAC Data Analytics and Research, heng.wang@h-gac.com
3/22 - 7/2022	Comparison of Quadrant Interchange to 95% PS&E Option 2 for George Bush Drive (FM 2347) at Wellborn Rd (FM 2154), TxDOT, Bryan District, TX, Traffic Engineer. Conducted traffic operational analysis to compare two grade-separated improvement alternatives for the existing at-grade intersection in College Station, Texas. Alternatives included the 95% PS&E design option and a proposed Quadrant Grade-Separated Intersection. Developed a detailed microscopic simulation model using VISSIM to represent intersection geometry and signal operations. Evaluated operational performance using measures including travel time, speed, queue length, and delay to support comparison of the two alternatives and inform project development decisions. Contact: TxDOT Bryan District, James Robbins, 979-778-6233

Firm employed by.



Name	Sean Markey, PE		Years of relevant experience with this employer	14
Title	Principal Rail Design Engineer		Years of relevant experience with other employer(s)	18
Degree(s) / Years / Specialization			Certificate / 1999 / Railroad Maintenance & Engineering Certificate, University of Wisconsin BS / 1993 / Civil Engineering / Lehigh University	
Active registration number / state / expiration date			PE. 51033 / LA / Exp. 09/30/2026	
Year registered	2026	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Railroad Support	
		Mr. Markey is a Senior Project Manager with considerable experience in the administration, project management, inspection, rehabilitation, design, review, and construction of various freight and passenger railroad projects along with traffic engineering, and utility design projects. He brings a deep experience in Program and Project Management for projects of all sizes. His background has been deeply involved in participating in Freight Rail and Passenger Rail throughout the United States. He brings an understanding of Federal Programs, Diagnostic Reviews, Track Design and the development of Force Account Estimates. From 1999 to 2002, Sean was embedded at CSX as a seconded employee and handled Public Projects.		
Experience dates		Experience and qualifications relevant to the proposed contract		
8/22 – 11/25		Siemens Mobility, Lexington, NC – Project Executive responsible for leading the Site Selection for a new Rolling Stock Factory and Maintenance Facility for Siemens on the East Coast. Led the team of Arcadis in various concept plans to assist with the site selection for the new facility for Siemens. Also led the team to develop bid packages for both the on-boarding of a Design Firm and the bid package for the on-boarding of a Construction Manager At-Risk (CMAR) firm to build the facility. He continued as the Project Executive through the build phase which Arcadis provided Construction Management and Owners Representative Services to Siemens Mobility. Services involved the concept planning for track design connecting the site to the North Carolina Railroad Corridor which is operated by Norfolk Southern and a new undergrade railroad bridge.		
01/12 – 12/20		CSX Transportation, Public Projects, Various Locations Systemwide. Project Manager responsible for leading the staffing and services for the Public Project Program with primarily responsibilities in the Southeast portion of the CSX Network including Louisiana, Alabama, Georgia, Mississippi, South Carolina and North Carolina. Over 2,000 Public Projects were reviewed from a technical basis and agreement processing. Projects included at-grade crossing modifications, grade separation projects, adjacent development projects and other projects proposed by parties outside of CSX. Services provided to CSX included Engineering Reviews, Agreement Preparation, Force Account Estimate development along with Construction Monitoring.		
02/12 – 12/16		Haverstraw Track Capacity, CSX Transportation, Haverstraw, NY. Project Manager for the concept planning and design of a second track from Milepost 33 to 38. This project involved the design of a new universal interlocking in a tangent along the Hudson River. Various options and alternatives were planned to safeguard the integrity of the embankment along the Hudson River. The final design included rip rap revetment protection to maintain the slope for the railroad operations to prevent scour from the Hudson River. Plans included two # 20 turnout installations at the northern and southern limits of the project. Duties included client management, financial management, staff management and technical reviews of the work product. He represented CSX at public meetings for the project to outline the scope of work and to interface with public.		

03/13 – 12/16	Plant Bowen Capacity Expansion, CSX Transportation, Stilesboro, GA. <i>Project Manager for design coordination and rail design for relocation of 2.25 miles of mainline track, construction of 0.40 miles of new bad order tracks, relocation of 0.57 miles of bad order tracks, construction of 2.18 miles of new industry track, relocation of 1.47 miles of industry track, construction of 8 #10 turnouts, raise and resurface one #10 turnout, construction of one new #15 turnout and relocation of one double switch point derail. The project included a new 146 LF double track concrete bridge structure over the environmentally sensitive Raccoon Creek as well as a concrete utility slab to protect an existing high pressure gas line.</i>
01/14 – 12/15	Norfolk Southern, South Raleigh Siding – Design & Environmental Permitting, Raleigh, NC. <i>Principal-in-Charge for track design for a new 7,000' siding. The design included realignment of nearly 2000' of mainline track to achieve required minimum clearances under the existing Tryon Road overhead bridge. New crash walls and soil nail walls were designed under the bridge. Wetland and buffer impacts were addressed by coordinating with local mitigation banks for purchase of required credits and obtaining approval from United States Army Corps of Engineers and North Carolina Department of Environment and Natural Resources.</i>
01/07 – 12/15	CSX Transportation, National Gateway, Multiple Locations. <i>Project Manager for the Vertical Clearance Improvements for the National Gateway Initiative. National Gateway is a freight intermodal project involving 64 vertical obstructions requiring modification, replacement or removal to achieve a minimum of 21'-0" of clearance from top of rail to the bottom of the obstruction. Project management involved leading several teams of professionals with schedule, funding pursuit, design activities and various procurement activities. Project involved modification of 13 mountain tunnels, replacement of the Virginia Avenue Tunnel (Washington, DC), and replacement of several overhead highway bridges throughout the corridor along with other locations involving trails and other railroads. Project packages included the development of several Design-Build Packages for advertisement on complex projects. Sean was tasked with providing weekly reports and coordination of this large effort to progress the designs for all locations through the various identified agencies for review. Funding for the project involved TIGER funding, State Funding from Pennsylvania and Ohio along with all various requirements with American Recovery and Reinvestment Act funding. The construction cost was at \$360 million for the vertical clearance improvements and \$850 million for the total efforts.</i>
04/12 – 12/15	CSX Transportation, Second Main Track and Crossover, Coxsackie, NY. <i>Project Manager for the concept planning and design of a second track from Milepost 121 to 129. This project involved the design of two new universal interlockings and two significant railroad bridge structures over Coxsackie Creek and Hannicrois Creek and 8-miles of track design to create additional capacity. Operational planning was performed to maintain railroad operation during the construction of the structures. Performed management of the project, client interface, and staff coordination. Permitting and property were both assessed and plans appropriately developed for both efforts.</i>

Firm employed by.



Name	Eric Bullerman, PE	Years of relevant experience with this employer	8
Title	Principal Rail Transportation Engineer	Years of relevant experience with other employer(s)	18
Degree(s) / Years / Specialization	BS / 1999/ Civil Engineering, University of Illinois		
Active registration number / state / expiration date	PE. 49597 / LA / Exp. 03/31/2027		
Year registered	2024	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Railroad Support		



Mr. Bullerman has worked on projects with all Class I railroads, many industrial clients, and is considered a leader in the field of railway engineering. He has designed construction projects valued as much as \$145 million, designed conceptual projects valued as much as \$4 billion, and managed construction services for projects as much as \$50 million with quality, on time, and to the client's satisfaction. He also trains staff on technical and application matters to improve team delivery across the market. Eric uses the AREMA manual and Railroad standards/specifications to design the track alignments, profiles, grading hydraulics and other aspects of railway engineering, and coordinates with other Arcadis Civil and Structural teams regularly.

Experience dates	Experience and qualifications relevant to the proposed contract
03/23 – Ongoing	St. Thomas Industrial Park Rail Spur and Yard, City of St. Thomas, Ontario, Canada. <i>Principal Rail Lead Engineer and Professional of Record to design a new rail spur from CN Railway mainline track, including rail structures and at-grade crossings, to CN Hazmat specifications, including a yard for receiving, departure, and storage of railcars being used for industrial use throughout a new commercial park. Coordinated effort with IBI-Arcadis on civil site work.</i>
01/22 – 10/24	CN-CP Rail Interconnect, Valero, Charles City, IA. <i>Project Manager, Senior Rail Engineer, and Professional of Record to update a track connection through a 2007 easement to allow the client flexibility in rail service. The design included track, civil, utilities, ROW, and property, DTMF switching, and a new public at-grade crossing, with CN, CPKC, and IADOT standards. This work was approved to proceed by the railroads and started construction December 2022 and put in service October 2024.</i>
10/21 – Ongoing	Maryland Ave. Bypass Culvert and Ellicott City North Tunnel, Howard County (Kinetic Concepts, Inc. [KCI]), Ellicott City, MD. <i>Senior Rail Engineer and Rail Professional of Record to design a series of shoofly alignments with CSX mainline track to accommodate staging of construction for these two massive drainage structures to be built underneath the track. The alignments minimized additional work for shoring on one side along the Patapsco River, and rock cut on the other. Without these new drainage structures, Ellicott City is prone to heavy flooding through its downtown district. Contracts with the County were through KCI and McCormick Taylor.</i>
09/20 – Ongoing	Orange Rd Railroad Grade Separation, Gannett Fleming, Delaware County, OH. <i>Subconsultant Project Manager to handle all track design for preliminary through final documents. The project team utilized OpenRail to review two potential sets of track alignments to allow for construction of new rail bridges and final grade separation. Two Norfolk Southern and one CSX tracks are involved in this project covering almost one mile between construction limits, with NS, CSX and ODOT standards applicable. 100% Plans to be completed in 2026.</i>

02/24	LINK US Phase A VE Study. LA Metro, Los Angeles, MA. <i>Senior Rail Engineer</i> responsible for identifying lower risk means, methods, and alternate solutions for connecting the south end of LA Union Station creating through track movements for LA Metro, Metrolink, Amtrak and California High Speed Rail (CAHSR). Track and signal staging, structural piers, HWY 101 infrastructure, and mechanical components were re- engineered as possible options in a one-week study.
09/19 – Ongoing	Hurontario Light Rail, Mobilinx, Brampton-Mississauga, Ontario, Canada. <i>Senior Rail Engineer and Rail Professional of Record</i> to review rail design specifications, construction submittals, Requests for Information (RFIs) with future rail material inspection and construction installation reviews as part of standard protocols. This 18 km line primary through the center of Hurontario Street, a local highway, with more than 30 interscctions, is in construction scheduled to be in service in 2026.
08/20 – 11/20	Diridon Station, Multiple Rail Clients, San Jose, CA. <i>Senior Rail Engineer</i> to design preliminary light car track alignments for Valley Transportation Authority, verify freight and electrified passenger tracks alignments into a new Intermodal Station located above the existing Diridon platforms, and coordinate staging efforts with the structural design. Phase I documents and design started in 2018, with joining the team in 2020 to handle the scope listed. Phase II design for VTA is set to start in 2026.
02/21 – 01/23	Construction Contract Package 2-3, California High Speed Rail, Central Valley, CA. <i>Project Engineer</i> to review and coordinate staff for review of new Engineering Contract Change Order Proposals, evaluate manhours and scope of changes versus contract, and provide feedback for final negotiation. Changes reviewed included Track, Civil, Structural, and Geotechnical tasks.
01/20 – 11/20	Intermodal Container Transfer Facility, Palmetto Rail, Charleston, SC. <i>Professional Engineer</i> on Construction Management staff to review, approve, sign and seal Contractor RFIs and Submittals for the new facility's North Lead track.
01/15 – 12/15	East Receiving Yard Realignment, Belt Railway of Chicago (BRC), Bedford Park, IL. <i>Rail Design Engineer</i> for two track projects taken to 30% design. The East Receiving Yard is to have its 23 tracks respaced so that there is improved safety for yard personnel, with the leads and approaches reconfigured so that the BRC gains an additional Clearing Yard hump approach track. The West Receiving Yard Lead was also developed to greatly reduce the number of derailments into six storage tracks.
03/18 – 12/19	Upper Processing Facility, Confidential Client, Newark, NJ. <i>Project Engineer</i> to lay out a new track spur, loading track, and ample storage for processing 4,400 tons of filter cake daily. The loading apparatus will consist of a hopper, scale, and loading arm and will load gondolas remotely shoved through by a railcar mover.
01/19 – 03/20	Project Smart Boxcar, Canadian National (CN), Chicago, IL. <i>Project Manager</i> for scheduling staff on a new technological development by CN for new Boxcars that will handle track geometry, record rail and tie deficiencies, record real time video and Lidar with GPS coordinates, and other confidential technologies.

Firm employed by.



Name	William Jansen, PE, LEED AP BD+C, ENV SP		Years of relevant experience with this employer	4
Title	National Railroad Engineering Lead		Years of relevant experience with other employer(s)	18
Degree(s) / Years / Specialization			MS / 2004 / Civil Engineering, Iowa State University BS / 2002 / Civil Engineering, Iowa State University	
Active registration number / state / expiration date			PE.E-12773 / NE / Exp. 12/31/2027 Application for comity is in progress for Louisiana PE license.	
Year registered	2008	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Railroad Support	
Experience dates		Experience and qualifications relevant to the proposed contract		
		Mr. Jansen is a highly experienced Civil Engineer with over 20 years of expertise, predominantly within the rail industry . His extensive background involves projects of various scales for Class I railroads, regional and short-line railroads , industrial clients, and public-sector agencies. Proficient in all stages of design from concept to construction, he has contributed to main line capacity enhancements, yard and facilities projects, as well as public initiatives such as grade crossings and separations . Mr. Jansen excels in collaborating with agencies to facilitate successful project outcomes in coordination with railroad stakeholders . His profound comprehension of railroad processes enables him to navigate project approvals, design, and construction effectively. With a track record of delivering projects across urban, suburban, and rural landscapes, including those with significant right-of-way and corridor limitations, Mr. Jansen's membership in AREMA and active involvement in Committee 14 – Yards & Terminals underscores his commitment to advancing the industry.		
03/22 – 10/24		CN-CP Rail Interconnect, Valero, Charles City, IA. <i>Quality Control and Railroad Coordination</i> responsible for oversight and quality control of a 2,000-foot-long crossover between Canadian National and CPKC main lines in Charles City. The project included a new at-grade crossing of a local roadway that necessitated close coordination with the city, multiple utilities, and the railroads to facilitate successful completion. Arcadis also served as the general contractor for this project.		
08/23 – Ongoing		Flood Protection System, USACE, Port Arthur, TX. <i>Railroad Design and Coordination</i> for flood gates at two CPKC track locations intersecting with a proposed flood protection system, including a triple-track area at the end of a rail yard and a section with an existing at-grade roadway crossing providing truck access to the port.		
07/23 – Ongoing		Russell Street Improvements, City of Fayetteville, NC. <i>Rail Task Manager</i> for a project widening two roadway bridges with a railroad bridge between them. The project includes extensive coordination with CSX Transportation, who owns the railroad in the median between the eastbound and westbound lanes of Russell Street to determine how to phase construction of the lengthened roadway and railroad bridges over the creek in a corridor with significant right- of-way constraints.		
11/24 – Ongoing		Oasis Trail, Great Parks, Cincinnati, OH. <i>Railroad Coordination</i> for a project to install a mixed-use trail along a lightly-utilized railroad corridor east of downtown Cincinnati. The project will install the trail on the track bed of an out-of-service second track along the Indiana & Ohio Railway Oasis Branch with a fence providing separation from the remaining active track.		
08/22 – Ongoing		Rail Car Manufacturing Facility, Siemens Mobility, Lexington, NC. <i>Owner's Design Manager</i> for new manufacturing facility for passenger rail cars with the potential to expand to other product lines including locomotives and light-rail vehicles. Effort included assistance with site selection and conceptual facility layout before transitioning to oversight of design firm and contractor-led design efforts. The facility consists of approximately 500,000 SF of area spread among 12 manufacturing and		

	servicing areas in eight buildings on a 200-acre site. The facility is rail-served and with a connection to the North Carolina Railroad and a seven-track railyard for receiving materials and staging outbound shipments of completed passenger cars.
11/20 – 03/22	Louisiana Capacity Improvements, Union Pacific Railroad, Basile, Lawtell, & Reeves, LA. <i>Quality Control</i> for three siding extension projects on the Union Pacific corridor between Houston and Baton Rouge . Projects extended existing sidings to a minimum length of 10,000 feet and included at-grade crossing modifications and coordination with local municipalities.
11/24 – Ongoing	Major Projects On-Call, Georgia Department of Transportation, Statewide, GA. <i>Railroad Subject Matter Expert</i> for on-call contract supporting major projects statewide in Georgia. Providing review and recommendations from railroad perspective for projects that directly or indirectly impact rail corridors within the state.
06/25 – 07/25	I-24 Review, Tennessee Department of Transportation, Chattanooga, TN. <i>Railroad Subject Matter Expert</i> for review of preliminary design for widening of I-24 through Chattanooga for potential railroad impacts and concerns.
03/11 – 02/13	Terminal Expansion, US Development, St. James, LA. <i>Track and Civil Design</i> for multiple phases of expansion to existing crude oil terminal to increase terminal capacity including final design of additional lead track from Union Pacific main line through expanded unloading rack and conceptual design for unit train loop facility capable of unloading 6 unit trains per day.
10/10 – 03/22	Chicago to St. Louis High Speed Rail, Union Pacific, Multiple Locations, IL. <i>Project Engineer and Quality Control</i> for various segments to improve capacity and increase track speed along the Chicago to St. Louis corridor for high-speed rail service implementation. Overall project included multiple segments including some in urban areas with limited right-of-way as well as crossing diagnostics and implementation of safety upgrades for multiple at-grade highway crossings along the route.
11/11 – 04/17	Council Bluffs Interstate System (CBIS) Railroad Consolidation, Iowa DOT, Council Bluffs, IA. <i>Railroad Design Lead</i> for project to consolidate multiple railroad corridors within urban area including realignment of rail corridors for three separate railroads, removal of seven existing at-grade crossings, and construction of two new at-grade crossings , as well as coordination with multiple railroads, rail-served industries, and agencies.
10/13 – 11/18	US-63 Railroad Shoofly, Iowa DOT, Waterloo, IA. <i>Project Manager</i> for temporary railroad shoofly project to facilitate reconstruction of a highway-rail grade separation from railroad over to highway over, including review of proposed highway bridge, modifications to existing adjacent at-grade crossings, and construction phasing.
10/10 – 12/18	Chicago to Iowa City Passenger Rail, Iowa DOT, Chicago, IL to Iowa City, IA. <i>Design Lead</i> for the grant application, conceptual design, and preliminary design of proposed improvements to railroad and highway-rail crossing infrastructure between Chicago and Iowa City to support proposed passenger rail service within the corridor.
10/11 – 12/13	Chicago to Omaha Passenger Rail, Iowa DOT, Chicago, IL to Omaha, NE. <i>Design Lead</i> for planning study to determine necessary improvements to implement regular passenger rail service between Chicago and Omaha. The study utilized a phased approach to service implementation, including increases in service frequency and train speeds over time, supported by phased implementation of capacity improvements and crossing safety upgrades along the proposed corridor.

Firm employed by.



Name	Jason Morrell, PWS	Years of relevant experience with this employer	12
Title	Principal Environmental Scientist	Years of relevant experience with other employer(s)	13
Degree(s) / Years / Specialization	BS / 1999 / Agriculture / Environmental Economics & Management, UGA		
Active registration number / state / expiration date	Professional Wetland Scientist – #2319 / USA / Exp. 04/2028		
Year registered	2013	Discipline	Ecology
Contract role(s) / brief description of responsibilities	Environmental Permitting		



Mr. Morrell has 25 years of experience in environmental planning and ecology in the southeastern U.S. Prior to joining Arcadis, he served as a NEPA Planner and Ecologist with the Georgia Department of Transportation (GDOT) evaluating environmental effects and completing permitting and environmental documentation for transportation projects. His area of expertise includes wetland studies, biological assessment, and environmental permitting, with a focus on Clean Water Act Section 404 permitting and Section 7 Endangered Species Act (ESA) consultation. He is experienced working with the Federal Highway Administration (FHWA), US Army Corps of Engineers (USACE), US Fish & Wildlife Service (USFWS), US Coast Guard (USCG) and state resource agencies. Since 2011, Mr. Morrell has worked almost exclusively on transportation projects and is an active member of the Transportation Research Board Committee on Environmental Compliance in Transportation Planning (AEP17).

Experience Dates	Experience and qualifications relevant to the proposed contract
04/25 - Ongoing	LA 1/LA 415 Connector CMAR, LADOTD, West Baton Rouge Parish, LA <i>Project Manager</i> for a new 2.7-mile connector roadway project, consisting of a four (4) lane roadway (LA 415 Connector), interchange modification at I-10 and LA 415, and new LA 415 interchanges at Sun Plus Parkway and LA 1. The Arcadis scope of services includes traffic engineering and analysis for the entire project, including design development and alternative concepts , phased project implementation, safety analysis, signal inventory and design, and transportation management plan. Arcadis is also responsible for all stages of CMAR plan design for select roadway segments.
10/22 - Ongoing	IIJA Off System Bridge Replacements Program – District 02, LADOTD, Multiple Parishes <i>Environmental Lead</i> for replacement of six (6) off-system bridges in LADOTD District 02. Responsibilities include management of environmental services for this bridge bundle including preparation of Solicitation of Views (SOVs) letters, wetland studies, Section 106 National Historic Places Act compliance documentation, NEPA Programmatic Categorical Exclusions, and USACE Section 404 Clean Water Act permitting, as needed.
04/21 – Ongoing	Rural Bridge Replacement Initiative Phase II – Districts 02, 03, 07, 61, and 62, LADOTD, Multiple Parishes, LA. <i>Project Manager and Environmental Lead</i> for 16 state projects involving replacement of 29 state highway bridges. The environmental scope of services for the projects consists of Solicitation of Views, Wetland Studies, Programmatic Categorical Exclusion Checklists, and permitting including USACE Nationwide Permits (NWPs), Louisiana .Department of Natural Resources Coastal Use permits, and local levee board permits
02/24 - Ongoing	I-10 Calcasieu River Bridge Public Private Partnership (P3) Project, LADOTD, Calcasieu Parish, LA <i>Environmental Lead</i> for preparation of required environmental permit applications for replacement of the I-10 Calcasieu River Bridge and 5.25 miles of interstate improvement along I-10. Led coordination with responsible federal, state, and local agencies throughout the permitting process on behalf of the P3 project team. Environmental permit applications prepared include a USACE Section

	10/404 Clean Water Act Standard Permit, Louisiana Department of Environmental Quality (LDEQ) Water Quality Certification Request, USCG Section 9 Rivers and Harbors Act Bridge Permit, and USCG Navigation Lighting Plan.
02/17 – 09/25	I-49 South (Ricohoc to Berwick) SEIS, LADOTD, St. Mary Parish, LA. <i>Project Manager</i> for a Supplemental NEPA Environmental Impact Statement (EIS) for the conversion of a 10-mile segment of US 90 to I-49 from Ricohoc to Berwick in St. Mary Parish. Responsibilities include scope and labor hour negotiations during initial project setup, as well as managing the multi-disciplinary scope, schedule and budget for all project phases including the traffic, line and grade, and environmental studies.
04/16 – 06/23	Pete’s Highway Interchange Alternative and Environmental Assessment, LADOTD, Livingston Parish, LA. <i>Ecology Lead</i> for wetland delineation and protected species habitat assessment along Range Road in the vicinity of the I-12 interchange for the proposed interchange improvement project. Provided technical review of a Biological Resources and Wetland Findings Report, including required exhibits, in support of the NEPA Environmental Assessment .
06/22 – Ongoing	Environmental Support Services - Ecology IDIQ Contract, GDOT, Statewide, GA. <i>Project Manager</i> . Responsible for contract management, staffing, and program delivery. Manage a team of staff and subconsultants providing over 20 embedded (Support Services) positions with the GDOT Office of Environmental Services (OES). Manage a team of ecologists and subconsultants delivering Ecology Initiatives including training media, guidance documents, report templates, programmatic agency agreements , and on-call services to the GDOT Ecology Section. Provide innovative digital solutions to improve GDOT program delivery including workload management, conflict of interest, and document tracking dashboards.
09/19 – 06/22	Environmental Support Services IDIQ Contract, GDOT, Statewide, GA. <i>Project Manager and Ecology Lead</i> . Responsible for management of embedded ecology and NEPA staff managing environmental studies on behalf of GDOT, including review of consultant documents. Design and develop ecology initiatives for the GDOT OES including guidebooks and toolkits to update the Environmental Procedures Manual, training materials for contractor prequalification, applications to streamline National Marine Fisheries Service Section 7 ESA and Essential Fish Habitat consultations, and other research initiatives.
10/15 – 04/18	North Bayou Black Drive/Hanson Canal Bridge (OSBP) – LADOTD, Terrebonne Parish, LA. <i>Senior Ecologist</i> . Completed a technical review of the Biological Resources and Wetland Findings Report, including required exhibits, prepared for replacement of an off-system highway bridge. Findings from the wetland delineation report were used for a USACE Jurisdictional Determination and Section 404 permit application.
07/16 – 03/18	Bayou Sara Streambank Restoration, West Feliciana Parish Department of Public Works, West Feliciana Parish, LA. <i>Senior Ecologist</i> . Project involved stabilizing the streambank along approximately 3,600 feet along Bayou Sara, where severe erosion is impacting the Town of St. Francisville’s Wastewater Treatment Facility, pond levees, and the Parish’s only access road (Ferdinand Street) to the Mississippi River. Completed a wetland delineation and protected species habitat assessment within the area proposed for bank stabilization, as well as adjacent staging and access areas. Provided technical review of a Biological Resources and Wetland Findings Report, including required exhibits, and NWP 13 PCN, including permit sketches for bank stabilization for which USACE authorization was successfully obtained.

Firm employed by.



Name	Catherine Bruns		Years of relevant experience with this employer	1
Title	Ecologist		Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization			BS / 2021 / Coastal Environmental Science, Louisiana State University	
Active registration number / state / expiration date			N/A	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Feasibility Report, Permit Plans / Permit Applications	
			Ms. Bruns is an Ecologist in the Arcadis Baton Rouge, Louisiana office. She supports transportation projects by performing wetland studies and preparing permit packages for submittal to United States Army Corps of Engineers (USACE) and Louisiana Department of Natural Resources (LDENR) Office of Coastal Management. Prior to joining Arcadis, she worked in the LDENR Office of Coastal Management performing technical and environmental reviews of projects submitted for Coastal Use Permits. She has experience with environmental permitting, biological assessment, and wetland studies	
Experience dates			Experience and qualifications relevant to the proposed contract	
05/23 – Ongoing			Rural Bridge Replacement Initiative Phase II, Louisiana Department of Transportation & Development (LADOTD), Multiple Cities, LA. Ecologist for 16 state projects involving replacement of 29 state highway bridges. The environmental scope of services for the projects consists of Solicitation of Views, Wetland Studies, Programmatic Categorical Exclusion Checklists, and permitting including USACE Nationwide Permits (NWP) and LDENR Coastal Use Permits (CUP).	
07/23 – Ongoing			I-20 Widening/Overlay (Vancil Rd – LA 34), LADOTD, West Monroe, LA. Ecologist. Performed a wetland delineation along I20 near West Monroe, LA for the proposed interstate widening project. Provided a Wetland Findings Report, including required exhibits, to be used for a USACE Jurisdictional Determination.	
02/24 – Ongoing			I-10 Calcasieu P3 Design Phase, LADOTD, Lake Charles, LA. Ecologist. Prepared environmental documentation and permitting materials for the Calcasieu River Bridge replacement in Lake Charles, LA. The environmental scope of services includes jurisdictional wetland verification, NEPA Re-Evaluation of environmental commitments, and permitting to include USACE Sections 10, 404, and 408, USCG Section 9, and LDEQ Section 401.	
05/24 – Ongoing			Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program, LADOTD, Lake Charles, LA. Ecologist for state projects involving replacement of off-system bridges. The environmental scope of services for the project consists of Solicitation of Views, Wetland Studies, Environmental Determination Checklists, and permitting including USACE Nationwide Permits (NWP) and Louisiana Department of Energy and Natural Resources Coastal Use Permits (CUP)	

Firm employed by. 			Meets MPR No. 5	
Name	Patrick C. Staiano, PLS		Years of relevant experience with this employer	5.5
Title	Staff Surveyor		Years of relevant experience with other employer(s)	10
Degree(s) / Years / Specialization		BS / 2008 / Construction Management, Louisiana State University ATSSA TCS		
Active registration number / state / expiration date		PLS #5130 / LA / Exp. 09/30/2027		
Year registered	2015	Discipline	Professional Surveyor	
Contract role(s) / brief description of responsibilities		Surveying		
		Mr. Patrick Staiano, PLS will serve as NTBA Survey Project Manager for property surveys and right-of-way mapping during this contract. He satisfies MPR No. 5 for property surveying and right-of-way mapping experience. He will manage field crews, technicians, data processing, drafting, review and certification of maps and surveys, and submittals. He has over 15 years of surveying experience.		
Experience dates		Experience and qualifications relevant to the proposed contract		
11/25 – 03/26		Upper Ward Creek Clearing & Snagging Project, City of Baton Rouge/East Baton Rouge Parish, East Baton Rouge Parish, LA. Project Manager. Directing field crews, file processing, drafting, and submittals for topographic and property surveys, right-of-way mapping, and surveys in support of QL C, B, and D surface utility designating for flood reduction and associated channel-improvement work.		
09/24 – 03/26		IDIQ Contract for Professional Boundary Surveying Services, LADOTD, LA. Project Manager. Directing field crews, file processing, drafting, and submittals for topographic surveys and property surveys in support of title take-offs, description preparations, preliminary and final right-of-way mapping in support of roadway design improvements.		
01/23 – 03/26		Jimmie Davis Bridge (LA 511) Design-Build, LADOTD, Bossier & Caddo Parishes, LA. Assistant Project Manager. Assisting in the management of field crews, file processing, drafting, and submittals for Static GPS control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, property surveys, surveys in support of QL B, C, and D subsurface utility designating, title take-offs, legal description preparation, and preliminary and final right-of-way mapping for the design-build project to replace the Jimmie Davis Bridge across the Red River as a sub-consultant to James Construction.		
09/22 – 03/26		Rural Bridge Replacement Initiative Phase II, LADOTD, Districts 05, 08, & 58, LA. Assistant Project Manager. Assisting in the management of field crews, file processing, drafting, and submittals for Static GPS control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, property surveys, title take-offs, legal description preparations, and preliminary and final right-of-way mapping for 34 bridge and culvert replacements including surveying all sub-surface drainage structures as a sub-consultant to BKI.		
09/22 – 03/26		Rural Bridge Replacement Initiative Phase II, LADOTD, Districts 02, 03, 07, 61, & 62, LA. Assistant Project Manager. Assisting in the management of field crews, file processing, drafting, and submittals for Static GPS control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, property surveys, title take-offs, legal description		

	preparations, and preliminary and final right-of-way mapping for 21 bridge and culvert replacements including surveying all sub-surface drainage structures as a sub-consultant to Waggoner.
09/22 – 03/26	Surveying & SUE Services, Delta Utilities/CenterPoint Energy, Various Parishes, LA. Assistant Project Manager. Assisting in the management of field crews, file processing, drafting, and submittals for topographic surveys, property surveying services, surveys in support of SUE, title research, title take-offs, boundary and right-of-way calculations, and reviews of CADD drawings and plats for maintenance and construction projects.
09/22 – 03/26 03/18 – 02/21	Infrastructure Improvements, Permian Basin, Apache Corporation, Reeves Counties, TX. Project Manager. Managing property surveying services and right-of-way acquisition mapping for approximately 84 miles of infrastructure improvements. Prepared approximately 131 property acquisition plats for this project.
09/22 – 3/26 03/18 – 02/21	Natural Gas Gathering System, Targa Pipeline, Howard and Martin Counties, TX. Quality Control Surveyor. Reviewing drafting and property acquisition plats as well as assisting with management of property surveying services. Prepared approximately 250 property acquisition plats for this project.
07/23 – 03/26	IJA Off-System Bridge Program, LADOTD, District 62, LA. Project Manager. Directing field crews, file processing, drafting, and submittals for Static GPS control surveys, topographic surveys, property surveys, title take-offs, legal description preparation, and preliminary and final right-of-way mapping in support of bridge replacements.
03/21 – 08/22	Jefferson Hwy. at Bluebonnet Intersection Improvements, MOVEBR, LA. Project Manager. Managed field crews and technicians for topographic surveys, property surveys, and right-of-way mapping.
03/20 – 02/21	Big Sandy Siding Survey, UPRR, Upshur and Wood Counties, TX. Assistant Project Manager. Performed property surveying services for 15 parcels along railroad consisting of approximately 3.24 miles of track to establish the existing railroad right-of-way. Prepared 8 ALTA Surveys along with the privately owned parcels for acquisition, 0.25-acre acquisition parcel in the right-of-way, and an overall right-of-way strip map.
09/19 – 02/20	MaBee Ranch Line Locates, DCP Midstream, Martin and Andrews Counties, TX. Project Manager. Managed property surveying services in support of property acquisition services for 32 individual pipelines totaling approximately 22 miles.
03/18 – 10/18	Rogillio Resubdivision, East Baton Rouge & East Feliciana Parishes, LA. Assistant Project Manager. Performed title take-offs, boundary, and right-of-way calculations, and reviewing CADD drawings and plats for resubdivision services for 93 acres.
04/17 – 03/18	LA 653 Bayou Dumar Bridge Replacement, LADOTD Lafourche Parish, LA. Survey Manager. Under the supervision of Robert H. Brooks, III, PLS and Max O. Usrey, III, PLS, performed property surveys, prepared title work info, and right-of-way maps for a +/-0.5-mile bridge replacement project.
01/17 – 03/18	LA 450 Stoney Point Bridge Replacement, LADOTD, Washington Parish, LA. Survey Manager. Under the supervision of Robert H. Brooks, III, PLS and Max O. Usrey, III, PLS, performed property surveys and prepared title work info and right-of-way maps for a +/-0.25-mile bridge replacement project.
09/17 – 01/18	LA 1026: Roundabout at Buddy Ellis Rd., LADOTD Livingston Parish, LA. Survey Manager. Under the supervision of Robert H. Brooks, III, PLS and Max O. Usrey, III, PLS, performed property surveys, prepared title work info, and right-of-way maps for a +/-0.3-mile project.
03/17 – 07/17	LA 1042: Bridges Near Greensburg, LADOTD, St. Helena Parish, LA. Survey Manager. Under the supervision of Robert H. Brooks, III, PLS and Max O. Usrey, III, PLS, performed property surveys, prepared title work info, and right-of-way maps for a +/- 2-mile bridge project.

Firm employed by. 			Meets MPR No. 5	
Name	Bryan T. Bunch, PLS		Years of relevant experience with this employer	17
Title	Executive Vice President		Years of relevant experience with other employer(s)	15
Degree(s) / Years / Specialization		BS / 1988 / Survey and Land Information Systems, University of Arkansas		
Active registration number / state / expiration date		PLS #5014 / LA / Exp. 03/31/2026		
Year registered	2009	Discipline	Professional Surveyor	
Contract role(s) / brief description of responsibilities		Surveying		
		Mr. Bryan Bunch, PLS will serve as NTBA Assistant Project Manager assisting in staff management, processing, and preparation of deliverables for surveying and mapping services. He also satisfies MPR No. 5 for topographic and property surveys and right-of-way mapping.		
Experience dates		Experience and qualifications relevant to the proposed contract		
08/25 – 03/26		LADOTD, I-20: Sam R. Fert Dr. to Red River Bridge, Caddo Parish, LA. Assistant Survey Project Manager. Assisting in staffing, coordination, and QA/QC for Static GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, and surveys in support of SUE for interstate rehabilitation along I-20, between a point southeasterly of the I-20 & I-49 interchange and the Caddo/Bossier Parish Line.		
11/25 – 03/26		LADOTD, Kings Hwy: Healthcare & Development Corridor, Caddo Parish, LA. Assistant Survey Project Manager. Assisted in staffing, coordination, and QA/QC for Static GPS Control surveys and topographic surveys in support of QL B, C, & D utility designating and utility coordination services in support of rehabilitation and design for roadway reconstruction.		
01/23 – 03/26		LADOTD, Jimmie Davis Bridge (LA 511) Design-Build, Bossier & Caddo Parishes, LA. Survey Project Manager. Directing field crews, file processing, drafting, and submittals for Static GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, property surveys, title take-offs, description preparations, preliminary and final right-of-way mapping, QL A, B, C, & D utility designating/locating, and utility coordination services for the design-build project to replace the Jimmy Davis Bridge across the Red River.		
09/20 – 03/26		LADOTD, Rural Bridge Replacement Initiative Phase II, Districts 05, 08, & 58, LA. Survey Project Manager. Directing field crews, file processing, drafting, and submittals for Static GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, property surveys, title take-offs, description preparations, preliminary and final right-of-way mapping, and QL C & D subsurface utility services for 34 bridge and culvert replacements as a sub to BKI.		
09/20 – 03/26		LADOTD, Rural Bridge Replacement Initiative Phase II, Districts 02, 03, 07, 61, & 62, LA. Survey Project Manager. Directing field crews, file processing, drafting, and submittals for Static GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, property surveys, title take-offs, description preparations, preliminary and final right-of-way mapping, and QL C & D subsurface utility services for 21 bridge and culvert replacements as a sub to Waggoner.		

07/23 – 03/26	LADOTD, IJJA Off-System Bridge Program, District 62, LA. <i>Quality Control Surveyor.</i> Assisted in staffing, coordination, and QA/QC for Static GPS control surveys, topographic surveys, property surveys, title take-offs, legal description preparation, and preliminary and final right-of-way mapping in support of bridge replacements.
12/24 – 05/25	LADOTD, Contract for Topographic Surveys, Box Culvert Replacements, Tasks Orders 1-4, St. Landry & Bienville Parishes, LA. <i>Assistant Project Manager.</i> Assisted in staffing, coordination, and QA/QC for Static GPS Control surveys, topographic surveys, and surveys in support of QL D subsurface utility record research for preliminary designs of box culverts.
12/17 – 11/24	LADOTD, I-10: LA 415 to Essen Lane on I-10 and I-12, West & East Baton Rouge Parishes, LA. <i>Survey Project Manager.</i> Directed field crews, file processing, drafting, and submittals for Static GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, QL B, C, and D subsurface utility designating, and surveys in support of QL B, C, and D subsurface utility designating for approximately 13 miles of roadway.
04/22 – 04/23	LADOTD, I-20 Monkhouse to I-49, Caddo Parish, LA. <i>Survey Project Manager.</i> Directed field crews, file processing, drafting, and submittals for Static GPS Control, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, QL C & D subsurface utility services, drainage map preparation, and Mobile Laser Scanning for interstate rehabilitation.
12/20 – 03/22	LADOTD, LA 47 IWGO Bridge Rehabilitation, Historic Bridge Improvement (HBI), Orleans Parish, LA. <i>Assistant Project Manager.</i> Assisted in the management of field crews and technicians for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection and surveys in support of QL C & D subsurface utility designating for bridge repair/rehabilitation.
12/20 – 03/21	LADOTD, LA 6: Youngs Bayou Bridge Rehab, Natchitoches Parish, LA. <i>Assistant Project Manager.</i> Assisted in staffing, coordination, and QA/QC for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection for bridge rehabilitation.
05/15 – 12/20	City of Bossier, Walter O. Bigby Carriageway (N. Pkwy Ext.), Bossier Parish, LA. <i>Quality Control Surveyor.</i> Supervised south LA field crews and technicians for Static GPS Control surveys, topographic, property, and hydrographic surveying services, and QL A, B, C, and D subsurface utility designation/locating for a parkway facility design featuring new roads, additional lanes, roundabouts, and a bridge.
05/16 – 06/18	LADOTD, LA 675 & LA 87 Improvements in New Iberia, Iberia Parish, LA. <i>Project Manager.</i> Directed field crews, file processing, drafting, and submittals for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection as a sub to Stanley Consultants, Inc.
07/16 – 03/17	LADOTD, Bayou Fountain, Route LA 327 Spur (Gardere Lane), East Baton Rouge Parish, LA. <i>Survey Project Manager.</i> Directed field crews, file processing, drafting, and submittals for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, surveys in support of QL B, C, and D subsurface utility designating, and drainage map preparation for roadway rehabilitation.
04/15 – 09/15	LADOTD, LA 3094: Hearne Ave. Bridge Rehab, Route LA 3094, Caddo Parish, LA. <i>Quality Control Surveyor.</i> Assisted in staffing, coordination, and QA/QC for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, drainage map preparation, and surveys in support of QL B subsurface utility designating for bridge rehabilitation.
04/15 – 02/16	LADOTD, I-20 (Airline Drive to I-220) Route I-20, Bossier Parish, LA. <i>Assistant Project Manager.</i> Supervised south LA crew members and technicians for topographic surveying services.

Firm employed by. 			Meets MPR No. 5
Name	Mike J. King, PLS	Years of relevant experience with this employer	19.5
Title	Vice President	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization	BS / 2012 / Construction Management, Louisiana State University		
Active registration number / state / expiration date	PLS #5127 / LA / Exp. 09/30/2027		
Year registered	2015	Discipline	Professional Surveyor
Contract role(s) / brief description of responsibilities	Surveying		
	Mr. Mike King, PLS will serve as NTBA Survey Project Manager for topographic surveying services during this contract. He satisfies MPR No. 5 for topographic surveying experience. He will manage field crews, file processing, drafting, and submittals. He has over 20 years of surveying experience.		
Experience dates	Experience and qualifications relevant to the proposed contract		
08/25 – 03/26	I-20: Sam R. Fert Dr. to Red River Bridge, LADOTD, Caddo Parish, LA. <i>Survey Project Manager</i> for Static GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, and surveys in support of SUE for interstate rehabilitation along I-20, between a point southeasterly of the I-20 & I-49 interchange and the Caddo/Bossier Parish Line.		
04/15 – 09/15	LA 3094: Hearne Ave. Bridge Rehab, Route LA 3094, LADOTD, Caddo Parish, LA. <i>Quality Control Surveyor.</i> Reviewed data and drafting for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, drainage map preparation, and surveys in support of QL B subsurface utility designating for bridge rehabilitation.		
11/25 – 03/26	Kings Hwy: Healthcare & Development Corridor, LADOTD, Caddo Parish, LA. <i>Survey Project Manager.</i> Directing field crews, file processing, drafting, and submittals for Static GPS Control surveys and topographic surveys in support of QL B, C, & D utility designating, and utility coordination services in support of rehabilitation and design for roadway reconstruction.		
01/23 – 03/26	Jimmie Davis Bridge (LA 511) Design-Build, LADOTD, Bossier & Caddo Parishes, LA. <i>Assistant Project Manager.</i> Assisting in the management of field crews and technicians for Static GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, property surveys , title take-offs, description preparations, preliminary and final right-of-way mapping, QL A, B, C, & D utility designating/locating, and utility coordination services for the design-build project to replace the Jimmy Davis Bridge across the Red River.		
08/21 – 03/26	Rural Bridge Replacement Initiative Phase II, LADOTD, Districts 05, 08, & 58, LA. <i>Assistant Project Manager.</i> Assisting in the management of field crews and technicians for Static GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, property surveys, title take-offs, description preparations, preliminary and final right-of-way mapping, and QL C & D subsurface utility services for 34 bridge and culvert replacements as a sub to BKI.		
04/21 – 03/26	Rural Bridge Replacement Initiative Phase II, LADOTD, Districts 02, 03, 07, 61, & 62, LA. <i>Assistant Project Manager.</i> Assisting in the management of field crews and technicians for Static GPS Control surveys, topographic surveys utilizing HDS 3D		

	Terrestrial Laser Scanning methods of data collection, property surveys, title take-offs, description preparations, preliminary and final right-of-way mapping, and QL C & D subsurface utility services for 21 bridge and culvert replacements.
08/22 – 03/26	Surveying & SUE Services, Delta Utilities/CenterPoint Energy, Various Parishes, LA. <i>Quality Control Surveyor.</i> Assisting in staffing, coordination, and QA/QC for topographic surveys, property surveys, surveys in support of SUE, title takeoffs, boundary and right-of-way calculations, CADD drawings, and plats for maintenance and construction projects. To date, NTBA has worked on over 100 separate projects stretching from Lake Charles to Lafayette to Shreveport, and along the Northshore of Lake Pontchartrain.
12/24 – 05/25	Contract for Topographic Surveys, Box Culvert Replacements, Tasks Orders 1-4, LADOTD, Evangeline, St. Landry, & Bienville Parishes, LA. <i>Project Manager.</i> Directing field crews, file processing, drafting, and submittals for Static GPS Control surveys, topographic surveys, and surveys in support of QL D subsurface utility record research for preliminary designs of box culvert initiative projects.
12/17 – 11/24	I-10: LA 415 to Essen Lane on I-10 and I-12, LADOTD, West & East Baton Rouge Parishes, LA. <i>Assistant Project Manager.</i> Assisted in the management of field crews and technicians for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, QL B, C, and D subsurface utility designating, and surveys in support of QL B, C, and D subsurface utility designating for approximately 13 miles of roadway.
04/22 – 04/23	I-20 Monkhouse to I-49, LADOTD, Caddo Parish, LA. <i>Assistant Project Manager.</i> Assisted in the management of field crews and technicians for Static GPS Control, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, QL C & D subsurface utility services, drainage map preparation, and Mobile Laser Scanning for interstate rehabilitation.
12/20 – 03/22	LA 47 IWGO Bridge Rehabilitation, Historic Bridge Improvement (HBI), LADOTD, Orleans Parish, LA. <i>Assistant Project Manager.</i> Assisted in the management of field crews and technicians for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection and surveys in support of QL C & D subsurface utility designating for bridge repair/rehabilitation.
05/15 – 12/20	Walter O. Bigby Carriageway (N. Pkwy Ext.), City of Bossier, Bossier Parish, LA. <i>Quality Control Surveyor.</i> Reviewed data and drafting for Static GPS Control surveys, topographic, property, and hydrographic surveying services, and QL A, B, C, and D subsurface utility designation/locating for a parkway facility design featuring new roads, additional lanes, roundabouts, and a bridge.
07/16 – 03/17	Bayou Fountain, Route LA 327 Spur (Gardere Lane), LADOTD, East Baton Rouge Parish, LA. <i>Assistant Project Manager.</i> Assisted in the management of survey crews and technicians for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, surveys in support of QL B, C, and D subsurface utility designating, and drainage map preparation for roadway rehabilitation.
02/14 – 03/15	Earhart Expressway Extension to US 61, Route LA 3139, LADOTD, Jefferson Parish, LA. <i>Sr. Survey Party Chief/Tech.</i> Ran a field crew and processed data for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection for an overpass connection, relocation of existing lanes, and construction of additional lanes as a sub to AECOM.
07/12 – 01/14	I-10 Loyola Ave. to Williams Blvd., LADOTD, Jefferson Parish, LA. <i>Sr. Survey Party Chief/Tech.</i> Managed a survey crew and processed data for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection for interstate rehabilitation as a sub to GEC, Inc.

Firm employed by. 			Meets MPR No. 9
Name	Belton Davis, Jr.	Years of relevant experience with this employer	6.5
Title	Party Chief	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization	U.T.A. Certified Professional Utility Locator ATSSA TCT		
Active registration number / state / expiration date	N/A		
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities	Surveying		
	Mr. Belton Davis will serve as an NTBA Survey/ SUE Party Chief during this contract. He will lead a field crew and download data for survey and SUE services.		
Experience dates	Experience and qualifications relevant to the proposed contract		
11/25 – 03/26	Upper Ward Creek Clearing & Snagging Project, City of Baton Rouge/East Baton Rouge Parish, East Baton Rouge Parish, LA (25-DR-US-0013). <i>Survey/SUE Party Chief.</i> Running a field crew and downloading data for topographic and property surveys, QL C, B, and D surface utility designating, and surveys in support of SUE for flood reduction and associated channel-improvement work.		
01/23 – 03/26	Jimmie Davis Bridge (LA 511) Design-Build, LADOTD, Bossier & Caddo Parishes, LA (H.001779). <i>Survey/SUE Party Chief.</i> Running a field crew and downloading data for Static GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, and property surveys in support of title take-offs, title research, preliminary and final right-of-way mapping, and QL A, B, C, & D utility designating/ locating for the design-build project to replace the Jimmy Davis Bridge across the Red River.		
07/23 – 03/26	IIJA Off-System Bridge Program, LADOTD, District 62, LA (4400025041). <i>Survey/SUE Party Chief.</i> Running a field crew and downloading data for Static GPS control surveys, topographic surveys, property surveys, title take-offs, legal description preparation, and preliminary and final right-of-way mapping in support of bridge replacements.		
12/24 – 01/25	Contract for Topographic Surveys, Box Culvert Replacements, Tasks Orders 1-4, LADOTD, Evangeline, St. Landry, & Bienville Parishes, LA (4400021975). <i>Survey/SUE Party Chief.</i> Ran a field crew and downloaded data for Static GPS Control surveys, topographic surveys, and surveys in support of QL D subsurface utility record research for preliminary designs of box culvert initiative projects.		
06/18 – 10/24	I-10: LA 415 to Essen Lane on I-10 and I-12, LADOTD, West & East Baton Rouge Parishes, LA (H.004100.5). <i>Survey/SUE Party Chief.</i> Ran a field crew and downloaded data for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, QL B, C, and D subsurface utility designating, and surveys in support of QL B, C, and D subsurface utility designating for approximately 13 miles of roadway.		

10/21 – 11/23	Rural Bridge Replacement Initiative Phase II, LADOTD, Districts 05, 08, & 58, LA (4400019337). <i>Survey/SUE Party Chief.</i> Running a field crew and downloading data for Static GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, and property surveys in support of title take-offs, legal description preparation, preliminary and final right-of-way mapping, and QL C & D subsurface utility services for 34 bridge and culvert replacements as a sub to BKL.
05/21 – 08/23	Rural Bridge Replacement Initiative Phase II, LADOTD, Districts 02, 03, 07, 61, & 62, LA (4400019338). <i>Survey/SUE Party Chief.</i> Running a field crew and downloading data for Static GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, and property surveys in support of title take-offs, legal description preparation, preliminary and final right-of-way mapping, and QL C & D subsurface utility services for 21 bridge and culvert replacements as a sub to Waggoner.
09/21 – 02/22	LA 47 IWGO Bridge Rehabilitation, Historic Bridge Improvement (HBI), LADOTD, Orleans Parish, LA (4400017713). <i>Survey/SUE Party Chief.</i> Ran a field crew and downloaded data for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection and surveys in support of QL C & D subsurface utility services for bridge repair/ rehabilitation.

Firm employed by. 			Meet MPR No. 6	
Name	Megan Bourgeois, PE		Years of relevant experience with this employer	19
Title	Geotechnical Engineer		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS / 2006 / Civil Engineering Traffic Control Supervisor / LA / 6-21-2028 DOTD Flagger / LA / 8-14-2028 Certified NHI Drilled Shaft Inspector		
Active registration number / state / expiration date		PE. 36725 / LA / Exp. 03/31/2028		
Year registered	2011	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		Geotechnical Engineer		
Experience dates	Experience and qualifications relevant to the proposed contract			
		Ms. Bourgeois has more than 19 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 & GEC design, slope stability (embankment and excavation) and earth retaining structures. She also has extensive experience with geotechnical instrumentation, installation and monitoring, and construction phase testing and laboratory management. She has served as Ardaman's project manager for many LADOTD projects for bridges and roadways throughout Louisiana and completed numerous geotechnical investigations, engineering, and reporting in accordance with LADOTD standards. She has successfully overseen several major contracts for LADOTD and other clients. Ms. Bourgeois also serves as the director of our geotechnical engineering and CMT laboratories in Baton Rouge and has overseen the laboratory testing programs in accordance with LADOTD standards. In this role, she supervises the laboratory managers, oversees testing, provides guidance to laboratory staff, and ensures appropriate protocol is followed and deadlines are met in addition to providing training material and maintaining all laboratory certifications, including AMRL, CCRL, DEQ & USACE.		
07/23 – Ongoing	MRB SOUTH GBRL: LA 1 TO LA 30 CONNECTOR: West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes, LA. <i>Project Engineer.</i> The project consists of an Enhanced Planning investigation into S.P. 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. 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 ECPT. The preliminary engineering analyses included caisson design, driven piles, drilled shafts, embankments, proposed alignment comparisons, environmental concerns, and testing program recommendations.			
07/21 – 01/22	I-10 CALCASIEU RIVER BRIDGE: Calcasieu Parish, LA. <i>Project Manager.</i> Managed 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. Also managed and oversaw the laboratory testing program and processing and analyzing of the ECPT and ER data. 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.			

04/21 – Ongoing	RURAL BRIDGE INITIATIVE PHASE II: West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, LA. 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, over various size rivers and creeks. Leads 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.
02/20 – Ongoing	DESIGN SUPPORT SERVICES LA 23, BELLE CHASSE BRIDGE & TUNNEL: Plaquemine Parish, LA. 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. Assisted in review and acceptance of geotechnical services as well as quality control and review of all acceptance verification sampling and testing during construction.
10/15 – Ongoing	PECUE LANE I-10 INTERCHANGE: East Baton Rouge Parish, LA. 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. Managed all aspects of the project that included field investigations, laboratory testing, and engineering design. Performed 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 DOTD standards. She is currently assisting with the field construction monitoring.
10/09 – Ongoing	I-20 MISSISSIPPI RIVER BRIDGE REVIEW: Vicksburg, MS. Project Manager. Manages this multi-million-dollar, highly technical project consisting of investigating movement of the I-20 Bridge in Vicksburg, MS. Managed and personally oversaw a comprehensive laboratory testing program and was involved in refining the geotechnical site characterization for the bank/bluff where there was evidence of shifting creating movement in the bridge structure . The specialized testing, performed or managed included 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. Instrumental in designing the geotechnical instrumentation program for this project including vibrating wire piezometers, Casagrande type piezometers, SAA inclinometers, and traditional inclinometers. Performed seepage and drawdown analyses , slope stability analyses, evaluation of remedial measures including design and evaluation of large foundation structures and developed technically feasible solutions to mitigate ground movement . Co-authored the geotechnical analysis and design report. Currently overseeing the comprehensive monitoring program.
09/22 – Ongoing	EVANGELINE ROAD & CN RAILROAD CULVERT: St. Charles Parish, LA. Project Engineer. 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, Louisiana 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.
07/23 – Ongoing	US 371: KCS RAILROAD OVERPASSES HBI: Webster Parish, LA. 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. Ardaman performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.

Firm employed by. 			Meet MPR No. 7
Name	Jessica Litt	Years of relevant experience with this employer	12
Title	Laboratory Manager	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BS / 2010 / Biology		
Active registration number / state / expiration date	NICET / Generalist, Laboratory No. 141243 / Exp: 10/01/2027		
Year registered	-	Discipline	-
Contract role(s) / brief description of responsibilities	Materials Testing		
Experience dates	Experience and qualifications relevant to the proposed contract		
	Ms. Litt serves as Laboratory Manager of Ardaman's Baton Rouge laboratory which is under the direction of a Registered Professional Engineer. She supervises and manages operations of our AMRL Certified, DEQ Accredited, and USACE-validated laboratory and performs and oversees laboratory testing assignments, organizes, and schedules testing, trains and develops technicians, and supervises five laboratory technicians. Ms. Litt is experienced conducting 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.		
	03/25 – Ongoing	CULVERT REPLACEMENTS: Evangeline, Jackson, Rapides, Richland, St. Landry, Vernon, and Winn Parishes, LA. <i>Laboratory Manager.</i> Oversaw 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. Ms. Litt entered the laboratory test results into gINT in order to produce the LADOTD soil boring logs.	
	08/24-Ongoing	LA 44 ROUNDABOUTS & WIDENING: Ascension Parish, LA. <i>Laboratory Manager.</i> 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. Ms. Litt entered the laboratory test results into gINT to produce the LADOTD soil boring logs.	
	07/23-Ongoing	MRB SOUTH GBR LA 1 TO LA 30 CONNECTOR: West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes, LA. <i>Laboratory Manager.</i> 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. Ms. Litt reviewed the consolidation test results and entered the laboratory test results into gINT in order to produce the LADOTD soil boring logs.	
	07/23-Ongoing	IIJA: OFF-SYSTEM BRIDGES: Allen, Beauregard, and Calcasieu Parishes, LA. <i>Laboratory Manager.</i> 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.
07/23-Ongoing	US 371: KCS RAILROAD OVERPASSES HBI: Webster Parish, LA. <i>Laboratory Manager.</i> 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. <i>Laboratory Technician.</i> 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.
09/22-Ongoing	EVANGELINE ROAD & CN RAILROAD CULVERT: St. Charles Parish, LA. <i>Laboratory Technician.</i> 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, Louisiana 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. <i>Laboratory Technician</i> 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. <i>Laboratory Technician.</i> 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. <i>Laboratory Technician</i> 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. <i>Laboratory Manager.</i> 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.

Firm employed by.



Name	Robert Jewell, PE		Years of relevant experience with this employer	18
Title	Geotechncal Engineer		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS / 2009 / Civil Engineering	
Active registration number / state / expiration date			PE. 38579 / LA / Exp. 09/30/2026	
			Traffic Control Supervisor / LA / 08/23/2028	
			DOTD Flagger / LA / Exp. 07/31/2029	
Year registered	2013	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Geotechnical Engineer	
Experience dates	Experience and qualifications relevant to the proposed contract			
	Mr. Jewell 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 & 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. Mr. Jewell 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.			
07/23 – Ongoing	MRB SOUTH GBRL: LA 1 TO LA 30 CONNECTOR: West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes, LA. Project Manager. The project consists of an Enhanced Planning investigation into S.P. 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. Managed 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 ECPT. 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.			
07/21 – Ongoing	I-10: LA 415 TO ESSEN LANE ON I-10 & I-12 (CMAR): Baton Rouge Parish, LA. 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. Currently oversee 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.			
09/22 – Ongoing	EVANGELINE ROAD & CN RAILROAD CULVERT: St. Charles Parish, LA. Project Manager. 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, Louisiana 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.			

07/23 – Ongoing	US 371: KCS RAILROAD OVERPASSES HBI: Webster Parish, LA. 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. Ardaman performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.
04/21 – Ongoing	RURAL BRIDGE INITIATIVE PHASE II: West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, LA. Project Manager. The 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. 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.
10/18 – 11/21	I-220 / I-20 INTERCHANGE IMPROVEMENT AND BARKSDALE AIR FORCE BASE ACCESS ROAD: Bossier Parish, LA. Project Manager. 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, Louisiana. Managed and oversaw the preparation of the preliminary design and planning report. Also oversaw the field construction services consisting of PDA monitoring , bi-directional load cell load tests, and settlement monitoring.
10/15 – Ongoing	PECUE LANE I-10 INTERCHANGE: East Baton Rouge Parish, LA. Project Engineer. 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. Helped perform analyses including settlement estimates with recommendations for monitoring, driven pile and drilled shaft design including down drag considerations, MSE Wall design, slope stability and pavement section recommendations; all completed according to DOTD standards.
07/15 – Ongoing	I-49 CONNECTOR (LAFAYETTE REGIONAL AIRPORT TO I-10/I-49/US 167 INTERCHANGE): Lafayette Parish, LA. Project Manager. 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. 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 . 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.
04/14 – Ongoing	I-12 TO BUSH SEGMENT 2, LA 3241 (LA 36-LA435): St. Tammany Parish, LA. Project Manager. 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. 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. Oversaw the construction phase which included PDA testing and settlement monitoring.
10/09 – Ongoing	I-20 MISSISSIPPI RIVER BRIDGE REVIEW: Vicksburg, MS. Project Engineer. Assisted in several aspects of 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. Helped managed the field investigations and instrumentation programs, along with review of the field data and engineering reporting.

Firm employed by.



Name	Mark Woodward, PE		Years of relevant experience with this employer	8
Title	Geotechncal Engineer		Years of relevant experience with other employer(s)	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 / Exp. 9/30/2027	
Year registered	1991	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Principal Geotechnical Engineer	
Experience dates	Experience and qualifications relevant to the proposed contract			
	Mr. Woodward served as a geotechnical engineer for 36 years in the geotechnical branch of USACE New Orleans District, retiring as the Deputy Chief of the Geotechnical Branch and Dam and Levee Safety Program Manager. He was responsible for managing all departments in the branch including engineering, drilling, soils laboratory, dredge material testing, concrete testing, and administration. Mr. Woodward has considerable experience designing and managing various types of projects on the Mississippi River, Atchafalaya Basin and Storm Surge Levees in Southeast Louisiana, Mississippi and Texas, as well as mitigation and coastal projects in Louisiana. These projects included design of major foundation elements for dams, earthen levees, hydraulic structures, floodwalls, revetments, channel stabilization, bank degrading, ground improvement, deep excavations, relief wells, wick drains, dewatering systems, seepage and stability beams, preloads, reinforced levees and marsh creation for mitigation, coastal restoration and protection and beneficial use of dredge material in marsh and coastal environments with field investigations requiring use of specialized marine and marsh drilling equipment. Since 2018, Mr. Woodward has served as Principal Geotechnical Engineer of Ardaman for Louisiana, Mississippi, Alabama, Arkansas, and Texas. Mr. Woodward provides oversight and review of design major foundation elements for transportation, industrial, commercial, and municipal projects.			
04/21 – 01/2025	RURAL BRIDGES PHASE I: Claiborne Parish, LA. Principal Engineer. The Rural Bridges project initiative consists of replacing many older bridges throughout the State of Louisiana. Provided review of the geotechnical design including pile foundations for 3 bridges.			
01/19 – 12/23	CHENIERE SPILLWAY & BRIDGE REPLACEMENT: Ouachita Parish, LA. Principal Engineer. Served as the Principal Engineer for this project which included the replacement of the current damaged spillway and bridge structure in Ouachita Parish, Louisiana.			
10/18 – 11/21	I-220 I-20 INTERCHANGE IMPROVEMENT AND BARKSDALE AIRFORCE BASE ACCESS ROAD: Bossier Parish, LA. 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, Louisiana. 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. Principal Engineer. 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. 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. Principal Engineer. The project consists of construction of three bridges for US 371 KC Railroad overpasses that <i>replaced two parallel bridges and one standalone bridge</i> . Ardaman performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.
05/18 – 08/19	I-12 WIDENING (US 190 to LA 59): St. Tammany Parish, LA. Principal Engineer. Provided technical oversight for this project which included the <i>widening of I-12 in St. Tammany Parish</i> . 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. Provided oversight to perform additional soil borings, lab testing and engineering analyses for a retaining wall for one of the bridge abutments
05/18 – 09/19	US 190: LA 437 TO USE 190 BUS (PH 1): St. Tammany Parish, LA. Principal Engineer. Provided technical oversight for this project which includes the widening of US 190 to a four-lane boulevard between US 437 and US 190.
05/18 – 07/18	IMTT ACCESS ROAD PAVEMENT, AVONDALE: Jefferson Parish, LA. Principal Engineer. Served as Senior Engineer for 2,200-foot-long x 50 -foot wide rigid and flexible roadway design for <i>AASHTO loading per LADOTD guidelines</i> , including subsurface exploration and testing, California Bearing Ratio, subbase material and thickness recommendations, wearing course thicknesses, and construction recommendations.
06/16 – 07/16	SOUTHEAST LOUISIANA URBAN FLOOD CONTROL, LOUISIANA AVENUE PAVING: Orleans Parish, LA. Chief of Structural Design. Served as decision maker as <i>Chief of Structural Design</i> , USACE New Orleans, for asphalt or concrete paving, looking at factors such as construction cost, durability, maintenance cycles and costs, constructability, construction duration, etc.
2014 – 2018	DAM AND LEVEE SAFETY PROGRAM, USACE NEW ORLEANS DISTRICT: LA. Dam and Levee Safety Program Manager. Served as the USACE New Orleans District Levee Safety Program Manager for over four years, responsible for Levee Evaluation Reports for Levee Certifications and the National Flood Insurance Program, Levee Inspection Reports on over 1300 miles of levee on an annual basis, Risk Assessments and Communication for all levees in the District's jurisdiction. Responsible for final Section 408 permitting approval to ensure that construction activities do not increase risk or diminish function of levees and do not cause harm to the public.
2006	HOMEPLACE LEVEE WITH GROUND IMPROVEMENT, P24: Plaquemines Parish, LA. Lead Geotechnical Engineer. In the aftermath of Hurricane Katrina, was assigned to <i>USACE Task Force Guardian as Geotechnical Engineer</i> for Plaquemines Parish to restore levee damage to pre-Katrina conditions. The Homeplace Floodwall had been 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 had coordinated pre-Katrina for Deep Mixing. Designed ground improvement and reviewed/ approved all construction submittals and oversaw construction.

16 STAFF EXPERIENCE:

Firm employed by:  AILLET, FENNER, JOLLY & MCCLELLAND INC.

Name	Robbin K. Cassity, PE, LEED AP	Years of relevant experience with this employer	28
Title	Electrical Engineer / Principal	Years of relevant experience with other employer(s)	13
Degree(s) / Years / Specialization	BS / 1985 / Electrical Engineering		
Active registration number / state / expiration date	PE.0026059 / LA / 3/31/28		
Year registered		Discipline	Electrical
Contract role(s) / brief description of responsibilities	Electrical Design / Lighting		
Experience dates	Experience and qualifications relevant to the proposed contract		
	Mr. Cassity is a licensed Electrical Engineer with a Bachelor of Science in Electrical Engineering from Louisiana Tech University in Ruston, Louisiana. For over forty-one years Robbin has developed considerable experience in electrical engineering design, specification writing, project management and construction administrative work on a variety of municipal, military, industrial, healthcare, institutional and commercial projects. The design experience of his project portfolio includes the complex nuances of design for highly secure, classified military areas, detention centers, and healthcare to include power distribution, lighting systems, fire alarm systems, access control and security system integration, and mass notification systems. Additionally, he has experience in power system analysis including, short-circuit studies, coordination studies and arc-flash studies. Mr. Cassity is LEED AP Certified.		
04/23 – Present	LaDOTD, Jimmie Davis Design Build, Caddo & Bossier Parishes. This project will construct a new 4-lane bridge over the Red River, convert LA 511 from a five-lane roadway to a 4-lane median divided roadway with turn lanes, and construct full-access interchange connections with LA 511 at both Arthur Ray Teague Parkway and Clyde Fant Memorial Parkway with associated roadway drainage systems, lighting and the conversion of the existing Jimmie Davis Bridge into a linear park. AFJMC was tasked with the design of at grade and elevated portions of the shared use trails on both sides of the Red River to connect at the existing Jimmie Davis Bridge. AFJMC is also responsible for the drainage for the west portion of the roadway design of LA 511 and its connections to Clyde Fant Parkway, and the electrical/lighting design for the project.		
11/25 - Present	LaDOTD, Kings Highway Healthcare Corridor, Caddo Parish, LA. <i>Electrical Designer.</i> Project includes plans for a new roadway lighting system on Kings Highway in Shreveport along the approximate 1.5 mile corridor from Samford Avenue to Hearne Avenue as well as coordination with utilities for relocation of overhead distribution to underground.		
02/26 - Present	City of Shreveport, Interstate Highway Improvements, Shreveport, LA. <i>Electrical Designer.</i> Repairs to the existing I-20 highway lighting systems in the approximate 6.5 mile corridor from the Monkhouse Drive interchange to the Spring Street interchange. The project will assess the condition of the existing system, including light fixtures, poles, wiring and controls and establish the extent of work needed to restore to the systems to the original design condition. Pending the assessment of existing conditions, a possible retrofit of existing fixture to new LED roadway light fixtures may be included in repairs.		
5/16 to 11/16	LaDOTD, Weigh Station Design, Renovation and Upgrade, Statewide, LA. Site visits to conduct assessment and inventory of all existing electrical equipment and conditions. Included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control.		
2/13 to 12/16	LaDOTD, I-49 North, I-220 to LA 1, Caddo Parish, LA. <i>Electrical Engineer</i> responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange.		

3/11 to 8/13	LaDOTD, Retainer Contract for Electrical Services Statewide, Louisiana. <i>Electrical Engineer.</i> Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed. Locations included: H.970609.1, District 62 – Franklinton Maintenance Unit, Washington Parish; H.971895.1, Section 42 – Central Repair Shop Renovations, East Baton Rouge Parish; and H.971552.1, East Baton Rouge Parish – HQ Renovation Truck Permits.
2022	Shreveport Regional Arts Council, US Hwy 80: Red River, Texas Street Bridge, Shreveport, LA (The Bakowski Bridge of Lights) <i>Electrical Engineer</i> provided the plans for the lighting installation.
12/19	LaDOTD, DOTD Headquarters Helipad, Baton Rouge, LA. <i>Electrical Engineer.</i> Provided electrical design for the DOTD Headquarters helipad.
8/03 to 6/06	City of Bossier, Benton Road, LA Highway 3 Overpass, Bossier City, LA. <i>Electrical Engineer.</i> Responsible for engineering design for the installation of roadway lighting along the approaches and overpass at LA Highway 3 and Benton Road Spur. Plans coordinated with roadway and overpass design plans by AFJMc Transportation group. Plans included with overall project set and issued for bid as part of complete roadway project.
12/01 to 6/04	City of Shreveport, Louisiana Highway 3132, The Inner Loop Expressway - Roadway Lighting, Shreveport, LA. <i>Electrical Engineer.</i> Responsible for engineering design and project management for the installation of roadway lighting for an approximate 7-mile section of the highway. Project included lighting layout-design, power distribution and control. Teamed with DBE firm for COS Fair Share Program. Design complete and submitted to the City of Shreveport.
2003	City of Shreveport, General Motors Boulevard - Roadway Lighting, Shreveport, LA. <i>Electrical Engineer.</i> Responsible for the engineering design and project management for the installation of roadway lighting for an approximate 2-mile roadway. Project included lighting layout/design, power distribution and control, as well as preparation of the complete bid package.
2011-2012	City of Bossier, Traffic Street Roadway Lighting, Phase 2 & Phase 3, Bossier City, LA. Phase 2 - <i>Electrical Engineer.</i> Responsible for design of a section of roadway lighting extending from the intersection with U.S. Highway 80. Project included lighting layout/design, power distribution and control. Phase 3 – Responsible for design for the extension of Phase 2 lighting further along Traffic Street and underneath an existing railway overpass.

16 STAFF EXPERIENCE:

Firm employed by: 

Name	Daniel Brown, PE, LEED AP	Years of relevant experience with this employer	18
Title		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BS / 2008 / Electrical Engineering		
Active registration number / state / expiration date	PE.0041687 / LA / 9-30-27		
Year registered	2017	Discipline	Electrical
Contract role(s) / brief description of responsibilities	Electrical Design / Lighting		

Experience dates	Experience and qualifications relevant to the proposed contract
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Mr. Brown is a licensed electrical engineer in the states of Louisiana and Texas. He routinely visits project sites for data collection and inspection, issues reports and project submittals. He attends training every three years when the Electrical Code is updated. Mr. Brown is LEED AP certified.

03/24 - Present	LaDOTD, Jimmie Davis Bridge Design Build, Caddo & Bossier Parishes, LA. This project will construct a new 4-lane bridge over the Red River, convert LA 511 from a five-lane roadway to a 4-lane median divided roadway with turn lanes, and construct full-access interchange connections with LA 511 at both Arthur Ray Teague Parkway and Clyde Fant Memorial Parkway with associated roadway drainage systems, lighting and the conversion of the existing Jimmie Davis Bridge into a linear park. AFJMC was tasked with the design of at grade and elevated portions of the shared use trails on both sides of the Red River to connect at the existing Jimmie Davis Bridge. AFJMc is also responsible for the drainage for the west portion of the roadway design of LA 511 and its connections to Clyde Fant Parkway, and the electrical/lighting design for the project.
11/20 to 8/21	LaDOTD, Mound Rest Area Improvements, Route I-20, Madison Parish, LA. Electrical engineer responsible for converting the site to 3-Phase power, site lighting, CCTV surveillance systems, back-up generator systems, surge protection, and replacing lighting on the interstate ramps.
4/19 to 4/20	LaDOTD, Virtual Weigh-in-Motion US Hwy 61, W. Feliciana Parish, LA. Prime consultant to develop construction road plans for the placement of a Virtual Weigh-In-Motion (VWIM) station, south of Louisiana/Mississippi State Line. The plans included electrical and guardrail design for the site.
2/19 to 4/20	LaDOTD, I-10: Texas State Line-E. of Coone Gulley, WIM Toomey Weigh Station, I-10, Calcasieu Parish, LA. Electrical design for electrical equipment including cabinet, poles, and cameras.
4/13 to 3/18	LaDOTD, I-49 North, I-220 to LA 1, Caddo Parish, LA. Electrical design for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange.
8/11 to 5/16	LaDOTD, Retainer Contract for Electrical Services, Statewide, LA. Providing electrical design services for new and existing LaDOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed. Project locations included: H.970609.1, District 62 – Franklinton Maintenance Unit, Washington Parish; and H.971895.1, Section 42 – Central Repair Shop Renovations, East Baton Rouge Parish

SECTION
17

NTBA, Inc., a trusted leader in geospatial and surveying services, brings extensive expertise critical to the successful delivery of the US 71 bridge project. Their precision topographic and boundary surveys form the foundational data that drives accurate design, alignment, and construction planning. By partnering with NTBA, Arcadis leverages a proven team committed to delivering timely, accurate, and high-quality survey data that underpins every phase of this complex infrastructure endeavor.



17 FIRM EXPERIENCE:

Firm name			Past Performance Evaluation Discipline(s)*	Bridge
Project name	Cross Bayou Bridge Replacement		Firm responsibility (prime or sub?)	Prime
Project number	H.000413	Owner's name	Louisiana Department of Transportation and Development	
Project location	Shreveport, LA District 4		Owner's Project Manager	Hamed Babaizadeh
Owner's address, phone, email	1201 Capitol Access Rd, RM 602-L, Baton Rouge, LA 70802; 225 379 1331			
Services commenced by this firm (mm/yy)	8/22	Total consultant contract cost (\$1,000's)	\$2100	
Services completed by this firm (mm/yy)	10/23	Cost of consultant services provided by this firm (\$1,000's)	\$324	

Firms Members: Osama Shahawy, Jose Rodriguez, Ari Deitch, Collin Sarratt, Sushil Dhungana

Firms Role: Project Management, Feasibility Study Report, Traffic study and final recommendation

Arcadis provided all engineering and related services required for developing a comprehensive Stage 0 Feasibility Study, per the LADOTD Stage 0 Manual of Standard Practice. The study was conducted for bridge replacement on US 71 at Cross Bayou in Caddo Parish, Shreveport, LA.

Relevant Services

- Feasibility Study
- Traffic Study and analysis
- Bridge and Roadway design Alternatives
- Construction Cost Estimate
- Benefits / Cost analysis

Project Number	Recall Number	Latitude	Longitude	Existing Structure Type	Route	Crossing
H.000413	013500	32.518890	-9293.750700	LG Girder	US 71	Cross Bayou
	013510	32.519200	-9293.750700	LG Girder	US 71	Cross Bayou

Bridge and Roadway Evaluation and Design Alternatives - An in-depth analysis of structural and roadway approaches was performed to determine the most **cost-effective approach for bridge replacement** and land **roadway improvement**. Alternatives were developed in accordance with the ASHTO LRFD Bridge Design Specifications Manual and the LADOTD Bridge Design and Evaluation Manual (BDEM).

Traffic Analysis / Alternative Development. A traffic study was performed to establish existing and future conditions in the study area and to evaluate improvement alternatives that support the replacement of bridge structures and **enhance operational efficiency and safety** for the Market Street and Spring Street corridors. The proposed improvements for each alternative include **improving traffic signal visibility and clarity** of available and restricted vehicular movements, implementing alternative intersection types such as roundabouts, and enhancing pedestrian infrastructures.

Construction Cost Estimate: A cost estimate has been prepared for the alternatives using average cost information per the LADOTD Project Delivery Manual. The costs include construction, mobilization, and contingency. A benefit-to-cost ratio was calculated for each alternative to provide a meaningful comparison. Replace the existing bridges with prestressed concrete girders (LG 45). Using LG 45 for the superstructure replacement of both bridges offers the following benefits: **reduced fabrication costs, transportation cost savings** due to lighter girders, smaller on-site cranes, and overall construction cost savings.



17 FIRM EXPERIENCE:

Firm name			Past Performance Evaluation Discipline(s)*	Bridge, Traffic, ITS
Project name	I-10 CMAR Structural Design and Traffic Support		Firm responsibility (prime or sub?)	Sub
Project number	H.004100	Owner's name	Louisiana Department of Transportation and Development	
Project location	Baton Rouge, Louisiana		Owner's Project Manager	Nicholas Olivier
Owner's address, phone, email	1201 Capitol Access Rd, RM 602-L, Baton Rouge, LA 70802; 225 379 1331			
Services commenced by this firm (mm/yy)	10/20	Total consultant contract cost (\$1,000's)	\$20000	
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$2500	

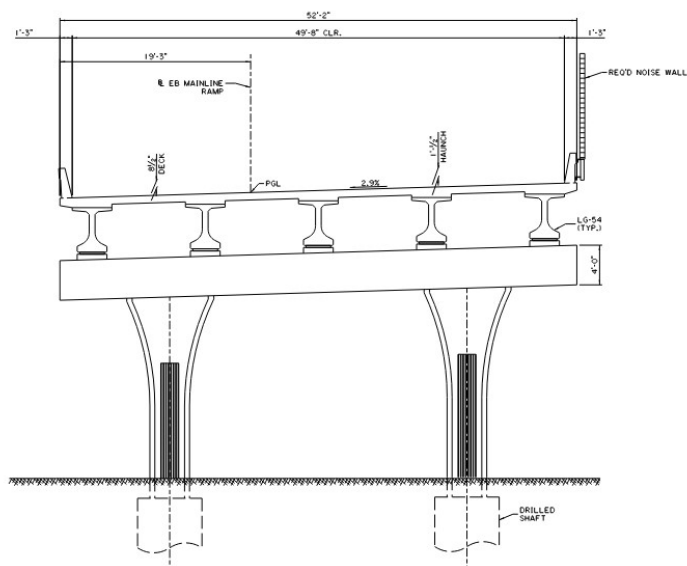
Firms Members: Osama Shahawy, Akhil Chauhan, Kester Hollier, Jose Rodriguez, Ari Deitch, Collin Sarratt, Krishna Singaraju, Sushil Dhungana, Bryan Barnes

Firms Role: Bridge and structural design, permanent signing design, transportation management plan (TMP), interchange modification reports (IMRs).

As part of the COREX10 (Corridor Renewal, Enhancement, and Expansion for I-10) team, Arcadis is responsible for **bridge and structural design**, development of interchange modification reports (IMRs), permanent signing plans, and development of a **transportation management plan (TMP)**. The project aims to widen I-10 from 3 to 4 lanes in each direction, including **bridge replacement and rehabilitation**, interchange and ramp modification, shoulder widening, and auxiliary lanes from LA 415 to Essen Lane. The RCP Plan Phase and Phase 1 Design for the project are in development, including the I-10 segment from the Mississippi River Bridge to Essen Lane.

Relevant Services

- Bridge and Structural Design
- Traffic Study and Design
- Construction Cost Estimate
- Transportation Management Plan
- Stakeholder and Agency Coordination



Bridge / Structural Design—Arcadis is tasked with designing and detailing the substructures for the Terrace-Washington mainline bridges and the I-110 ramp connecting to the EB mainlines. This includes **temporary and permanent bridge widening** for the EB and WB mainlines, converting and **rehabilitating an existing ramp into a bridge** by extending the existing columns, and using new bent caps. Conducting **phase construction**. The foundation layout is developed to incorporate the Greenway shared path beneath the mainline bridges.

Management Plan—Arcadis is responsible for developing the project's TMP, which is critical to ensuring the safety of motorists and workers, the quality of work, and minimizing travel delays during construction. Arcadis developed a **calibrated mesoscopic model to evaluate construction phasing alternatives**, determine the impacts on interstate and local networks, and identify practical mitigation strategies.

Permanent Signing – Permanent signing plans are being developed to replace all existing guide and standard signs along the corridor. Proposed signs utilize the latest state and federal policy guidance and employ strategies such as sign spreading to safely and efficiently guide motorists through the corridor

17 FIRM EXPERIENCE:

Firm name			Past Performance Evaluation Discipline(s)*	Bridge, Road, Traffic, Environmental
Project name	US 11 Railroad Bridge Replacement and Corridor Improvements		Firm responsibility (prime or sub?)	Prime
Project number	H.000688.2	Owner's name	Louisiana Department of Transportation and Development (LADOTD)	
Project location	St. Tammany Parish, Louisiana		Owner's Project Manager	Nicholas Olivier, PE
Owner's address, phone, email	1201 Capitol Access Rd, RM 602-L, Baton Rouge, LA 70802; 225.379.1331			
Services commenced by this firm (mm/yy)	08/11	Total consultant contract cost (\$1,000's)	\$768	
Services completed by this firm (mm/yy)	12/24	Cost of consultant services provided by this firm (\$1,000's)	\$716	

Firms Members: David Fulks, Sharear Kabir, Badre Enam, Akhil Chauhan, Buddy Porta

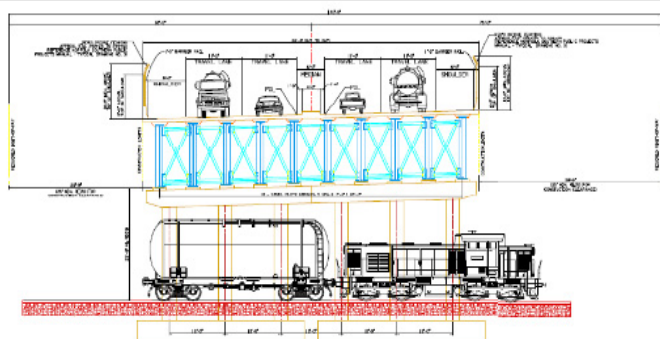
Firms Role: Roadway & bridge geometric design, railroad geometric design & clearance checks, 3D terrain modeling, line & grade document development, construction cost estimate, independent technical & quality reviews.

LADOTD contracted Arcadis and its sub-consultants to conduct **bridge and roadway design, traffic engineering, and environmental** services as part of an environmental assessment for the **replacement of a historic railroad overpass** and the upgrade of the existing undivided highway to a four-lane superstreet in Slidell, LA. The project goal was **to promote mobility and safety** along the corridor.

Bridge and Roadway Design - Arcadis performed all engineering services including roadway and **bridge line and grade and geometric design**; railroad track, ballast, and maintenance and road design to evaluate clearance requirements with future planned rail additions; **3D design modeling** of existing terrain, railroad full-build condition, and bridge and roadway typical sections and geometric layouts for improvements to accurately determine earthwork, construction limits, and required right-of-way.

Relevant Services

- Roadway and Bridge Geometric Design
- Bridge Type Study/Structural Analysis/3-D Modeling of Preferred Bridge Structure
- Curved Steel Plate Girder Bridge
- Access Management, Complete Streets
- Construction Cost Estimate
- Railroad Coordination / Design Considerations



Proposed US 11 bridge typical section and railroad clearance

Traffic Study - Five existing intersections were reconfigured as either **RCUT or median U-turn (MUT) intersections** to eliminate side-street left turns. The corridor was designed for WB-67 vehicles, requiring several lanes and truck aprons at U-turns. Vertical geometry was designed for the main corridor and all side streets, and a 3D design model was developed to verify that construction limits were accurate and that low ground clearance at railroad crossings was avoided.

Context-Sensitive Design - The design includes **compliant ramps and crosswalks to integrate with** existing sidewalks and **accommodate pedestrian traffic**. Sufficient space was included within the roadway border for the future installation, by the City of Slidell, of a multi-use path to accommodate bicyclists. Finally, **access to existing businesses was carefully balanced with the LADOTD Access Management Policy**.

17 FIRM EXPERIENCE:

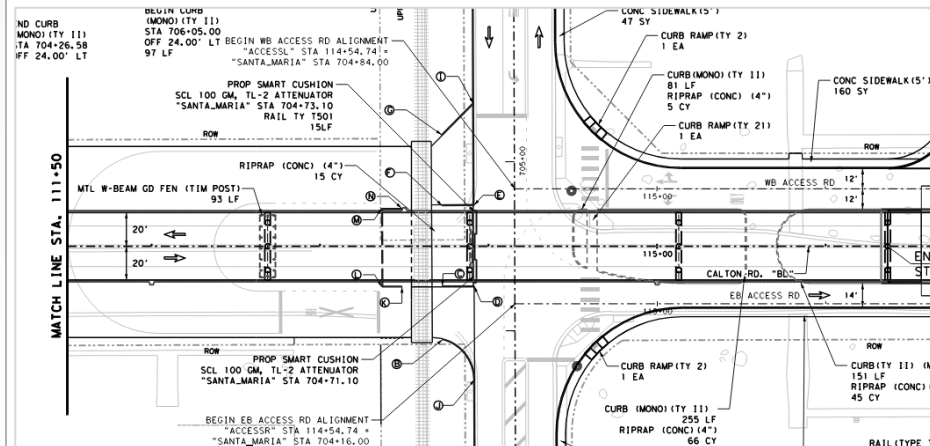
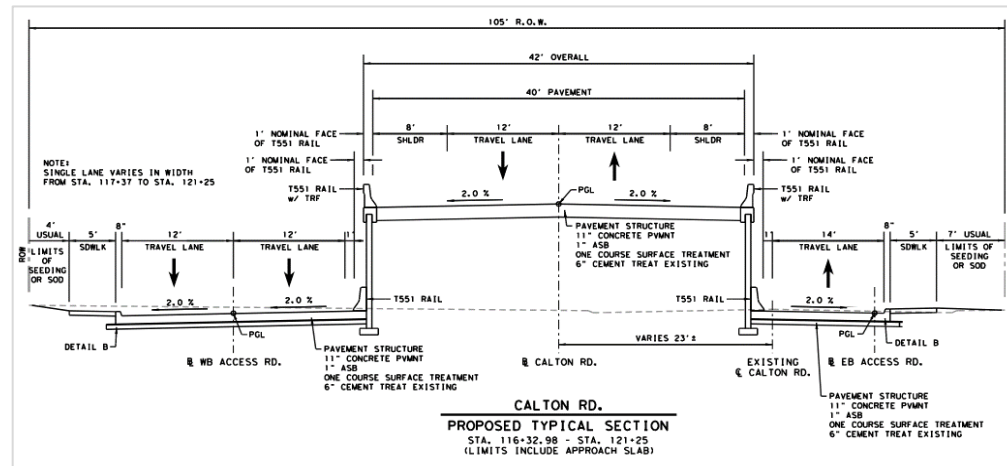
Firm name	ARCADIS	Past Performance Evaluation Discipline(s)*	Bridge, Road, Environmental
Project name	Calton Road Overpass	Firm responsibility (prime or sub?)	Prime
Project number	30102048	Owner's name	Laredo, Texas
Project location	Laredo, Texas	Owner's Project Manager	Gloria Saavedra
Owner's address, phone, email	1110 Houston Street, Laredo, Texas 78040, 956-791-7346, gsaavedra@ci.laredo.tx.us		
Services commenced by this firm (mm/yy)	03/06	Total consultant contract cost (\$1,000's)	\$1,200
Services completed by this firm (mm/yy)	08/24	Cost of consultant services provided by this firm (\$1,000's)	\$684

Firms Members: Osama Shahawy, Collin Sarratt, Bob Beasley

Firms' Role: Roadway design, retaining wall design, hydrology and hydraulic analysis, preliminary and final plans preparation, bridge design, geotechnical investigation and report, environmental documentation, utility coordination, railroad coordination, and construction cost estimate.

Bridge Design: The bridge is 866 feet long, including a 248-foot 2-span continuous steel I-girder unit supported on pile bents. The roadway typical section on the bridge consists of 2 12-foot lanes with 8-foot shoulders. Arcadis provided all engineering design services and environmental documentation for the development of a **grade separation over the Union Pacific Railroad and Rio Grande Railroad tracks**, while maintaining open traffic under TxDOT Laredo

District design oversight. **Utility relocation** includes the water & Sewer, electric, telecommunications, and **utility crossing under railroad permits**. The team overcame the challenge of providing utility adjustments and proposed a storm sewer system within a 105' ROW.



Railroad Coordination: The Arcadis Team **coordinated with UPRR** on the required horizontal and vertical clearance. **Provided Exhibit A for UPRR and TXDOT approval**

Arcadis then prepared the **final bridge and roadway design plans** and a **construction cost estimate**. The new bridge is located in a tangent section of roadway followed by one normal-crowned curve. Site conditions required **close coordination between the roadway and bridge teams to design a safe, constructable facility that fit within the existing right-of-way** while meeting railroad minimum vertical clearance requirements.

17 FIRM EXPERIENCE:

Firm name			Past Performance Evaluation Discipline(s)*	Bridge, Road, Traffic, Environmental
Project name	Chef Menteur Bridge and Approaches, Route US 90		Firm responsibility (prime or sub?)	Prime
Project number	H.000263.2	Owner's name	Louisiana Department of Transportation and Development	
Project location	Orleans Parish, LA		Owner's Project Manager	Nikki Leon / Irina Sorset
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225 242 4514, nikki.leon@la.gov (irina.sorset@la.gov)			
Services commenced by this firm (mm/yy)	08/11	Total consultant contract cost (\$1,000's)		\$1,118
Services completed by this firm (mm/yy)	11/14	Cost of consultant services provided by this firm (\$1,000's)		\$879

Firms Members: Akhil Chauhan

Firms Role: Bridge and roadway design, roundabout evaluation, complete streets analysis, bridge type/lifecycle cost assessment; typical sections, bridge and road line and grade, horizontal and vertical design services, local access connections, roadway approach design, alternatives development, visual imagery, USCG navigable waterway permit assessment, preliminary construction cost estimate based on LADOTD pay items and unit cost prices.

Arcadis was contracted by LADOTD to complete preliminary design layouts for replacing the existing US 90 swing-span **bridge** over Chef Menteur Pass in Orleans Parish as part of an environmental assessment. Both movable- and fixed-span designs were considered, along with three preliminary

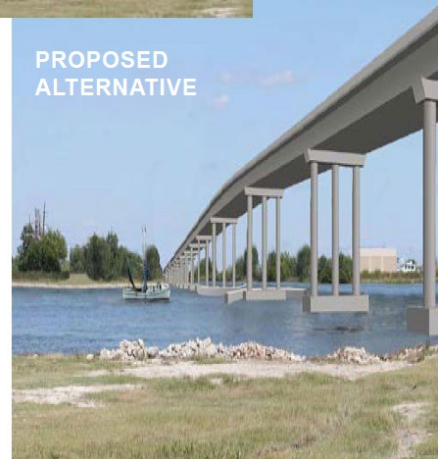


ORIGINAL

alignments. **LADOTD Design Guidelines and EDSMs**, along with the LADOTD Road Design and Bridge Design Manuals, were utilized.

Key Challenges - The challenges were to minimize impacts to the abutting Venetian Isles Subdivision, while also avoiding or minimizing effects to the Fort Macomb structure and state parkland, terrestrial and submerged archaeological sites, and the Bayou Sauvage National Wildlife Refuge. From an engineering perspective, the project site posed notable challenges. The Chef Pass experiences swift tidal flow, resulting in substantial scour and a higher potential for vessel collisions.

Project Approach - The approach identified the schedule's critical path, including a post-Katrina vessel height study update, remote sensing of Chef Pass to identify submerged cultural resources and to obtain bathymetric data, and **early coordination and approval of the design criteria** to adequately address the mixed-use in the vicinity of the bridge. In accordance with the **LADOTD Complete Streets Policy**, this project queried and incorporated comments from New Orleans bicycle representatives, who recognize US 90 as the only bicycle route between New Orleans and the state line. Arcadis followed good **access management principles to address local mobility needs**. Private access connections (driveways) were minimized by providing interconnectivity and shared driveways among residential, commercial, and park properties. With nearly **10 stakeholder and agency meetings in the first two months of the contract, the team was aggressive in early outreach and maintained continuous coordination with both agencies and the public.**



PROPOSED
ALTERNATIVE

Relevant Services

- Geometric Design of Roadway and Bridge
- Roadway and Bridge Typical Sections
- Local Access Connections
- Bridge type / Lifecycle Cost Assessment
- Construction Cost Estimate
- LADOTD Design Guidelines and EDSM's
- LADOTD Road Design and Bridge Design Manuals
- Stakeholder and Agency Coordination

17 FIRM EXPERIENCE:

Firm name	Aillet, Fenner, Jolly & McClelland, Inc.		Past Performance Evaluation Discipline(s)*	Road, Other (Lighting)
Project name	I-49 North including Segment K, Phase 1, Phase II, Cul-De-Sac Phase		Firm responsibility (prime or sub?)	Prime
Project number	SP# H.003495 / H.011111/ H.011105	Owner's name	Louisiana Department of Transportation and Development (LADOTD)	
Project location	Caddo Parish, LA		Owner's Project Manager	Joe Umeozulu,PE
Owner's address, phone, email	PO Box 94245, Baton Rouge, LA / 225-379-1386 / joachim.umeozulu@la.gov			
Services commenced by this firm (mm/yy)	12/03	Total consultant contract cost (\$1,000's)		\$3,720
Services completed by this firm (mm/yy)	2/20	Cost of consultant services provided by this firm (\$1,000's)		\$1,862

Members involved: Matthew J. Wallace, Robbin Cassity, J. Daniel Thompson, Paul Cormier.

Section K, Phase I is 1.677 miles of 7 lane to 4 lane divided Interstate Highway, with a partial interchange at MLK and the rebuild of MLK. AFJMc was responsible for the Preliminary and Final roadway and drainage plans.

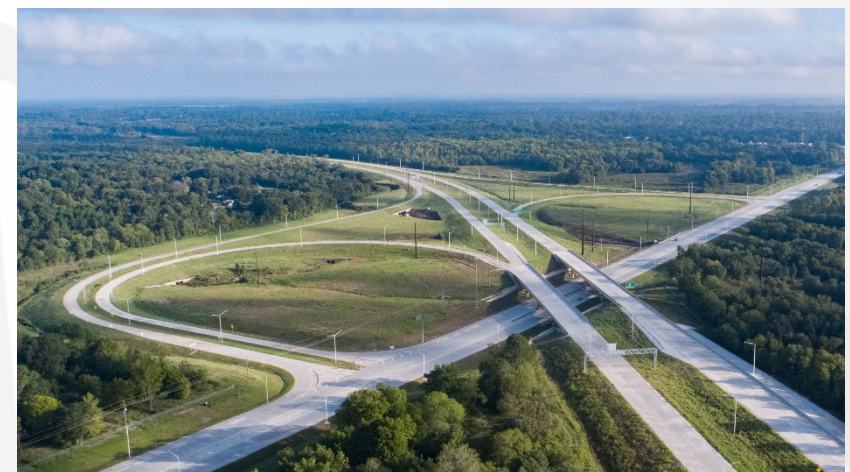
Section K, Phase II is 4.252 miles of 7 lanes to 4 lane divided Interstate Highway, with a partial interchange at I-220 and the rebuild of I-220. AFJMc was responsible for the final geometry Preliminary and Final roadway and drainage plans.

Section K, Cul-De-Sac Phase is 5 Cul-De-Sac's that are required for City of Shreveport Streets that have been cut off by the construction of I-49 North Section K, and the C of A Right-of-Way. AFJMc was responsible for the final Preliminary and Final roadway and drainage plans.

AFJMc provided not only highway design services for this project but also electrical and structural design services. The electrical design included highway and ramp interstate lighting design. It also included aesthetic lighting on the pier decorative panels. The aesthetic lighting for the project utilized color-changing fixtures. The structural design included design of the luminaire supports and foundation design of overhead structures for the entire project.

The I-49 Segment K Phase 2 Interchange with I-220 earned the regional award for "Best Use of Technology & Innovation" from the American Association of State Highway & Transportation Officials (AASHTO).

The \$142 million I-49 Interchange project was also awarded the 2020 Louisiana Transportation Conference Excellence Award in the "Roadway/Bridge Construction Project over \$10 Million" category.



17 FIRM EXPERIENCE:

Firm name	Aillet, Fenner, Jolly & McClelland, Inc.		Past Performance Evaluation Discipline(s)*	Road, Other (Lighting), Other (Structural), Other (Shared-Use Trail)
Project name	Jimmie Davis Bridge (LA511) Design Build		Firm responsibility (prime or sub?)	Prime
Project number	H.001779	Owner's name	Louisiana Department of Transportation and Development (LADOTD)	
Project location	Caddo and Bossier Parishes		Owner's Project Manager	Catherine Mastin
Owner's address, phone, email	PO Box 94245, Baton Rouge, LA / 225-379-1844 / catherine.mastin@la.gov			
Services commenced by this firm (mm/yy)	06/23	Total consultant contract cost (\$1,000's)		\$12,950
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)		\$1,085

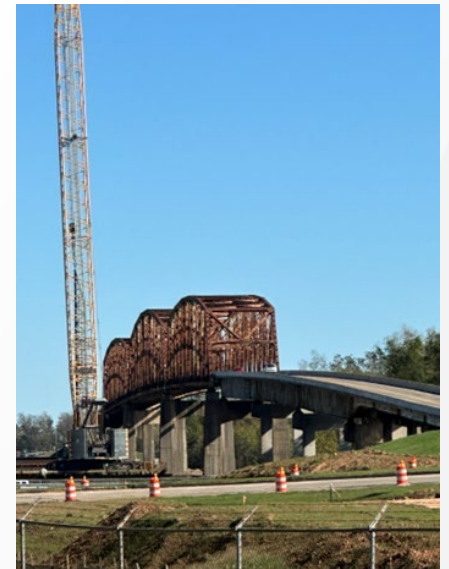
Members involved: Robbin Cassity, Matthew J. Wallace, Paul Cormier

This project will construct a new 4-lane bridge over the Red River, convert LA 511 from a five-lane roadway to a 4-lane median divided roadway with turn lanes, and construct full-access interchange connections with LA 511 at both Arthur Ray Teague Parkway and Clyde Fant Memorial Parkway with associated roadway drainage systems, lighting and the conversion of the existing Jimmie Davis Bridge into a linear park. AFJMC was tasked with the design of at grade and elevated portions of the shared use trails on both sides of the Red River to connect at the existing Jimmie Davis Bridge. AFJMc is also responsible for the drainage for the west portion of the roadway design of LA 511 and its connections to Clyde Fant Parkway, and the electrical/lighting design for the project.

Multi-use Path – Shreveport Side: The at-grade portion of the new multi-use path on the Shreveport side of the Red River is approximately 2,750 ft in length. To access the elevated Linear Park, approximately 730 ft of the path will be on an elevated structure. The at-grade portions of the path will be located along the east side of Clyde Fant Parkway and extend south from the Marie and Charles Hamel Park to just south of the existing bridge where the path will turn east becoming an elevated structure

Multiuse Path –Bossier City Side: The multi-use path will provide access to the Linear Park from the existing paths along Arthur Ray Teague Parkway and is approximately 2100 ft in length. The new multi-use path will meet the required design criteria and match the existing path alignment except at the new bridge where the path will be realigned to avoid the new bridge piers.

Switchback Structures for the Multi-use Path: To access the Linear Park from the paths at ground level, AFJMc designed elevated switchback ramp structures. The grades meet ADA requirements and will provide landing areas at turning locations that can function as rest spots. The landing locations also ease the ascent and descent of path users. The deck will be reinforced concrete providing 14 ft of horizontal clearance between the handrails. All structures will conform to AASHTO guidelines for shared-use trails and ADA slope guidelines.



AFJMc design will allow the local community access between Shreveport and Bossier City providing a safe and enjoyable recreational opportunity for all users.

17 FIRM EXPERIENCE:

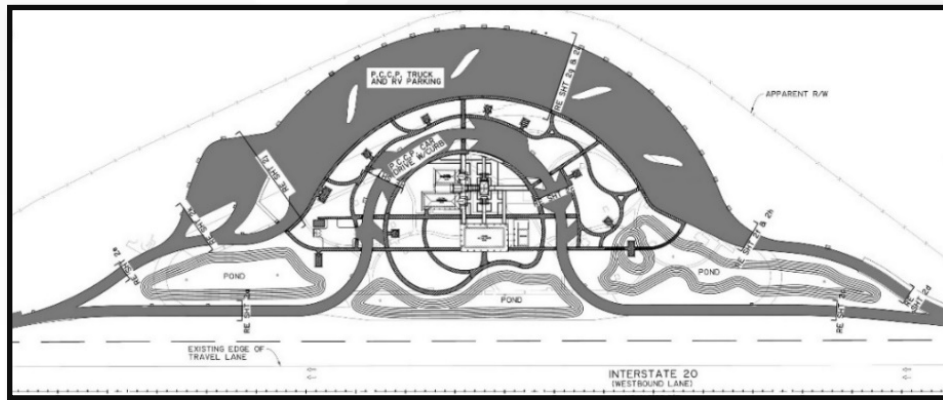
Firm name	Aillet, Fenner, Jolly & McClelland, Inc.		Past Performance Evaluation Discipline(s)*	Other (Civil Design), Other (Structural), Other (Electrical)
Project name	Mound Rest Area Improvements, Route I-20		Firm responsibility (prime or sub?)	Prime
Project number	H.011446.5	Owner's name	Louisiana Department of Transportation and Development (LADOTD)	
Project location	Madison Parish, LA		Owner's Project Manager	M. Scott Guinn, PLA
Owner's address, phone, email	LaDOTD, 1212 E. Hwy Dr., Baton Rouge, LA 70802/ 225-379-1739, scott.guinn@la.gov			
Services commenced by this firm (mm/yy)	11/20	Total consultant contract cost (\$1,000's)		\$432
Services completed by this firm (mm/yy)	08/21	Cost of consultant services provided by this firm (\$1,000's)		\$401

Members involved: Paul Comier, Matthew J. Wallace, Robbin Cassity

As part of LADOTD's Statewide Facilities and Rest Area retainer contract, AFJMc designed site improvements to the Mound Rest Area on I-20 in Madison Parish. The project consists of new acceleration and deceleration ramps/drives into the rest area, new car and truck parking facilities, site grading and drainage systems with storm water management. The project also includes general site amenities such as pedestrian walkways and a courtyard.

AFJMc provided not only civil design services for this project but also structural and electrical designs services. The structural design included foundation design for overhead structures such as pavilions, covered walkways and the design of wood bridges and bulkhead at pond edges. The electrical design included converting the site to 3-Phase power, site lighting, CCTV surveillance systems, back-up generator systems, surge protection, and replacing lighting on the interstate ramps. The electrical/lighting design included the structural design of the luminaire supports and foundation design of overhead structures for the entire project.

AFJMc tasks for this project included the development of final plans, the development of specifications, the development of cost estimates, the review of shop drawings, and the response to Request for Information (RFI) on an as needed basis when the project was complete.



17 FIRM EXPERIENCE:

Firm name		Past Performance Evaluation Discipline(s)*	Geotech
Project name	I-20 Mississippi River Bridge Review		Firm responsibility (prime or sub?) 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	Louisiana Department of Transportation and Development (LADOTD)
Project location	Madison Parish, LA	Owner's Project Manager	Chris Nickel
Owner's address, phone, email	1201 Capitol Access Rd, RM 602-L, Baton Rouge, LA 70802; 225.379.1100; Chris.Nickel@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

Firm Members Involved: Megan Bourgeois, Robert Jewell, Jarmon King, Casey Floyd, Jessica Litt

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.



17 FIRM EXPERIENCE:

Firm name		Past Performance Evaluation Discipline(s)*	Geotech
Project name	IIJA Bridge and Highway Program Districts 05		Firm responsibility (prime or sub?) Sub
Project number	H.015337	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	E. Carroll, W. Carroll, Ouachita, Jackson, Lincoln, Madison, Morehouse, Richland, Union Parishes	Owner's Project Manager	Ryan Spillers
Owner's address, phone, email	2000 North 7th St., W. Monroe, LA 71291; 318-387-2710; RSpillers@LazenbyEngr.com		
Services commenced by this firm (mm/yy)	04/2023	Total consultant contract cost (\$1,000's)	
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$408

Firm Members Involved: Megan Bourgeois, Robert Jewell, Jessica Litt

This program consisted of the replacement of multiple 13 small rural bridges and cross-drain structures across northern and northeastern Louisiana in 9 different parishes. These structures generally include short-span slab bridges and multi-cell reinforced concrete box or pipe culverts located along low-volume parish roads crossing small creeks, bayous, and drainage channels. The existing bridges, often supported on timber piles or corrugated metal pipes are being replaced due to age, deterioration, or structural deficiency. Ardaman & Associates, Inc. (Ardaman) was retained to perform comprehensive geotechnical investigations and engineering evaluations to support LADOTD's final design for each site.

The scope of services for the program included field reconnaissance, boring layout, utility clearance, drilling of 120- foot soil borings, SPT and Shelby tube sampling, groundwater measurements, and an extensive laboratory testing program. Laboratory work included Atterberg limits, grain-size distribution, density, moisture content, hydrometer analyses, and unconsolidated-undrained triaxial strength testing. For bridge sites, Ardaman completed LRFD pile design using FHWA methods, drivability evaluations, and verification criteria using the Modified Gates Formula. For culvert sites, Ardaman performed bearing capacity analyses, settlement modeling using Settle3, and bedding/backfill recommendations in accordance with LSSRB and Standard Plans.

Final deliverables included detailed Geotechnical Data Reports and Geotechnical Interpretation Reports containing subsurface characterization, engineering properties, pile design summaries, culvert foundation recommendations, settlement analyses, and construction guidelines. These comprehensive evaluations provide LADOTD with the geotechnical basis necessary for the safe and economical replacement of multiple rural bridges and culverts throughout the program area.



17 FIRM EXPERIENCE:

Firm name		Past Performance Evaluation Discipline(s)*	Geotech
Project name	US 371: KCS Railroad Overpasses HBI		Firm responsibility (prime or sub?) Sub
Project number	H.012030	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Webster Parish, Louisiana	Owner's Project Manager	Hamed Babaizadeh
Owner's address, phone, email	1201 Capitol Access Rd, RM 602-L, Baton Rouge, LA 70802; 225-379-1937, Hamed Babaizadeh@la.gov		
Services commenced by this firm (mm/yy)	07/2023	Total consultant contract cost (\$1,000's)	\$956.8
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$231.4

Firm Members Involved: Megan Bourgeois, Robert Jewell, Jarmon King, Casey Floyd, Jessica Litt

The project consists of a geotechnical subsurface exploration and recommendations for S.P. No. H.012030, US 371: KC Railroad Overpasses HBI, with the objective of **replacing two parallel bridges and one standalone bridge located on US 371 between Minden and Sibley, Louisiana. The bridges cross over Kansas City (KC) Railroad at each site.** The standalone bridge near Sibley, LA was later removed from the project to be placed under another state project, however the geotechnical exploration that was performed for this site will be included in this description. The three bridges range from approximately 200 feet to 250 feet in length including 4 bents per bridge supported on drilled shafts with varying diameters.

For the geotechnical exploration phase of work, **Ardaman performed 8 soil borings to a maximum depth of 110 feet below existing ground surface (bgs), targeting the proposed bridge foundations on either side of the KC railroad.** Two of the soil borings were performed through the existing bridge deck within the ROW of the KC railroad while occupying one lane of US 371. Coordination with temporary traffic control services and the KC railroad temporary construction requirements was necessary to perform these soil borings.

Engineering services include 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. The engineering analyses included drilled shaft design and advanced test shaft program recommendations. A data report, geotechnical interpretation report, and test shaft memorandum were submitted.



17 FIRM EXPERIENCE:

Firm name		Past Performance Evaluation Discipline(s)*	**Survey, Other (SUE), Right-of-Way
Project name	Jimmie Davis Bridge (LA 511) Design-Build		Firm responsibility (prime or sub?) Sub
Project number	H.001779	Owner's name	LaDOTD Baton Rouge/ James Construction/ Huval & Associates, Inc.
Project location	Bossier & Caddo Parishes, LA	Owner's Project Manager	Mr. Thomas Gattle, III, PE
Owner's address, phone, email	922 West Pont Des Mouton Road, Lafayette, LA 70507 (337) 234-3798 tgattle@huvalassoc.com		
Services commenced by this firm (mm/yy)	01/22	Total consultant contract cost (\$1,000's)	\$1,140
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$1,140

Firms Members: Mike King, Patrick Staiano, Bryan Bunch, Belton Davis

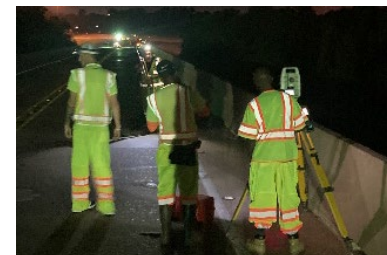
Firms Role: Static GPS control, topographic utilizing HDS 3D Terrestrial Laser Scanning methods of data collection and property surveying services, traffic control, utility coordination services, QL A, B, C, & D utility designating/locating, as well as preparing title takeoffs, 60% Right-of-Way Maps, Final Right-of-Way Maps, and legal descriptions.

This design-build project is to replace the Jimmy Davis Bridge across the Red River. The scope of this project consists of constructing a new four lane structure carrying LA 511 across the Red River, converting LA 511 (Jimmie Davis Hwy) into a four-lane, median-divided highway on the east side of bridge; as well as providing full access interchanges between LA 511 and Clyde Fant Memorial Parkway and Arthur Ray Teague Parkway.

NTBA designed and implemented a Traffic Control Plan for a bridge closure to verify the horizontal and vertical control set by LaDOTD during the original survey and verified the vertical control for both sides by running digital levels across the bridge, which was not performed in the original survey. All of this was completed during night shifts to verify the safety of employees and the public as well as to avoid traffic disruptions.

NTBA performed property surveys and title take-offs for approximately 50 properties adjacent to the route and a property survey submittal prepared with apparent right-of-way shown. Final Mylar Right-of-Way Maps have been submitted for 21 parcels requiring right-of-way taking. The set included 21 plan and 1 title sheet.

NTBA performed SUE services to designate all utilities within the project limits. A conflict matrix was created showing the utilities in conflict with the construction. We are coordinating with the utility owners to relocate utilities that conflict with the construction and will monitor the relocation to verify compliance with relocation plans. NTBA is utilizing the Louisiana Department of Transportation Survey and Design Manual Addendum A as well as CI/ASCE Standard 38-02.



17 FIRM EXPERIENCE:

Firm name			Past Performance Evaluation Discipline(s)*	**Survey & Other (SUE)
Project name	Walter O. Bigby Carriageway (N. Pkwy Ext.)		Firm responsibility (prime or sub?)	Prime
Project number	City Proj. No. 8-15	Owner's name	City of Bossier City	
Project location	Bossier Parish, LA		Owner's Project Manager	Mr. Mark B. Hudson, PE
Owner's address, phone, email	P.O. Box 5337, Bossier City, LA 71171 (318) 465-5801 engineering@bossiercity.org			
Services commenced by this firm (mm/yy)	05/15	Total consultant contract cost (\$1,000's)	\$4,901	
Services completed by this firm (mm/yy)	11/24	Cost of consultant services provided by this firm (\$1,000's)	\$1,313	

Firms Members: Mike King, Patrick Staiano, Bryan Bunch, Belton Davis

Firms Role: NTBA provided control, topographic utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, property, and bathymetric surveying services, QL A, B, C, and D subsurface utility designation/locating, as well as surveys in support of subsurface utility engineering, right-of-way acquisition plats/maps, and legal description preparation.

Project consisted of approximately 2 miles of roadway right-of-way for a parkway facility design featuring new roads, additional lanes, roundabouts, and a bridge in Bossier City, LA. Bathymetric surveying services were performed to accurately determine the river bottom and channel location in association with the design of a new storm water outfall into the river and separate bathymetric surveying services in support of a levee seepage analysis required by the USACOE. NTBA is also responsible for environmental assessment, public hearings, conceptual design, and Construction Management Support Services.

The project contains two multi-lane traffic circles with an estimated construction cost of \$42.3 million. The area includes **a major thoroughfare, local streets, riverbanks, levee crossings, and railroad rights-of-way**. This project consisted of the design of the Walter O. Bigby Carriageway from north of Eatman Street to Benton Road, Walter O. Bigby follows an existing roadway for a portion of the alignment, then continues northward on **new alignment between the Red River Levee and Union Pacific Railroad, crosses existing Union Pacific Railroad tracks with a bridge structure and connects to Benton Road at a new signalized intersection**. Total project length includes approximately 5,300 feet of reconstructed city streets and 3,600 feet of new four-lane streets, which includes a 1,470-foot bridge structure. This project was completed in accordance with the Louisiana Location and Survey Manual, CI/ASCE Standard 38-02, and City of Bossier standards.



17 FIRM EXPERIENCE:

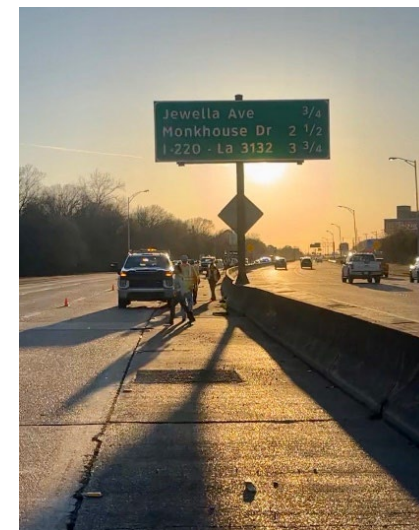
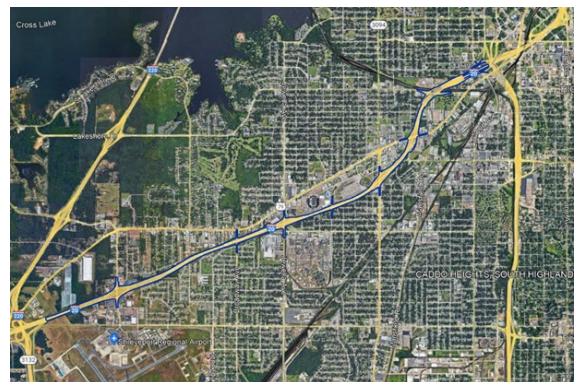
Firm name			Past Performance Evaluation Discipline(s)*	**Survey & Other (SUE)
Project name	I-20: Monkhouse to I-49, Route I-20			Firm responsibility (prime or sub?) Prime
Project number	4400017713/ H.010468.5	Owner's name	LaDOTD Baton Rouge	
Project location	Caddo Parish, LA	Owner's Project Manager	Mr. Barrett Smith, PLS	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802 (225) 379-1133 barrett.smith@la.gov			
Services commenced by this firm (mm/yy)	04/22	Total consultant contract cost (\$1,000's)		\$1,355
Services completed by this firm (mm/yy)	04/23	Cost of consultant services provided by this firm (\$1,000's)		\$1,355

Firms Members: Mike King, Patrick Staiano, Bryan Bunch, Belton Davis

Firms Role: NTBA performed Static GPS Control, topographic surveying services utilizing RTK and conventional surveying and HDS 3D Terrestrial Laser Scanning, Traffic Control, and QL C & D subsurface utility investigation for interstate rehabilitation. NTBA also prepared a drainage map.

This project was one of the **largest topographic surveys** NTBA has ever been a part of. **It consisted of 4.89 miles of interstate, 2.35 miles of side streets, and a drainage area of approximately 990 acres.** Surveys and utility investigations were performed along I-20 beginning approximately 4,200 ft. southwest of the intersection of Monkhouse Dr. and I-20 and proceed in a northeasterly direction along I-20 ending at the westerly end of the I-20/I-49 interchange. Areas included Monkhouse Drive, Jewella Avenue, Hearne Avenue, Greenwood Road, Texas Avenue, Kings Hwy, and Lakeshore Drive.

NTBA managed our sub-consultant, E.S.P. Associates, P.A., for Mobile Laser Scanning Services of hard surfaces along the route. NTBA performed data extraction of mobile scan data for incorporation into Inroads and for Point Cloud delivery. LaDOTD's project schedule had an allowable duration of 365 days, but NTBA completed in 359 days with one minor comment. This effort took 3,999 field crew hours, 3,448 CADD hours, and 2,250 PLS hours. There were over 70,000 points for the topographic survey and over 1,500 drainage structures surveyed for the drainage map. **The areas included major thoroughfares, surface streets, railroad rights-of-way, and drainage canals.** MicroStation files were the deliverable for the project. All services were completed in accordance with the Location and Survey Manual and all currently accepted Location and Survey Automated procedures.



SECTION
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The rendering below illustrates Arcadis' vision for the revitalized Market Street bridge in Shreveport, Louisiana. This design exemplifies our commitment to delivering safe, accessible, and resilient infrastructure while seamlessly integrating with the urban fabric.



As the prime consultant, Arcadis brings 20+ years of successful LADOTD experience and has assembled a proven team that has delivered design and rehabilitation projects in accordance with the LADOTD Project Delivery Manual, Roadway Design Manual, and Bridge Design Manual. Our team is very familiar with LADOTD's preferences and expectations, and our approach will guide us in meeting them in every aspect of our work for the replacement of Recall Nos. 014410 & 014420 and rehabilitation of Recall No. 014400 crossing ICG (KCS) Railroad in Caddo Parish.

Our nationwide experience in bridge replacement, rehabilitation, and repair projects allows us to offer practical, economical, and constructable solutions. To complement our bridge design services, we have engaged a team of highly specialized subconsultants, each recognized as an expert in their discipline in Louisiana, to deliver comprehensive professional and technical solutions. Our team structure provides depth in bridge design, road design, traffic, survey, geotechnical engineering, bridge lighting, and environmental services, as reflected in our organizational chart.

Arcadis	Bridge, Road, Traffic, Enviro., Drainage, RR
Ardaman	Geotechnical Services Lead
NTBA	Survey Services Lead
AFJ&M	Lighting Lead

PROJECT UNDERSTANDING: The US 71 project aims to rehabilitate the Spring St. bridge over the ICG RR and replace the two Market St. bridges with a single 4-lane bridge, thereby *improving urban aesthetics and connectivity*, and providing 23'-6" vertical clearance for the ICG railroad. The new bridge limits are Crockett St. and Lake St., which constrain the bridge approaches and require integration with the City of Shreveport's Festival Plaza.

For bridge preservation/rehabilitation, our approach is to *minimize service disruption, prioritize safety, plan access*, and maintain ongoing engagement with stakeholders.

CONTRACT SCOPING MEETING: Following NTP, Arcadis will hold a kickoff meeting with LADOTD's Project Manager and key staff to confirm project objectives, design criteria, coordination needs, and deliverable schedules. This meeting will establish communication protocols and determine the frequency of coordination meetings. All data pertinent to the projects will be collected. We will request and review the as-built plans, existing load rating reports, inspection reports, existing

R/W, traffic data, parish maps, scaled aerial photos of the site, LADOTD roadway classification, Stage 0 Structural Site Surveys, alignment studies, and any other relevant and available information that would aid in providing the required submittals.

We will then schedule a *site visit to prioritize critical aspects of the project identified by our team and assess site conditions, including environmental impacts, railroad impacts, utility relocations, right-of-way impacts, permit issues, and possible roadway detour alternatives and detour length*, the existing approach roadway section, and geometry. This will facilitate discussions on any updated or supplemental data needed based on the initial review and site assessment.

Before finalizing the schedule, we will hold a railroad coordination meeting to review the proposed LADOTD and ICG RR review times for each submittal. We will then *explore potential alternatives to reduce construction costs and minimize construction time*. We will identify the critical path and deliverables in detail, utilizing scheduling software to develop and track the project schedule. Our risk mitigation plan will include regular reviews of the project schedule to ensure on-time delivery.

DESIGN APPROACH: Bridge Preservation / Rehabilitation: Arcadis offers deep expertise in bridge preservation, professional engineering, and technical services across all phases of the project lifecycle. For bridge rehabilitation design and plan preparation, it is essential to begin by *adhering to the requirements of BDEM Part I, Chapter 6 — Design Policy for Bridge Rehabilitation/Repair Projects*. This includes reviewing all existing project documents, *conducting a field investigation of the existing bridge, evaluating the existing structure's load-carrying capacity*, and determining the proposed scope of rehabilitation.

The preparation of preliminary repair plans starts after the study and establishes preliminary repair details and plan sheets. Traffic impacts and temporary controls are addressed, along with environmental considerations and permit submittals. Before concluding this stage, a Plan-in-Hand meeting is held with LADOTD and stakeholders, and comments are incorporated.

Arcadis will *develop comprehensive bridge rehabilitation and repair plans* based on a review of data collected from LADOTD, provided documents, and site assessment findings. Site inspections shall comply with all *safety requirements in Chapter 4, "Safety Practices," of the DOTD Bridge Inspection Manual*. Our assessment will include determining the magnitude and extent of needed repairs,

analyzing existing repairs, integrating new members, and implementing strengthening elements. Detailed reports will document all findings to support LADOTD's decisions. Using inspection data, AASHTOWare BrR, and spreadsheets, we will *perform bridge load-rating analyses* to identify elements requiring rehabilitation. Recognizing that initial ratings may be conservative, *we prioritize accuracy by incorporating field observations and refined analysis methods* to ensure precise validation of load-carrying capacity. Our reports will detail methodologies, assumptions, rating factors, and actionable repair recommendations, along with cost estimates and schedules, to *support LADOTD's rehabilitation efforts*. Prepare *Exhibit A for LADOTD and ICG RR review and approval*. To minimize time spent on the overactive track, the design team will use modular/precast deck panels or steel elements. Off-site fabrication will enable rapid installation during agreed railroad closure windows.

Bridge Replacement: The Arcadis Team will conduct a site visit to collect field data and assess the condition of the two existing bridges. The inspections shall be in accordance with all applicable Federal (OSHA) and State workplace safety laws and regulations, as well as the LADOTD Bridge Inspection Manual. We will identify any potential constructability issues and evaluate alternative construction methods (including phased bridge construction). The assessment will include the identification of existing utilities, drainage systems, and property boundaries, as well as an inventory of Festival Plaza activities, layout, and business access and storage considerations. We will perform detailed topographic and geotechnical surveys, review LADOTD roadway classification and Stage 0 structural recommendations, and examine alignment studies, grade profiles, and the surrounding urban context.

The Arcadis Team will *develop design criteria* in accordance with Appendix A – Design Criteria Checklist of the BDEM and submit for LADOTD approval. We will evaluate site constraints, span requirements, and constructability to select the optimal bridge type. All designs, from substructures to bridge decks, will use *AASHTO LRFD Bridge Design Specifications and BDEM criteria for live loads, dead loads, wind, seismic*, and other applicable loads. Superstructure and substructure components will be sized and detailed to meet strength, service, and durability requirements. Bridge geometry (alignment, profile, cross-section) will be developed to ensure safe roadway transitions and adequate clearances.

The new bridge shall be aligned to integrate with the existing intersection tie-ins at both approaches seamlessly. The vertical profile will be designed to achieve a peak elevation above the railroad tracks, ensuring compliance with required clearance standards. We will evaluate design alternatives to maintain

the *Grade slopes within LATDOT design limits* to accommodate both vehicular traffic and ADA-compliant pedestrian access. Smooth vertical curves will be developed to provide gradual transitions from the intersections to the bridge apex. *Span lengths will be optimized to minimize the number of piers* within or adjacent to the railroad right-of-way, thereby reducing potential impacts on railroad operations. Efforts will be made to avoid or *minimize disruptions to Festival Plaza* and the surrounding business storage areas.

Structural options under consideration include a shallow continuous steel plate girder or prestressed concrete construction, enabling a long, clear span over the railroad tracks. These solutions will facilitate the required clearance while maintaining the bridge profile within acceptable grade constraints.

To minimize traffic impact and lengthy detours, *staged construction could be considered to replace the existing Market St. bridges*. If traffic demand requires 4 lanes, the staged construction of the new bridge could start within the open space between the existing structures, *allowing continued traffic flow during construction and facilitating a seamless transition* to the new facility. Approach elevations will be matched, with a raised midspan profile to achieve the required vertical clearance for the railroad. The design and construction plans will be set to *minimize/avoid interference with Festival Plaza and business storage operations*.

The foundation installation will *use low-vibration pile driving or drilled shafts* per the LADOTD Bridge Design Manual to minimize impact on adjacent structures and rail traffic.

The abutments and piers with access restrictions will be built using temporary platforms or cranes. The settlement and vibration will be monitored in accordance with LADOTD monitoring requirements.

Arcadis leverages its expertise in complex, staged bridge construction to *deliver a solution that meets Louisiana LADOTD standards, maintains traffic operations, and minimizes disruption to stakeholders*. This methodology ensures public safety, constructability, and long-term durability while achieving regulatory compliance.

Roadway: The Arcadis Team will be working alongside the bridge rehabilitation and replacement over the ICG Railroad. We will focus on the tight urban setting and the short distance between the intersections at Crockett Street and Lake Street.

One of the main design challenges for the Market Street bridge replacement is to provide at least 23.5 feet of vertical clearance over the railroad while *maintaining safe, practical roadway grades* between the two intersections. Arcadis will carefully analyze the vertical profile to determine the best bridge and

approach grades that meet clearance requirements and *comply with DOTD urban design standards*. The roadway profile will include a vertical crest over the railroad and smooth transitions into the intersections at Crockett Street and Lake Street. We will *design vertical curves to meet or exceed the stopping sight distance* for design speed. We will also ensure the grades and cross-slopes at the intersections support safe turns, pedestrian access, and ADA-compliant sidewalks.

The design Team will review how the new vertical profile affects the nearby intersections. We may need to adjust pavement grades, curb returns, and lane transitions to make sure the new bridge approaches fit well with the current street network. We will also look at traffic operations and safety by reviewing traffic data and crash history. All *roadway features will follow the LADOTD Roadway Design Manual and the AASHTO Green Book*.

Drainage: Arcadis will review the current drainage conditions in the project area and design the drainage improvements needed for the new bridge and roadway. Since the project is in a tight urban area, we will carefully connect bridge deck drainage, roadway runoff, and the city's existing drainage systems.

The new bridge deck will have an efficient drainage system to quickly remove stormwater from the travel lanes and *prevent runoff from reaching the railroad right-of-way and Festival Plaza*. We will consider bridge scuppers, downspouts, or closed drainage systems to direct runoff to the roadway drainage system beyond the railroad area, in accordance with railroad coordination requirements.

The existing curb-and-gutter drainage and storm sewers will be reviewed to determine any changes needed to accommodate the new bridge approach grades. All drainage improvements will comply with LADOTD Hydraulic Design Guidelines and applicable local drainage requirements.

Utility Coordination: We will partner with the utility companies to verify all the facilities identified through Subsurface Utility Engineering (SUE) and survey efforts. If needed, we will begin coordinating to create the Utility Relocation Agreements (URAs) as early as possible in the design development process.

PROJECT MANAGEMENT PLAN: Per the requirements defined in 23 U.S.C. 106(h), the project will require a project management plan (PMP) for FHWA review and approval. Arcadis will develop the PMP on behalf of LADOTD, in accordance with published FHWA guidance and requirements. The purpose of the PMP is to help ensure successful project delivery and to maintain public and stakeholder trust and support throughout the life of the project. The PMP will identify project

stakeholders, define roles and responsibilities, establish the plan and methodology to complete the project within the required schedule and budget, and document the processes for project delivery, approvals, dispute resolution, and overall project control. As part of the PMP, Arcadis will prepare a list of agencies and stakeholders and develop coordination, communication, and involvement plans. This will be an interactive process that will continue to be developed and updated throughout the life of the project. The PMP will also define the approach for managing scope, quality, schedule, cost, resources, risks, and applicable laws and regulations.

TRAFFIC STUDY: The Arcadis Team will prepare a *traffic study in conformance with TEPR requirements*. The primary goals of the traffic study are listed as follows:

- 1) Establish the existing and future no-build conditions of the study area.
- 2) Determine final bridge configurations and additional roadway improvements that may be needed as part of the bridge replacement and rehabilitation projects for Spring Street and Market Street.
- 3) Evaluate proposed construction phasing alternatives to assess impacts to the immediate and surrounding transportation network and identify mitigation measures to maintain acceptable operations during construction.
- 4) Inform future Transportation Management Plans (TMP) that will be needed to support the construction of the project.

Arcadis will prepare a detailed scope of work and submit it to LADOTD to outline how the study will be conducted before initiating the traffic study.

An initial task of the traffic study will be to *utilize the Shreveport Mesoscopic Model previously developed by Arcadis* to perform a high-level assessment of the impacts to traffic patterns from anticipated construction phasing alternatives. Based on this exercise, Arcadis will identify the impact areas of the construction phases and determine where traffic data is needed to evaluate the impact of construction phases and detours fully.

Arcadis previously worked on several projects in the immediate area, including *the Cross Bayou Bridge Replacement and District 04 Pedestrian Safety Improvements*. Arcadis will review the available traffic data from these studies and determine if it is suitable for re-use. *Results from both the mesoscopic model and review of existing traffic data will be utilized to develop and submit a data collection plan to LADOTD.*

The *TEPR-compliant traffic study* will include all required components: data collection (Chapter 1), existing and no-build analyses (Chapter 2), and alternative analyses (Chapter 3). All study results will be documented in a Final Traffic Engineering Report. The study will document the alternative development and selection processes for both the final build conditions and the preferred construction phasing alternatives. Construction cost estimates will be included in the Alternative Analysis.

STRUCTURAL REMOVAL: Bridge removal over active railroad tracks demands early coordination with railroad operators and strict compliance with safety regulations. *A scheduled railroad outage window enables safe removal of spans over tracks* using cranes or controlled methods. *Prefabricated elements can expedite new bridge construction, minimizing on-site time.* Throughout, implement robust traffic management, debris containment, and communication plans to ensure environmental and safety compliance.

RAILROAD COORDINATION: The active track volume of through traffic with high operating speeds. *Early coordination between ICG and LADOTD* is essential and should begin immediately after the kickoff meeting. We will initiate discussions early with the railroad to ensure that all appropriate considerations are taken into account regarding the removal and development of the new bridge overpass. The railroad will remain an involved stakeholder throughout the design process. Our team will review the structure options and recommendations discussed at the kickoff meeting with ICG to establish design criteria requirements for working over live tracks.

PUBLIC INVOLVEMENT / ENVIRONMENTAL PERMITTING

Often, the public's main concerns are detours. *Arcadis will explore all options to avoid detours. Still, if they are necessary,* we will consider the following items: school bus routes, emergency response, detour length, and the safety of alternate routes. We will contact local officials, including the fire department, EMS, and the police department, as well as local businesses and residents affected by the detour, and schedule face-to-face meetings. Bridge replacement projects will not have significant environmental impacts, as capacity is likely unchanged, and an existing route will be used within the ROW. However, the Arcadis team will complete all necessary steps to deliver an environmentally sound project.

URBAN INTEGRATION & AESTHETICS: The Arcadis team will use context-sensitive design for railings, lighting, and finishes to enhance pedestrian experience and connectivity. The Team will coordinate with city stakeholders for landscaping and plaza integration.

CONSTRUCTION COST: Leveraging our estimating team, we will continuously update and track construction costs throughout the design development process. A detailed construction cost estimate will be submitted at each design milestone, and focused technical reviews of major cost drivers—such as structural bridge elements—will be conducted to ensure LADOTD remains fully informed of potential budget impacts.

QA/QC: We understand the financial challenge to DOTD with the rising cost of construction materials. The QA/QC Team will *review the construction costs*. It will conduct separate technical discussions to *identify opportunities to reduce project costs, enhance structural safety and durability, improve constructability, and add value*. Please refer to Arcadis's project QA/QC program, which aligns with LADOTD policy and is included in form 24-102 with this proposal.

Bridge Rehabilitation									
NTP									
Review of Existing Material									
Traffic Control Plans for Inspection									
Field Inspection									
Load Rating									
Bridge Evaluation									
60% Preliminary Plans									
90% Preliminary Plans									
PIH									
100% Preliminary Plans & Cost Estimate, Design Waivers or Exceptions									

Bridge Replacement									
NTP									
Survey									
Geotechnical Investigation									
Environmental Services									
Design Criteria									
Preliminary Design Report									
60% Preliminary Plans									
90% Preliminary Plans									
PIH									
100% Preliminary Plans & Cost Estimate, Design Waivers or Exceptions									

SECTIONS
19-23

Careful planning avoids interference with local businesses and community events, maintaining access and supporting economic activity during construction. Modern lighting, wide sidewalks, and aesthetic treatments foster a welcoming environment for both drivers and pedestrians, promoting walkability and urban cohesion.



Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Discipline	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance
	Traffic	4400029193 / H.004100.5 and H.004100.6	I-10: LA 415 to Essen Lane on I-10 and I-12 <i>(50% of remaining work is complete and invoiced but awaiting payment)</i>	\$541,663
		4400019379 / H.013797	LA 30: EBR PL – I-10	\$232,048
		4400024307 / H.015052	I-20: Widening/Ovrly (Vancil Rd-LA 34)	\$4,510
		4400021325 / H.012837.5	I-10 New Orleans Master Plan	\$58,758
		4400023690 / H.015590.5	LA 494: LA 6 To Blanchard Rd	\$86,924
		4400023690 / H.016529.5	US90BUS (Broad St): Enterprise BL – I-210	\$168,203
		4400023690 / H.016380.5	LA 1024: S-Wave Ground Inlay Grooves	\$82,995
		4400017033 / H.005121	LA 1/LA 415 Connector	\$434,747
		4400025625 / H.014622.2	St. Nazaire Road Ext: LA 96 – Corne Road	\$107,786
		4400024084 / H.009300.5	CMAR Contract for Hooper Road Widening (LA 3034 – LA 37)	\$10,202
		H.003931	I-10 Calcasieu River Bridge P3 Project <i>(Majority of remaining work to be completed within 9 months)</i>	\$1,260,000
		4400025047 / H.011358.2	US 190 (Vine Street) Reconstruction	\$80,013
		4400021325 / H.010824.1	US 71 Corridor Study	\$113,080
	Road	4400024307 / H.015052	I-20: Widening/Ovrly (Vancil Rd-LA 34)	\$2,883
		4400017033 / H.005121	LA 1/LA 415 Connector	\$1,064,381
		4400025022 / Multiple State Project Nos	IJJA Off System Bridge Program – Road Task Orders	\$10,377
		H.003931	I-10 Calcasieu River Bridge P3 Project <i>(Majority of remaining work to be completed within 9 months)</i>	\$1,680,000
	ITS	4400029193 / H.004100.5 and H.004100.6	I-10: LA 415 to Essen Lane on I-10 and I-12 <i>(50% of remaining work is complete and invoiced but awaiting payment)</i>	\$127,450
		4400026457 / H.013868.5 (2025 Renewal)	ITS MGMT, OPERATIONS, & MAINT	\$581,428



		4400026457 / H.013868.6 (A) (2025 Renewal)	ITS MGMT, OPERATIONS, & MAINT	\$424,134
		4400026457 / H.013868.6 (B) (2025 Renewal)	ITS MGMT, OPERATIONS, & MAINT	\$228,024
		H.003931	I-10 Calcasieu River Bridge P3 Project <i>(Majority of remaining work to be completed within 9 months)</i>	\$294,000
	Environmental	4400019338 / Multiple State Project Nos	Rural Bridge Replacement Initiative Phase II	\$17,088
		4400009281 / H.009932	US 80 Widening: Vancil Road to Well Road EA	\$5,343
		4400025022 / H.015498.5 Recall 102225	Park Road Over Lagoon	\$35,000
		4400025022 / Multiple State Project Nos	IJJA Off System Bridge Program – Env. Task Orders	\$183,549
		4400025625 / H.014622.2	St. Nazaire Road Ext: LA 96 – Corne Road	\$37,871
		H.003931	I-10 Calcasieu River Bridge P3 Project <i>(Majority of remaining work to be completed within 9 months)</i>	\$336,000
		4400025047 / H.011358.2	US 190 (Vine Street) Reconstruction	\$6,957
	Bridge	4400029193 / H.004100.5 and H.004100.6	I-10: LA 415 to Essen Lane on I-10 and I-12 <i>(50% of remaining work is complete and invoiced but awaiting payment)</i>	\$265,521
		4400025022 / Multiple State Project Nos	IJJA Off System Bridge Program – Bridge Task Orders	\$20,498
		H.003931	I-10 Calcasieu River Bridge P3 Project <i>(Majority of remaining work to be completed within 9 months)</i>	\$630,000
	CE&I/OV	4400029193 / H.004100.5 and H.004100.6	I-10: LA 415 to Essen Lane on I-10 and I-12	\$127,450
		4400027361 / H.011220.6, H.012901.6, H.010634.6	US 90 Engineering Support	\$248,775
		4400016923 / H.012901.6, H.010634.6	US 90Z (Bodenger Blvd. – Stumpf Blvd.)	\$192,319
		4400025046 / H.013710.6	I-10: US 61 to LaPlace ITS Deployment (CE&I)	N/A
		4400025665 / H.013482.6	I-10 WBR Queue Warning System <i>(Waiting on a supplement)</i>	\$83,341
	Data Collection	4400021325 / H.012837.5	I-10 New Orleans Master Plan	\$3,751
		4400023812 / H.015377.5	Weigh Station Assessment	\$352,125

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Discipline	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
	Survey	4400019338 Multiple SP Nos.	Contract for Rural Bridge Replacement Initiative Phase II, Districts 05, 08, & 58 (Sub to Waggoner)	\$57,492
		4400019337 Multiple SP Nos	Contract for Rural Bridge Replacement Initiative Phase II, Districts 02, 03, 07, 61, & 62 (Sub to BKI)	\$28,748
		4400025041 H.015406	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program - Lock No. 3 Bridge, St. Tammany Parish (Sub to Waggoner)	\$10,216
		4400025041 H.015403	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program - W. Yellow Water Road Bridge, Tangipahoa Parish (Sub to Waggoner)	\$12,661
		4400027686 H.008768.5	IDIQ Contract for Hydrographic Surveying Services – Task Order No. 7 – Spring Bridges	\$53,011
		4400027918 H.012869.5	IDIQ Contract for Professional Boundary Surveying Services – Task Order 3 – LA 182 (Univ) @ LA 723 (Renaud) Roundabout, Lafayette Parish	\$27,332
		4400027918 H.011310	IDIQ Contract for Professional Boundary Surveying Services – Task Order 4 – Ford Street Extension, District 61	\$13,872
		4400027918 H.015721	IDIQ Contract for Professional Boundary Surveying Services – Task Order 5 – LA 30 Roundabout, Ascension Parish	\$23,592
		4400027918 H.015568	IDIQ Contract for Professional Boundary Surveying Services – Task Order 6 – LA 44 Pelican Point Roundabout & Widening	\$44,108
		4400027918 H.014059	IDIQ Contract for Professional Boundary Surveying Services – Task Order 7 – US 80: Bridges Near Minden, Webster Parish	\$15,906
		4400027918 H.014059	IDIQ Contract for Professional Boundary Surveying Services – Task Order 8 – US 80: Bridges Near Minden, Addt'l Site, Webster Parish	\$14,937
		44000021975 H.016413.5	IDIQ Contract for Professional Surveying Services – Task Order 6 – I:20 Sam R. Fert Dr. to Red River Br., Caddo Parish	\$305,814
	Other (SUE)	4400030630 H.015724.5	Kings Hwy: Healthcare & Dev. Corridor, Caddo Parish (Sub to AFJ&M, City of Shreveport, & Forte & Tablada)	\$75,495
		4400026587 H.001779	Jimmie Davis Bridge (LA 511) (HBI) Design Build Project, Bossier Parish (Sub to James Construction/ Huval & Associates, Inc.)	N/A
		Parish Proj. No. 2025-118 H.003855	Cong Relief Winfield Road, Bossier Parish (Sub to Volkert)	\$42,790

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Discipline	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
	Geotech	44-4128; H.004273	I-49 Connector, Lafayette	\$183,132
		44-18899; H.004791	LA 23: Belle Chasse Bridge & Tunnel (HBI)	\$22,508
		44-19013; H.004100.5 & .6	I-10 CMAR Design Continuation: LA 415 TO ESSEN ON I-10 & I-12	\$540,869
		H.004435	I-12 to Bush Construction Phase	\$37,900
		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	\$1,377,611
		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	IIJA	\$36,932
		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, H.015569 HH.01H.015569.5	Pelican Point Roundabout	\$348
		44-24652; H.012842.5	LA 124 Ext. Larto Lake	\$152
		44-21519; H.012030.5	KCS RR Overpasses US 371	\$38,876
		44-21887; H.012542, H.012453, H.012544, H.012047	Replacement of 15 Bridges	\$300,380
		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	\$31,997
		H.015429, H.015430, H.015432	IIJA	\$3,192
		H.001798	LA 531: Bridges Near Dubberly	\$16,276
		H.004100.5	I-10 CMAR Borings: LA 415 TO ESSEN ON I-10 & I-12	\$638,894
		H.06094.5	US 371 Brushy Creek Bridge	\$127,527
		H.016204.5	Benton Sidewalks and RR Xing	\$32,218
AFJ&M	Road	4400030630, H.015724.5	Kings Hwy: Healthcare & Dev. Corridor, Caddo Parish	\$579,060
	Road	H.001779	Jimmie Davis Bridge (LA511) Design Build	\$133,832

STAFF CERTIFICATION CHART SUMMARY

Names	Firm	Relevant Certification
Akhil Chauhan, PE, PTOE, PTP, PMP <i>Meets MPR No. 10</i>		Professional Traffic Operations Engineer (PTOE) Project Management Professional (PMP) Professional Transportation Planner (PTP) Traffic Engineering Analysis Process & Report Module 1, 2, & 3 Various Relevant NHI and DOTD Courses Mesoscopic Project References: <i>*more also listed in projects on resume</i> 1. Mesoscopic Traffic Model for Irvine (California) Network, FHWA, MIT ITS Lab, Cambridge, MA. Contact: Prof. Moshe Ben-Akiva, MIT, mba@mit.edu. 2. Mesoscopic Traffic Model for Lower Westchester County New York Network, FHWA, MIT ITS Lab, Cambridge, MA. Contact: Prof. Moshe Ben-Akiva, MIT, mba@mit.edu. 3. Integrated Mesoscopic-Microscopic Framework for Real-time Traffic Estimation and Prediction System, MIT ITS Lab, Cambridge, MA. Contact: Prof. Moshe Ben-Akiva, MIT, mba@mit.edu. 4. I-20 Mesoscopic Traffic Model and TMP, LA 3 to LA 3105, LADOTD, Bossier City, LA. Contact: Ryan Hoyt, LADOTD, ryan.hoyt@la.gov. 5. Mesoscopic Traffic Model for I-10 Widening, LADOTD, Baton Rouge, LA. Contact: Ryan Hoyt, LADOTD, ryan.hoyt@la.gov.
Shashank Shekhar, PE <i>Meets MPR No. 10</i>		Mesoscopic Project References: <i>*more also listed in projects on resume</i> 1. SMART Study, TxDOT Houston District. Contact: Brenda Bustillos, TxDOT Houston District, brenda.bustillos@txdot.gov 2. Subregional Mesoscopic EMAT Study, TxDOT Houston District. Contact: Brenda Bustillos, TxDOT Houston District, brenda.bustillos@txdot.gov. 3. I-10 Feasibility Study, TxDOT Houston District. Contact: Brenda Bustillos, TxDOT Houston District, brenda.bustillos@txdot.gov 4. I-10 Resiliency Scenarios, TxDOT Houston District. Contact: Brenda Bustillos, TxDOT Houston District, brenda.bustillos@txdot.gov 5. H-GAC FIFA World Cup 2026 Scenario Planning Services, Houston-Galveston Area Council (H-GAC). Contact: Heng Wang, H-GAC Data Analytics and Research, heng.wang@h-gac.com
Ari Deitch, PE, PTOE, PTP, RSP1 <i>Meets MPR No. 3</i>		Road Safety Professional (RSP) Professional Traffic Operations Engineer (PTOE) Professional Transportation Planner (PTP)

Names	Firm	Relevant Certification
		Traffic Engineering Analysis Process & Report Modules 1, 2, & 3 ATSSA Traffic Control Supervisor NHI - Highway Safety Manual Workshop NHI Traffic Signal Design & Operation
Kester Hollier, PE, PTOE <i>Meets MPR No. 4 & 5</i>		Professional Traffic Operations Engineer (PTOE) Traffic Engineering Analysis Process & Report Modules 1, 2, & 3 ATSSA Traffic Control Supervisor
Sridhar Basetty, PE, PTOE <i>Meets MPR No. 5</i>		Professional Traffic Operations Engineer (PTOE) Traffic Engineering Analysis Process & Report Modules 1, 2, & 3 NHI Course No. 133078 – Access Management, Location and Design Association of Pedestrian and Bicycle Professionals – Designing Pedestrian Facilities for Accessibility Traffic Controller and Streetwise Training Course NHI – 133121 Traffic Signal Design and Operation
Jose L. Rodriguez, PE <i>Meets MPR No. 2</i>		ATSSA Traffic Control Supervisor
Megan Bourgeois, PE <i>Meets MPR No. 6</i>		ATSSA Traffic Control Supervisor ATSSA National Flagger Training
Jessica Litt <i>Meets MPR No. 7</i>		NICET / Generalist, Laboratory
Victor Sanchez, PE <i>Meets MPR No. 11</i>		ATSSA Traffic Control Supervisor
Robert Jewell, PE		Dynamic Measurement and Analysis Proficiency Test ATSSA Traffic Control Supervisor ATSSA National Flagger Training
Patrick Staiano		ATSSA Traffic Control Supervisor
Belton Davis		ATSSA Traffic Control Technician Utility Location Skills Enhancement Training

Louisiana's Secretary of State (SOS) Registration Screenshots for: **Arcadis U.S., Inc.; Ardaman & Associates, Inc.; NTB Associates, Inc. (NTB) and Aillet, Fenner, Jolly & McClelland, Inc. (AFJ&M)** are located at the end of this section.

Transportation Professional Certification Board Inc.

certifies that

Akhilendra Singh Chauhan

*has met all of the requirements established by the Certification Board
to use the title of*

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

*Unless withdrawn by the Certification Board, this certificate number 2544
issued in Washington, D.C. is subject to the provisions for renewal
November 24, 2008*

Steven

D. Hofener
Chair



Akhilendra Singh Chauhan
Executive Director

Project Management Institute

THIS IS TO CERTIFY THAT

Akhilendra S Chauhan

HAS BEEN FORMALLY EVALUATED FOR DEMONSTRATED EXPERIENCE,
KNOWLEDGE AND SKILLS TO LEAD AND DIRECT PROJECT TEAMS AND IS HEREBY
BESTOWED THE GLOBAL CREDENTIAL

Project Management Professional

IN TESTIMONY WHEREOF, WE HAVE SUBSCRIBED OUR SIGNATURES UNDER THE SEAL OF THE INSTITUTE.

Beth Parleton

Beth Parleton - Chair, Board of Directors

Mark A. Langley

Mark A. Langley - President and Chief Executive Officer



PMP® Number **1444676**

PMP® Original Grant Date **16 August 2011**

PMP® Expiration Date **15 August 2014**



Transportation Professional Certification Board Inc.

certifies that

Akhilendra Singh Chauhan

*has met all of the requirements established by the Certification Board
to use the title of*

PROFESSIONAL TRANSPORTATION PLANNER

*Unless withdrawn by the Certification Board, this certificate number 246
issued in Washington, D.C. is subject to the provisions for renewal
December 1, 2009*

Steven D. Hofener
Chair



Steven D. Hofener
Executive Director

Certificate of Completion

presented to

Akhil Chauhan

for completing the

Traffic Engineering Analysis Process & Report Module 1

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

Professional Development
Hours (PDHs) Awarded: 4

Poly Kolina
Authorized Instructor

John Holt
Authorized Instructor

Robert Parnell
Authorized instructor



Certificate of Completion

presented to

Akhil Chauhan

for completing the

Traffic Engineering Analysis Process & Report Module 2

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

Professional Development
Hours (PDHs) Awarded: 4

Poly Kolina
Authorized Instructor

John Holt
Authorized Instructor

Robert Parnell
Authorized instructor



Certificate of Completion

presented to

Akhil Chauhan

for completing the

Traffic Engineering Analysis Process & Report Module 3

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

Professional Development
Hours (PDHs) Awarded: 3

Poly Kolina
Authorized Instructor

John Holt
Authorized Instructor

Robert Parnell
Authorized instructor





National Highway Institute



Certificate of Training

Akhil Chauhan

has participated in

**FHWA - NHI Course No. 380071 -
Interactive Highway Safety Design Model (IHSDM)**

hosted by

Louisiana Department of Transportation and Development

Date: May 9-10, 2012

Hours of Instruction: 12

Location: Baton Rouge, LA

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

Instructor



National Highway Institute



Certificate of Training

Akhilendra Chauhan

has participated in

**NHI Course No. 380075 -
New Approaches to Highway Safety Analysis**

hosted by

LA DOTD/LTRC

Date: October 9-11, 2012

Hours of Instruction: 18

Location: Baton Rouge, LA

Instructor

Local Coordinator

Instructor

Richard Barnaby, Director
National Highway Institute



National Highway Institute



Certificate of Training

Akhil Chauhan

has participated in

**FHWA - NHI Course No. 133078
Access Management, Location and Design (3 day)**

hosted by

LA DOTD/LTRC

Date: January 6-8, 2015

Hours of Instruction: 18

Location: Baton Rouge, LA

Instructor

Local Coordinator

Instructor

Valerie Briggs, Director
National Highway Institute



National Highway Institute



Certificate of Training

Akhil Chauhan

has participated in

**NHI Course No. FHWA-NHI-380106
Highway Safety Manual Online Overview**

hosted by

National Highway Institute

Location: Web-Based Course

Hours of Instruction: 12 hours

Date: 7/18/2012

Richard J. Barnaby, Director
National Highway Institute

Certificate of Training

PRESENTED BY

Louisiana Local Technical
Assistance Program

TO CERTIFY THAT

Akhil Chauhan

HAS SATISFACTORILY COMPLETED 7 PROFESSIONAL DEVELOPMENT HOURS IN:

Louisiana's Complete Streets Peer Exchange

Maud B. Walsh
Director of Louisiana LTAP Center



January 19-20, 2016
Date

Baton Rouge, Louisiana
Location

Certificate of Attendance

USING STATISTICS IN HIGHWAY SAFETY

PRESENTED BY

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

TO CERTIFY THAT

Akhil Chauhan

HAS SATISFACTORILY COMPLETED 6 HOURS OF TRAINING

Helmuth Schneider

Dr. Helmut Schneider
Director
Highway Safety Research Group



Transportation Professional Certification Board, Inc.

certifies that

Ari Jacob Deitch

*has met all of the requirements established by the Certification Board
to use the title of*

Road Safety Professional

unless withdrawn by the Certification Board and subject to the provisions for renewal.

Certificate number 37 issued in Washington, DC, USA

12/21/2018

Diane W. Morabito
Diane W. Morabito
Chair



**ROAD SAFETY
PROFESSIONAL**

Jeffrey F. Paniati
Jeffrey F. Paniati
Executive Director

Transportation Professional Certification Board, Inc.

certifies that

Ariel Jacob Deitch

*has met all of the requirements established by the Certification Board
to use the title of*

Professional Traffic Operations Engineer

*unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 4346 issued in Washington, DC, USA*

11/20/17


Michael K. Park
Chair




Jeffrey F. Paniati
Executive Director

Certificate of Completion

presented to

Ari Deitch

for completing the

Traffic Engineering Analysis Process & Report Module 1

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

Professional Development
Hours (PDHs) Awarded: 2

Poly Colina
Authorized Instructor

Ari Deitch
Authorized Instructor

P. L. P. P.
Authorized instructor



Certificate of Completion

presented to

Ari Deitch

for completing the

Traffic Engineering Analysis Process & Report Module 2

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

Professional Development
Hours (PDHs) Awarded: 3

Poly Colina
Authorized Instructor

Ari Deitch
Authorized Instructor

P. L. P. P.
Authorized instructor



Certificate of Completion

presented to

Ari Deitch

for completing the

Traffic Engineering Analysis Process & Report Module 3

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

Professional Development
Hours (PDHs) Awarded: 3

Poly Colina
Authorized Instructor

Ari Deitch
Authorized Instructor

P. L. P. P.
Authorized instructor



ATSSA
Safer Roads Save Lives

Ari Deitch
has attended
Louisiana Traffic Control Supervisor

Completed: 22-FEB-2024

CEU (If Applicable): 1.5

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

Certificate of Professional Development Hours
presented to

Ari Deitch

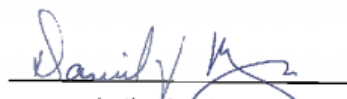
for attending the

Highway Safety Manual Workshop
12 PDHs

on

May 2-3, 2013

Baton Rouge, Louisiana


Authorized By



Research, Technology Transfer, Education and Training





U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

ARI DEITCH

has participated in

***FHWA-NHI-133121 Traffic Signal Design
and Operation***

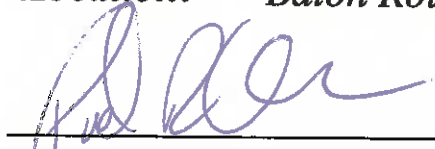
hosted by

LA DOTD/LTRC

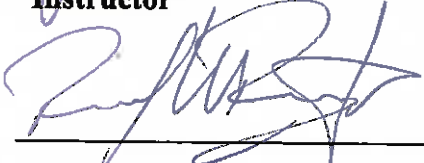
Date: *August 16-17, 2017*

Hours of Instruction: 11

Location: *Baton Rouge, LA*



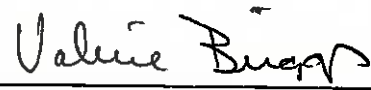
Instructor



Instructor



Local Coordinator



**Valerie Briggs, Director
National Highway Institute**

Transportation Professional Certification Board, Inc.

certifies that

Ariel Jacob Deitch

*has met all of the requirements established by the Certification Board
to use the title of*

Professional Transportation Planner

*unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 690 issued in Washington, DC, USA*

07/17/2019

Diane W. Nordb.
Diane Morabito
Chair



Jeffrey F. Puniati
Jeffrey F. Puniati
Executive Director



Kester Hollier
has attended
Louisiana Traffic Control Supervisor Refresher

Completed: 29-JUL-2023

CEU (If Applicable):

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

Transportation Professional Certification Board Inc.

certifies that

Kester Berk Hollier

*has met all of the requirements established by the Certification Board
to use the title of*

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn by the Certification Board, and subject to the provisions for renewal.

Certificate number 3928 issued in Washington, D.C., U.S.A.

November 18, 2015

Kenneth W. Akert
Chair



[Signature]
Executive Director

Certificate of Completion

presented to

Kester Hollier

for completing the

Traffic Engineering Analysis Process & Report Module 1

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

Professional Development
Hours (PDHs) Awarded: 2

Poly Colvine
Authorized Instructor

Jim Holt
Authorized Instructor

Rob T. Marshall
Authorized instructor



Certificate of Completion

presented to

Kester Hollier

for completing the

Traffic Engineering Analysis Process & Report Module 2

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

Professional Development
Hours (PDHs) Awarded: 3

Poly Colvine
Authorized instructor

Jim Holt
Authorized instructor

Rob T. Marshall
Authorized instructor



Certificate of Completion

presented to

Kester Hollier

for completing the

Traffic Engineering Analysis Process & Report Module 3

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

Professional Development
Hours (PDHs) Awarded: 3

Poly Colvine
Authorized Instructor

Jim Holt
Authorized Instructor

Rob T. Marshall
Authorized instructor



Training Certificate

P R E S E N T E D T O

Sridhar Basetty

for successful completion of a webinar presentation on
Traffic Controller (Naztec TS1 & TS2) and Streetwise Training Course

June 17, 2014

8 PDH's



Michael Trueblood

Michael Trueblood, PE, PTOE
Facilitator



U.S. Department
Of Transportation
**Federal Highway
Administration**

National Highway Institute

Certificate of Training

Sridhar Basetty

has participated in

**NHI Course No. 133078 -
Access Management, Location and Design**

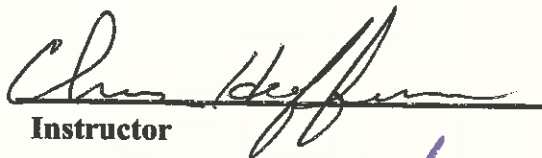
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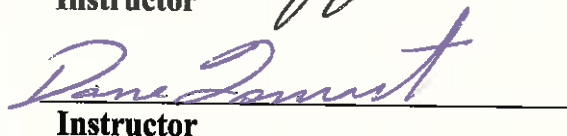
LA DOTD/LTRC

Date: April 8-10, 2014

Hours of Instruction: 18

Location: Bossier City, LA


Instructor


Instructor


Local Coordinator


Richard Barnaby, Director
National Highway Institute



NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Certificate of Completion

THE ASSOCIATION OF PEDESTRIAN AND BICYCLE PROFESSIONALS

presents this certificate to

Sridhar Basetty

in recognition of attendance at the course

Designing Pedestrian Facilities for Accessibility

An educational program developed by the Association of Pedestrian and Bicycle Professionals in conjunction with the United States Access Board to provide an overview of the Americans with Disabilities Act guidelines and policies for the public rights-of-way.

*Hosted by the New Orleans Regional Planning Commission on December 9 & 10, 2013
10.5 hours of continuing education credits earned.*



Michael Ronkin
APBP Instructor



Dan Jatres
New Orleans Regional Planning Commission

Transportation Professional Certification Board Inc.

certifies that

Sridhar Basetty

*has met all of the requirements established by the Certification Board
to use the title of*

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn by the Certification Board and subject to the provisions for renewal.

Certificate number 3682 issued in Washington, D.C., U.S.A.

August 1, 2014

Timothy D. Harpst
Chair



Donna M. Gabel
Executive Director



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

SRIDHAR BASETTY

has participated in

***FHWA-NHI-133121 Traffic Signal Design
and Operation***

hosted by

LA DOTD/LTRC

Date: ***August 16-17, 2017***

Hours of Instruction: ***11***

Location: ***Baton Rouge, LA***

Instructor

Instructor

Local Coordinator

**Valerie Briggs, Director
National Highway Institute**

Congratulations!

Sridhar Basetty

You have completed

Traffic Engineering Analysis Process & Report Class

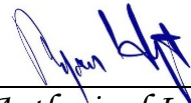
Modules 1, 2 &3

Date: April 27-28, 2023

Location: Baton Rouge, Louisiana

Professional Development

Hours (PDHs) Awarded: 8.50



Authorized Instructor



Authorized instructor



Certificate of Completion

presented to

Max Aguirre

for completing the

Traffic Engineering Analysis Process & Report Module 1

Date: January 29, 2020
Location: Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded: 2.5

Poly A. Colina
Authorized Instructor

John H. Hitt
Authorized Instructor

Robert J. Brumfield
Authorized instructor



Certificate of Completion

presented to

Max Aguirre

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date: January 29, 2020
Location: Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded: 3.5

Poly A. Colina
Authorized Instructor

John H. Hitt
Authorized Instructor

Robert J. Brumfield
Authorized instructor



Certificate of Completion

presented to

Max Aguirre

for completing the

Traffic Engineering Analysis Process & Report Module 3

Date: January 30, 2020
Location: Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded: 3.5

Poly A. Colina
Authorized Instructor

John H. Hitt
Authorized Instructor

Robert J. Brumfield
Authorized instructor





Jose Rodriguez
has attended
Louisiana Traffic Control Supervisor Refresher

Completed: 29-MAR-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



In cooperation with the
Louisiana Department of Transportation & Development
presents this

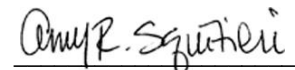
Certificate of attendance and participation for:

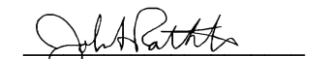
Victor Sanchez

Training Course:
Maintenance and Rehabilitation of Historic Bridges

July 2020

You have earned 4 PDH units that can be applied to applicable
continuing education requirements for professional engineering
licensure.


Mead & Hunt Instructor
Amy Squitieri


Mead & Hunt Instructor
John A. Rathke, PE, SE



PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Patrick Staiano

has attended

**Traffic Control Supervisor Refresher-LA State Specific
Training Course**

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

Baton Rouge, LA
Location

Ramona Smith
Director of Training

Sharon T. Johnson
President, CEO

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



American Traffic Safety Services Association ATSSA.com



PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Belton Davis

has attended

Traffic Control Technician-LA State Specific

Training Course

2/7/2023 to 2/7/2027
Training Valid Through

Baton Rouge, LA
Location

A handwritten signature in black ink, appearing to read "Donna M. Clark".

Vice President of Education and Technical Services

A handwritten signature in black ink, appearing to read "Shamus T. Tachman".

President, CEO

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



American Traffic Safety Services Association ATSSA.com



State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
ARCADIS U.S., INC.	Business Corporation (Non-Louisiana)	WILMINGTON	Active

Previous Names

ARCADIS G&M, INC. (Changed: 1/4/2007)

ARCADIS GERAGHTY & MILLER, INC. (Changed: 6/12/2001)

Business: ARCADIS U.S., INC.

Charter Number: 34610353F

Registration Date: 2/5/1998

Domicile Address

222 DELAWARE AVENUE, SUITE 1110
WILMINGTON, DE 19801

Mailing Address

C/O LEGAL DEPT.
110 WEST FAYETTE ST., SUITE 300
SYRACUSE, NY 13202

Principal Business Office

630 PLAZA DR., SUITE 200
HIGHLANDS RANCH, CO 80129

Registered Office in Louisiana

3867 PLAZA TOWER DR.
BATON ROUGE, LA 70816

Principal Business Establishment in Louisiana

6100 CORPORATE BLVD., SUITE 325
BATON ROUGE, LA 70816

State of
Louisiana
Secretary of
State



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**

Annual Report Status: **In Good Standing**

Qualified: 12/13/1991

Last Report Filed: 11/13/2025

Type: Business Corporation (Non-Louisiana)

Registered Agent(s)

Agent:	C T CORPORATION SYSTEM
Address 1:	3867 PLAZA TOWER DR.
City, State, Zip:	BATON ROUGE, LA 70816
Appointment Date:	12/13/1991

Officer(s)

Additional Officers: No

State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
NTB ASSOCIATES, INC.	Business Corporation	SHREVEPORT	Active

Previous Names

NTB, INC. (Changed: 1/4/2000)

Business: NTB ASSOCIATES, INC.

Charter Number: 34216133D

Registration Date: 8/14/1986

Domicile Address

525 LOUISIANA AVE.
SHREVEPORT, LA 71101

Mailing Address

525 LOUISIANA AVE.
SHREVEPORT, LA 71101

Principal Office Address

525 LOUISIANA AVE.
SHREVEPORT, LA 71101

Status

Status: Active

Annual Report Status: In Good Standing

File Date: 8/14/1986

Last Report Filed: 7/25/2025

Type: Business Corporation

Registered Agent(s)

Agent:	W. JAMES HILL, III
Address 1:	8570 BUSINESS PARK DR.
City, State, Zip:	SHREVEPORT, LA 71105
Appointment Date:	8/14/1986

Officer(s)

Additional Officers: No

Officer:	AARON G BUNCH
Title:	Officer, President
Address 1:	224 TWIN POINT DRIVE
City, State, Zip:	BENTON, LA 71006

Officer:	BRYAN BUNCH
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State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
AILLET, FENNER, JOLLY & MCCLELLAND, INC.	Business Corporation	SHREVEPORT	Active

Previous Names

Business: AILLET, FENNER, JOLLY & MCCLELLAND, INC.

Charter Number: 24911370D

Registration Date: 3/17/1960

Domicile Address

3003 KNIGHT STREET, SUITE 120
SHREVEPORT, LA 71105

Mailing Address

3003 KNIGHT STREET, SUITE 120
SHREVEPORT, LA 71105

Principal Office Address

3003 KNIGHT STREET, SUITE 120
SHREVEPORT, LA 71105

Status

Status: Active

Annual Report Status: In Good Standing

File Date: 3/17/1960

Last Report Filed: 2/21/2025

Type: Business Corporation

Registered Agent(s)

Agent:	MATTHEW J. WALLACE
Address 1:	3003 KNIGHT ST, SUITE 120
City, State, Zip:	SHREVEPORT, LA 71105
Appointment Date:	8/9/2002

Officer(s)

Additional Officers: No

Officer:	ROBBIN K. CASSITY
Title:	Treasurer, Director
Address 1:	114 DRAKE
City, State, Zip:	STONEWALL, LA 71078

Officer:	MATTHEW J. WALLACE
Title:	Director, President

QUALITY CONTROL / QUALITY ASSURANCE

Bridge Design

US 71: ICG RAILROAD OVERPASS REHAB (HBI)

US 71: MARKET ST BRIDGE OVER ICG RR (HBI)

Contract No. 4400034051

State Project Nos. H.012008.5 and H.012009.5

F.A.P. No. H012008 and H012009

Route US 71

Caddo Parish, LA

Prepared For



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Appendix I — Consultant Project Submittal QA/QC Certification

Appendix J — Project Activity Log Sheet

1.1. Introduction

This Project Quality Assurance/Quality Control Plan establishes the minimum requirements for Quality Assurance (QA) and Quality Control (QC) for the assigned task orders under this Contract for Bridge Preservation and Bridge Design Services. It provides guidance to the project team regarding responsibilities and procedures for the QA/QC process. Any individual who performs work on this project shall comply with these minimum requirements. The QA/QC requirements shall be implemented for all design activities in both the design phase and the construction support phase of the project. The QA/QC requirements shall be implemented for all load rating activities of any task order.

This Quality Control Management Plan (QMP) provides an overview of the project's basic quality processes and the procedures established to implement them. The general procedures outlined herein are recommended for use on all tasks, including the management of our subconsultant's work products.

This QMP is consistent with the requirements of the State of Louisiana Department of Transportation and Development (LA DOTD) *Bridge Design and Evaluation Manual* (Revision No. 9) and the FHWA/AASHTO *Guidance on QC/QA in Bridge Design in Response to NTSB Recommendation (H-08-17)* (August 2011) documents.

Any questions about this Project QA/QC Plan should be directed to the Project Manager (PM). The PM should be contacted if there are quality-related issues or concerns, or if any aspects of the project appear inconsistent with the quality principles and procedures described in this Project QA/QC Plan.

1.2. Definition of Terms and Positions

QC: Procedure for checking the accuracy and consistency of the calculations and the drawings, detecting and correcting design omissions and errors before the design plans are finalized, and verifying that the specification for the load-carrying members is adequate for the service and operation loads.

QA: Procedure for reviewing the work to ensure the QC procedures are in place and effective in preventing mistakes, and consistency in the development of bridge design plans and specifications.

Designer: The engineer is directly responsible for developing design calculations, drawings, special provisions, and cost estimates. Must be either a licensed professional engineer or an engineer intern.

Checker: Engineer responsible for performing a full technical review of the design calculations, special provisions, drawings, and cost estimates. Must be either a licensed professional engineer or an engineer intern; however, if the designer is an engineer intern, the design checker must be a professional engineer.

Design Back-Checker: Typically, the designer. If the designer is unavailable, the design back-checker must coordinate with the checker to ensure all noted changes are agreed to. Must be either a licensed professional engineer or an engineer intern; however, if the checker is an engineer intern, the design back-checker must be a professional engineer.

Detail Back-Checker: Engineer responsible for performing a full review of the drawings. Must be either a licensed professional engineer or an engineer intern; however, if the checker is an engineer intern, the detail back-checker must be a professional engineer.

Updater: Individual responsible for updating the design calculations or plans to reflect all agreed-upon changes. (For design calculations, typically the designer; for plans, typically the detailer.)

Verifier: Individual (usually the checker) responsible for verifying that all changes or additions to a drawing, calculation, report, or graphic element have been accurately incorporated.

Reviewer: Engineer responsible for ensuring that the QC process has been followed as outlined.

Detailer: An individual responsible for preparing drawings.

Supervisor or Team Leader: Project manager or task assignee responsible for overseeing the project and staff on the project.

Engineer of Record (EOR): The engineer responsible for supervision and/or preparation of plans, sealing calculations, plans, and special provisions if required.

Quality Project Manager (QPM)/Quality Task Manager (QTM): An individual responsible for conducting audits and ensuring QC plans are adhered to. The QPM is responsible for the entire project and all aspects, and the QTM is responsible for each

Independent Technical Reviewer: Engineer who completes an independent review of the drawings and/or calculations. An independent technical reviewer is part of the consultant team but not the design team. An engineer must have experience reviewing tasks that meet or exceed those of the designer and/ or checker.

Peer Review: An independent engineering entity with no prior involvement in the project either checks the designs by producing an independent set of calculations based on the drawings or performs the review as specified in the scope of work. Peer reviewers may not be employed by the same consultant as the designer or design checker. Peer reviews are typically performed between the 60% and 98% final plan stage, depending on the scope of the review. It is not within the scope of this project's services.

Audit: A systematic, independent, and documented activity performed to verify that applicable elements of the OMP have been effectively implemented and documented in accordance with the specific requirements.

Constructability Review: A design review performed by the contractor or appropriate construction services personnel to assess the feasibility of the proposed design from a construction perspective.

Design Criteria: A set of project-specific parameters that define the design requirements, specifications, and functional classifications of the project.

Inter-Discipline Review: A discipline-specific design review of a design package by all applicable design disciplines.

Quality Records: A completed document or record-keeping evidence of successful implementation of any given aspect of the QMP.

1.3. Consultant Responsibilities

Arcadis is fully responsible for the QA/QC of its work and the work of its sub-consultants and is also responsible for all expenses incurred as a result of omissions, ignorance, or errors. The LA DOTD is not responsible for the QA/QC of its consultants' work. The individual roles, responsibilities, and requirements of the TRC design team and the LA DOTD Bridge Task Manager are described in Section 3.0. All personnel working on any task order shall follow the design policies and procedures described herein.

1.4. Summary of Project Scope of Work

The selected Consultant shall provide the following scope of engineering services. The selected Consultant should expect to perform task orders for specialized services.

Bridge Design Services

General Bridge Engineering Services

Provide bridge engineering services for all types of bridges. Bridge project types may include, but are not limited to, new bridges, bridge replacements, bridge rehabilitation, bridge preventive maintenance and repair, and roadway lighting. Bridge engineering services include, but are not limited to, structural, mechanical, electrical, and architectural feasibility, design, and plan development, and the following:

- 1.4.1. Bridge/structural inspection and evaluation of existing bridges or other structures. Associated reports shall be provided as required
- 1.4.2. As-designed, as-built, and condition bridge ratings
- 1.4.3. Design peer review of developed plans or conceptual designs to verify concept, constructability, and accuracy of designs, along with associated reports, conclusions, calculations, and recommendations as needed
- 1.4.4. Construction engineering support, including construction drawing review, shop drawing review, request for information support, contractor proposals, etc.

Geotechnical Services

Provide all geotechnical services necessary to perform geotechnical investigations, analysis, and design. These services may include, but are not limited to, the following:

- 1.4.5. Geotechnical field investigations, including both shallow and deep soil borings
- 1.4.6. Geotechnical laboratory testing and analysis
- 1.4.7. Preparation of boring soil logs
- 1.4.8. Geotechnical analysis and design based on obtained data or data

furnished by the DOTD

1.4.9. Construction-related engineering services

Road Design and Traffic Services

Provide all services necessary to perform hydraulic, road, and traffic investigation, analysis, and design. These services may include, but are not limited to, the following:

- 1.4.10. Preliminary and final roadway design and plan development
- 1.4.11. Hydraulic analysis and design
- 1.4.12. Traffic engineering, traffic control design, and data collection
- 1.4.13. Transportation Management Plan (TMP) development

Surveying Services

Provide all surveying work services necessary to perform topographic and boundary surveying, and provide other existing site data. These services may include, but are not limited to, the following:

- 1.4.14. Topographic surveying, 3D laser scanning
- 1.4.15. boundary surveying

Environmental and Permitting Services

Provide all environmental and permitting services necessary to obtain project permits.

All work shall be performed in accordance with all applicable DOTD policies, procedures, and manuals. Design criteria shall be developed and submitted to the Bridge Task Manager for review and approval before proceeding with the design.

Project submittals, the associated schedule, and the format shall be established for each Task Order. At a minimum, all bridge plan submittals shall be submitted in pdf format, and the 100% signed final plans shall be submitted in pdf format. Design and rating calculations shall be submitted in pdf format no later than 30 days after the 100% final plan submittal. Unless waived by the Task Order Project Manager, ProjectWise shall be utilized for all pdf submittals, and electronic plan delivery will be required. See the following website for details on electronic plan delivery: [http://wwwsp.dotd.la.gov/Inside LaDOTD/Divisions/Engineering/Electronic Plans Delivery/Pages/default.aspx](http://wwwsp.dotd.la.gov/Inside%20LaDOTD/Divisions/Engineering/Electronic%20Plans%20Delivery/Pages/default.aspx)

2. Project Team

Arcadis U.S., Inc. will be the prime consultant for the project. Arcadis will manage the contract and is responsible for Bridge Design, Roadway Design, Traffic, hydraulics, drainage, and overall QA/QC of the design documents.

The sub-consultants, NTB & Associates, Inc., will be responsible for surveying, and Ardaman & Associates will provide geotechnical services for bridge design.

Arcadis will be fully responsible for the project's overall QA/QC. The key team members and roles are described below, but listed here for easy reference:

Title/Role	Name	Company
Project Manager	Osama Shahawy, PE	Arcadis
Quality Review	Llyod "Buddy" Porta Jr, PE	Arcadis
	Bob Beasley, PE	Arcadis
Bridge Design Lead	Victor Sanchez, PE	Arcadis
Bridge Preservation Lead	Osama Shahawy, PE	Arcadis
Roadway Design\Drain Lead	Jose L. Rodriguez, PE	Arcadis
Traffic Lead	Ari Deitch, PE	Arcadis
Environmental Lead	Jason Morrel, PWS	Arcadis

Staff qualifications for QC/QA roles and qualification information for team support staff are described in the 24-102 form for this proposal.

Project Team Communications/Coordination. As Project Manager, Mr. Osama Shahawy will be the team's administrative and technical point of contact for the LADOTD. All team communications to LADOTD will be through Mr. Shahawy or his designee on a case-by-case basis, or at LADOTD's request.

The details of the QC/QA plan described below apply to the current project based on the scope of services requested. The overall QC/QA plan shall be amended in case additional services are added to the contract through amendments or extensions.

3. Design Criteria

The design criteria and the project objectives will be discussed in the Consultant Kick-Off Meeting. The design criteria will be created in accordance with the latest versions of the following documents:

- AASHTO LRFD Bridge Design Specifications
- LADOTD Bridge Design Manuals

- LADOTD Bridge Design Technical Memoranda
- LADOTD Minimum Design Guidelines
- AASHTO Geometric Design of Highways and Streets

The design criteria shall include.

- Governing Design and Construction Specifications and Other References
- Design Assumptions and Design Exceptions
- General Information
- Hydraulic Design Criteria
- Design Factors
- Design Loads
- Limit States
- Bridge Barrier
- Guardrail
- Approach Slab
- Deck and Deck Drainage
- Superstructure
- Substructure
- Piles
- Geotechnical Design
- Software

4. Design Team

As project manager, **Mr. Osama Shahawy, PE** of Arcadis, will be responsible for Quality Assurance, i.e., assuring that the QC Plan is implemented. He will also serve as the administrative and technical point of contact for the Arcadis team.

Mr. Victor Sanchez, PE of Arcadis, will lead the structural design team for bridge condition assessment and replacement. Mr. Sanchez's qualifications are clearly summarized in the attached 24-102 forms. He will be in charge of the preliminary and final design and cost estimation of the superstructure and substructure for the new bridge structures.

Mr. Jose L. Rodriguez, PE, will lead the roadway design efforts for the project in addition to his role as the Project Manager. He and his team are responsible for carrying out the roadway, geometric, and drainage design. His credentials are also well highlighted in the relevant section of the 24-102 form.

Mr. Lloyd "Buddy" Porta, Jr., PE, and Bob Beasley, PE from Arcadis, will serve as the overall Technical Advisors & QA/QC for the roadway and bridges. Mr. Porta & Mr. Beasley will perform a detailed review of the contract documents, including the plan sets and specifications. Their credentials are also highlighted in the relevant section of the 24-102 form.

The design teams mentioned above are responsible for developing the plan & profile plans, preliminary and final design calculations, special provisions, and cost estimates for their respective disciplines. The designers are also required to follow the design criteria that will be developed for the project.

5. Bridge Plans Development

Before design efforts are initiated, detailed design criteria for roadway and bridge structures shall be proposed and approved by the LADOTD. Approval will be memorialized in a meeting/email or call record. Any changes to the design criteria will be reflected in a revised version that conforms to the expectations in LADOTD Policy Appendix A. Any changes will be distributed to team members via the Project Manager. The designer will maintain the calculations used in the design process and ensure they are consistent with the LADOTD calculation book checklist in Appendix B of the LADOTD QA/QC Policy. Key meeting decisions and communicated information will be memorialized in the meeting records and circulated via email to the design team.

Both the designer and detailer are responsible for conducting an initial self-check of their own work product. They and other support staff preparing work product will be required to affix their name at "prepared by" to denote responsibility on the Arcadis QC/QA Acknowledgement Form. (See Section 6 for an example of the form)

6. QC Team

Quality Control (QC) activities are those related to checking the accuracy and consistency of materials developed for the contract. The Arcadis team and its sub-consultants are fully responsible for all QC activities on the team's deliverables. LADOTD is not responsible for the quality of any contract deliverables. Mr. Beasley of Arcadis will check the preliminary and final design plans for the bridge structure and traffic. Mr. Porta has extensive experience in structural design and in preparing plans and specifications for a wide variety of bridges nationwide. His qualifications are clearly summarized in the attached 24-102 form. He will also lead the QC effort to ensure compliance with the LADOTD bridge design guidelines. As a design checker, he will perform a full technical review of the design calculations, plan and profile drawings, and cost estimate. He will also ensure that the plans reflect the most current information shown in the design criteria.

7. QC Review

Based on Arcadis' practice and established workflow on previous LADOTD projects, it is recommended that the review be initiated and completed at the end of each phase. Individual pieces of the design, carried out throughout the project, shall be subjected to QC review before being transmitted or presented to LADOTD. A color-coding procedure will be used on plans, calculations, and report work products to document responsibility and work-checking, back-checking, comment incorporation, and change verification. The Arcadis Infrastructure Bridge Group color codes will be implemented for this entire project, which is explained below:

Color Code	Action	Responsibility
Yellow Highlight	Item is Correct	Checker/reviewer
Red Pencil	Delete, Error and Correction, Addition, Comment	Checker/reviewer
Green Pencil	Has been resolved, (use check); additional changes	Designer
Blue Pencil	Resolution of error or comment addressed and corrected on the original document	Checker/reviewer
Orange Highlight	Revision has been made	CADD/other

LADOTD checklists will be used by both the design and QC teams in the preparation and review of project design criteria, final calculations, and the QA Packet. Arcadis uses a Quality Matters QA/QC Acknowledgement Form to document milestone reviews, which is combined with QC stamps that provide lines for the checker, author/designer resolution, and comment incorporation verification. This form will be used extensively during each QC review of individual design components involved in the project.

Proper QC procedures should minimize the need for superseding calculations. However, any such calculations will be carefully coordinated by the Designer to ensure proper disposition. All such changes will be documented on the Project Activity Log Sheet as appropriate.



ARCADIS INFRASTRUCTURE DIVISION QA/QC ACKNOWLEDGEMENT FORM			
Project Name:			
Project No.:			
Facility/Project Location:			
Discipline:			
Work Product: (briefly describe the work being reviewed)			
Milestone: (briefly describe the status of work product being reviewed)			
☐ Detail Check If Independent Technical Review is required, attach a 2nd QA/QC form. Check with PM for appropriate level of review.		☐ Independent Technical Review Minimum ITR Scope	
		1. Has ARCADIS complied with the scope and contract (attached)? ☐ 2. Has the standard of care for the industry been applied (e.g., have the appropriate standards and accepted practices been followed)? ☐ 3. Are the assumptions and conclusions reasonable? ☐	
Notes to Reviewer:			
Attachments: Attach mark-ups, back-check document, or comment summary for each iteration as appropriate.			
Quality Review Signoff: Signoff signifies that all QA/QC functions have been conducted in accordance with ARCADIS policy and meet client requirements and the project-specific Quality Control Plan.			
Preparer:		Date Submitted for Review:	
Reviewer:		Date Review Completed:	
Preparer Backcheck:		Date Backcheck Completed:	
Revisions Incorporated by:		Date Incorporation Completed:	
Verification:		Date of Verification:	
Preparer – Staff responsible for work and self-checking for errors and omissions throughout preparation. Reviewer – Detail Check: scan or hardcopy (yellow = correct, red = revision); electronic files (show revisions in tracked changes or comment box). ITR: mark up document with comments or attach separate page. At a minimum, respond to questions above and any others relevant to attached scope or technical criteria. Preparer Backcheck – Concur (check mark/accept changes); do not concur (X mark/comment box). See PM or senior technical staff as appropriate for resolution of non-concurrence. Revisions Incorporated by – Preparer or Other Staff; attach Preparer Back-check document. Verification by – Assigned QC reviewers verify incorporation of revisions.			

Form used to document Arcadis milestone QC reviews.

8. QA Information Package

Upon satisfactory completion of the design and detail checks, the designer is required to prepare the QA Information Package using the LADOTD-approved checklist (Appendix C). This package includes the following items:

- QA information package checklist
- Calculation book
- Plans
- Special provisions including Non-Standard items
- Cost estimate
- Relevant documents, such as checklists, review comments, etc., that were used by the designer, design checker, detailer, and detail checker

The designer is responsible for providing this package to the Reviewer for his further use before the submittal milestones. Should there be any revisions to the plans or calculations after this submittal, the designer shall revise the QA Information Package and inform the Reviewer of the changes and provide him with the revised information.

9. QA Process

Quality Assurance (QA) activities are those related to reviewing work to ensure QC procedures are in place and effective. Arcadis is wholly responsible for all QA activities of team deliverables. Project Manager Osama Shahawy, PE, is ultimately responsible for ensuring that the QC Plan is implemented and that the Reviewer has completed all review steps. LADOTD is not responsible for assuring that the QC Plan is implemented or for maintaining documentation of QC reviews and related information. The Arcadis team and its sub-consultants are solely responsible for maintaining all administrative and technical files for the project archives.

Mr. Shahawy will coordinate with the Reviewer as required and maintain a record of QC forms, including the LADOTD checklists, QC/QA certification, Arcadis review forms, and other relevant information. Once the project manager confirms that the Reviewer has completed the QA process, design documents, including design calculations, plans, special provisions, and cost estimate, shall be considered as final.

10. QC/QA Certificate

After the QA process by the Reviewer, the QC/QA certificate (Appendix D of the LADOTD Policy) shall be signed by the designer, design checker, detailer, detail checker, and reviewer. This form will be included in the project's central files maintained by the Project Manager.

11. Archiving Design Files

Mr. Osama Shahawy shall be responsible for transmitting all deliverables to LADOTD. Mr. Shahawy will maintain all final deliverables' digital files on a project DVD set and server backup. Paper copies of these materials will also be maintained by the Project Manager in the project files repository and moved to off-site archives in accordance with LADOTD's document retention policy and Arcadis' retention policies, as appropriate. Retained files will include final, approved deliverables, calculation books, plans, special provisions, cost estimate, and other pertinent documents in accordance with the Bridge Design Section

records retention policy, as well as contract documentation, QC/QA records, correspondence, and other materials per Arcadis' records retention policy.

12. Reference Material

Arcadis will use the following reference materials in our QC/QA process:

- AASHTO LRFD Bridge Design Specifications
- LADOTD Bridge Design & Evaluation Manual
- LADOTD Bridge Design Technical Memoranda
- AREMA Manual for Railway Engineering
- LADOTD Roadway Design Procedures and Details
- LADOTD Minimum Design Guidelines
- AASHTO Geometric Design of Highways and Streets
- LADOTD Policy on Quality Control and Quality Assurance
- Arcadis Policy on Records Retention and Management
- Arcadis Infrastructure Division Quality Matters Program

13. Software

A pre-approved list of software is posted on the Bridge Design Section website under downloads (Appendix N). If any other software is required for unique applications for which pre-approved software cannot be used, a synopsis of the software should be submitted to the Bridge Design Engineer Administrator for approval prior to use. The synopsis shall include the name of the software and the developer, a general description of the functions, a certification from the software developer stating that it is maintained in accordance with the latest AASHTO LRFD Bridge Design Specifications, and an account of the requester's experience and the experience of other organizations or agencies that use the software. Data/results from in-house software will not be accepted as part of the delivery.

14. Deliverables

A deliverables schedule will be developed at the Consultant Project Kick-Off Meeting in accordance with other actions listed in the Consultant Project Kick-Off Meeting Agenda Checklist (Appendix H) of the LADOTD Policy. This schedule will be reviewed regularly by the Project Manager, Mr. Osama Shahawy, for opportunities to reduce activity durations and expedite delivery.

Deliverables, schedules, quality reviews, financials, and other topics are addressed monthly during a Monthly Project Progress Review Meeting between Arcadis Project Managers and Operations Managers near the monthly financial close period. An internal consultant QC milestone schedule will also be developed in association with this delivery schedule. The Project Manager will maintain it for the consultant team's review and scheduling. Deliverables will be internally reviewed for correctness and completeness before LADOTD submittal and will be accompanied by a Consultant Submittal (QC/QA) Certification form (Appendix I of the LADOTD Policy).

APPENDICES

LADOTD POLICY ON QUALITY CONTROL AND QUALITY ASSURANCE



Design Criteria Checklist

(Appendix A of LADOTD Policy on Quality Control and Quality Assurance)

Design criteria for each project shall include, but not be 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 (no. of bridges, bridge clear width, length, no. of lanes, lane width, shoulder width, etc.)
- Road information (roadway classifications, design speed, traffic data, etc.)
- Vertical datum
- Vertical and horizontal clearances
- 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 η_D , redundancy factor η_R , and operational importance factor η_I 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 and the information shall be provided by the Geotechnical Engineer. 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/Lighting 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.

Final Calculation Book Checklist

(Appendix B of LADOTD Policy on Quality Control and Quality Assurance)

The final calculation book 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
- The title of "Final Calculation Book."
- The EOR's seal with signature and date

_____ **Final Calculation Book Check List**

_____ **QC/QA Certifications**

_____ **Peer Review Resolution Agreement (if peer review is performed)**

_____ **Design Criteria**

_____ **Final Hydraulic Analysis Report from Hydraulic Engineer**

_____ **Final Geotechnical Analysis Report from Geotechnical Engineer**

_____ **Superstructure Design Calculations**

_____ **Substructure Design Calculations**

_____ **Quantity Calculations**

_____ **Special Provisions/NS-Items**

_____ **Construction Cost Estimate**

_____ **As-Designed Rating Report**

_____ **List of All Final Electronic Design Files and File Locations (ProjectWise directory name)**

Final calculation book shall be submitted to LADOTD on a CD or Flash Drive or placed to a designated ProjectWise folder including the following information:

_____ **A PDF File of the Calculation Book**

_____ **All Electronic Design Files**

_____ **A PDF File of the As-Designed Rating Report Only**

QA Information Package Checklist
(Appendix C of LADOTD Policy on Quality Control and Quality Assurance)

Project No.:

Project Name:

Project Description:

_____ **Calculation Book**

_____ **Plans**

_____ **Special Provisions**

_____ **Cost Estimate**

_____ **Other Documents:** _____

QC/QA Certification

(Appendix D of LADOTD Policy on Quality Control and Quality Assurance)

Project No.:

Project Name:

Project Description:

We, the undersigned designers, detailers, checkers, and reviewers for this project, have reviewed and accepted the calculations, plans, quantities, special provisions, and cost estimate prepared for this project. We certify that the work for which we are responsible has been completed in accordance with the LADOTD Bridge Design Section Policy on QC/QA.

Team Members	Name	Responsible Plan Sheets	Responsible Special Provisions	Signature

Consultant Project Bridge Design Kick-Off Meeting Agenda Checklist

(Appendix H of LADOTD Policy on Quality Control and Quality Assurance)

A kick-off meeting with the Consultant's bridge design team shall be initiated by the LADOTD Bridge Design Task Manager once the project is awarded. The meeting agenda shall include, but not limited to, the following items:

_____ **Introduce the LADOTD Bridge Task Manager and the Consultant's Key Team Members**

(The EOR and Key Designers/Design Checker/Reviewer).

_____ **Discuss Consultant's Staffing Plan and Implementation of QC/QA Plan Document**

(The staffing plan should include names and responsibilities of the designers, detailers, checkers, reviewers, and the EOR.)

_____ **Determine Schedules for Project Submittals**

(Design Criteria, TS&L, 30%, 60%, 90%, 100% of Preliminary Plans and Final Plans, Final Calculations, etc.)

_____ **Share Expectations and Consultant Rating Criteria**

(Consultant rating will be performed for all project submittals shown on the project submittal schedule.)

_____ **Discuss Design Criteria**

_____ **Discuss Budget, Supplemental Requests, Invoices, and Importance of Avoiding Claims**

(Staff shown on invoices will be reviewed in accordance with the staffing plan.)

Consultant Submittal QC/QA Certification

(Appendix I of LADOTD Policy on Quality Control and Quality Assurance)

Project No.:

Project Name:

Project Description:

We, the Engineers of Record for this project, certify that the information included in this submittal has been prepared in accordance with the QC/QA plan documents and the information presented is accurate and meets the requirements of this submittal.

Submittal Description		
Engineer of Record (Bridge Design)	Signature	Date
Engineer of Record (Roadway Design)	Signature	Date

Project Activity Log Sheet

(Appendix J of LADOTD Policy on Quality Control and Quality Assurance)

Project No.:

Project Name:

Bridge Task Manager:

Date	Project Activity	Comments

Consultant Submittal Review Checklist

Items	Design Criteria	TS&L	30% PP	60% PP	90% PP	100% PP	30% FP	60% FP	90% FP	100% FP	Final Calculation Book	Plan Revisions	Change Orders
Consultant Submittal QC/QA Certification													
Design Criteria	C												
TS&L		C											
Bridge Index			D	D	D	D	D	D	C	S			
General Notes			D	D	D	D	D	D	C	S			
Summary of Estimated Quantities			D	D	C	C	D	D	C	S			
General Plans			D	D	C	C	C	C	C	S			
Typical Sections			D	D	C	C							
Super elevation Diagram				D	D	C	C	C	C	S			
Construction Phasing Details				D	D	C	C	C	C	S			
Traffic Control Details				D	D	C	C	C	C	S			
Foundation/Pile Layout				D	D	C	C	C	C	S			
Pile Loads/Details					D	D	D	C	C	S			
Pile Data Table							D	D	C	S			
Bent Details							D	D	C	S			
Fender Details							D	D	C	S			
Girder Details							D	D	C	S			
Span Details							D	D	C	S			
Joint Details								D	C	S			
Bearing Details								D	C	S			
Approach Slab								D	C	S			

Items	Design Criteria	TS&L	30% PP	60% PP	90% PP	100% PP	30% FP	60% FP	90% FP	100% FP	Final Calculation Book	Plan Revisions	Change Orders
Guardrail Details								D	C	S			
Bridge Barrier/Railing Details								D	C	S			
Detour Bridge Details								D	C	S			
Revetment Details								D	C	S			
Signing/Lighting Details								D	C	S			
Year Plate								D	C	S			
Rebar Support								D	C	S			
Misc. Details								D	C	S			
Electrical Details								D	C	S			
As-built Plans								D	C	C			
Special Provisions							D	D	C	C			
NS-Items							D	D	C	C			
Cost Estimate					D	D	D	D	C	C			
Final Calculations											S		
Revised Plans/Calculations												S	S

LEGEND:

“R” = the item is required and shall be included in the submittal

“C”= the item shall be complete and shall be included in the submittal

“D”= the item shall be in development and shall be included in the submittal

“S”= the item is stamped by the EOR and shall be included in the submittal



22 SUB-CONSULTANT INFORMATION:

Firm Name (Name must match exactly as registered with Louisiana's Secretary of State (SOS): including punctuation, include screenshot(s) from SOS at the end of Section 20)	Address	Point of Contact and email address	Phone Number
ARDAMAN & ASSOCIATES, INC.	316 HIGHLANDIA DR. BATON ROUGE, LA 70816	Jerry Outlaw JOutlaw@Ardaman.com	(225) 324-7527
NTB Associates, Inc.	525 LOUISIANA AVE., SHREVEPORT, LA 71101	Michael J. King mking@ntbainc.com	(225) 751-4002
Aillet, Fenner, Jolly & McClelland, Inc.	3003 KNIGHT STREET, SUITE 120 SHREVEPORT, LA 71105	Matthew J. Wallace mwallace@afjmc.com	(318) 425-7452



Arcadis developed concept rendering for US 71 overpass

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