

REQUEST FOR QUALIFICATIONS

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

ROUTE: US 71 | CADDO PARISH



CONTRACT NO. 4400034051 | MARCH 2026

Michael Baker
INTERNATIONAL

We Make a Difference

SUBMITTED TO
**LOUISIANA DEPARTMENT OF
TRANSPORTATION AND DEVELOPMENT**

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)
2. Contract Number(s) as shown in the advertisement	4400034051
3. State Project Number(s), if shown in the advertisement	H.012008.5 & H.012009.5 Federal Aid Project Nos. H012008 AND H012009
4. Prime consultant name (name must match <u>exactly</u> as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; <u>include screenshot from SOS at the end of Section 20</u>)	Michael Baker International, 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.0000062 V.F. 0000010
6. Prime consultant mailing address	2600 Citiplace Drive, Suite 450, Baton Rouge, LA 70808
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	2600 Citiplace Drive, Suite 450, Baton Rouge, LA 70808
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Daniel Thornhill, PE Associate Vice President & Office Executive 225-218-2846 (office) 205-908-8026 (mobile) daniel.thornhill@mbakerintl.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Daniel Thornhill, PE Associate Vice President & Office Executive 225-218-2846 (office) 205-908-8026 (mobile) daniel.thornhill@mbakerintl.com

BY PARTNERING WITH MICHAEL BAKER, DOTD WILL BENEFIT FROM:



STRONG RELATIONSHIP WITH DOTD PM

PM Daniel Thornhill and Deputy PM Shalin Sheth will **coordinate closely with DOTD PM Hamed Babaizadeh to streamline the US 71 projects**, as we have on the ongoing US 371 KCS RR Overpasses project, which involves **multiple steel girder bridges over active railways**. Daniel and Shalin will bring the same collaborative management philosophy to these projects, **ensuring DOTD's goals and expectations are met**.



IDENTICAL URBAN BRIDGE EXPERIENCE

Michael Baker has delivered a nearly identical project: the **Courtland Street Bridge over CSX Railroad Design-Build project in Atlanta, GA**. Bridge Replacement QA/QC George Manning will **apply lessons learned and innovative techniques** from that project to tailor solutions to anticipated challenges related to urban constraints, geotechnical foundations, rail coordination, and traffic management, **improving project quality**.



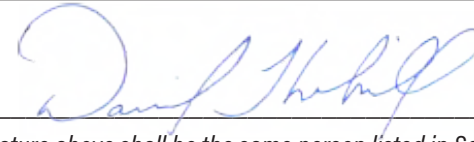
A HAND-PICKED TEAM OF EXPERTS

In addition to the Courtland Street and US 371 projects, the Michael Baker Team brings a wealth of experience developing innovative solutions for similar projects across Louisiana and the Southern U.S. **Key subconsultants HDR, NTB, and Terracon were specifically chosen for their expertise** in urban bridge rehabilitation, constrained utility coordination, and deep foundation design, respectively.

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.

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



Signature above shall be the same person listed in Section 9:

03/18/2026

Date:

Firm(s):

N/A

Firm(s)' %:

N/A

MICHAEL BAKER BRINGS DOTD AN EFFICIENT TEAM OF TRUSTED PARTNERS:

Michael Baker
INTERNATIONAL

Prime Consultant Leading Bridge Replacement, Roadway, & Environmental Services

- ✓ Ranked 7th in Bridges and 13th in Transportation by Engineering News-Record in 2025
- ✓ 30+ Louisiana-based professionals

HR

Major Subconsultant Leading Bridge Rehabilitation Services

- ✓ Ranked 2nd in Bridges by Engineering News-Record in 2025
- ✓ 50+ Louisiana-based professionals
- ✓ Supporting DOTD with bridge preservation & movable bridge inspections

Terracon

Major Subconsultant Leading Geotechnical Analysis & Laboratory Testing Services

- ✓ Ranked 19th in Top 500 Designers by Engineering News-Record in 2025
- ✓ Advanced GIS mapping, predictive technologies, and fleet of drill rigs

NTBA
SURVEY. DESIGN. BUILD. SUCCEED.

Major Subconsultant Leading Survey, SUE, & Utility Coordination Services

- ✓ Offers 3D Lidar scanning and SUE services from Quality Levels A through D
- ✓ Corporate office located less than three blocks from the project site in Shreveport

VECTURA
CONSULTING SERVICES, LLC

Subconsultant Providing Traffic Engineering Services

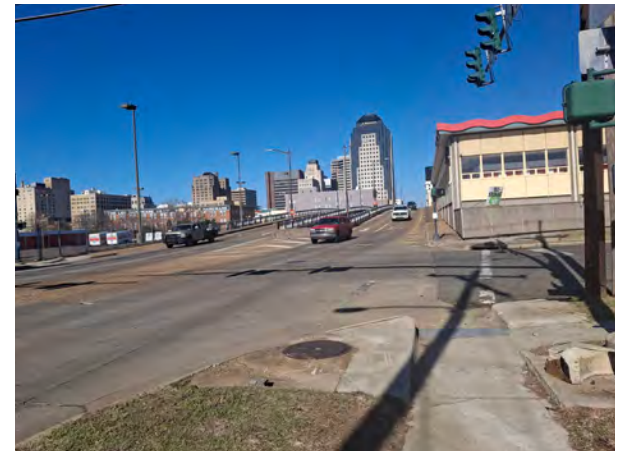
MCA
Engineering & Construction

Subconsultant Providing Electrical & Lighting Design Services

CDM Smith

Subconsultant Providing Mesoscopic Modeling Services

DISCIPLINE TABLE | TEAM SIZE | ORGANIZATIONAL CHART | MINIMUM PERSONNEL REQUIREMENTS



Michael Baker offers DOTD a deep bench of experts in urban bridge replacement/rehabilitation, complex geotechnical and traffic engineering, and state-of-the-art surveying and SUE techniques.

12. Discipline Table:

<i>Discipline(s)</i>	<i>% of Overall Contract</i>	<i>Michael Baker International, Inc.</i>	<i>HDR Engineering, Inc.</i>	<i>Vectura Consulting Services, LLC</i>	<i>CDM Smith Inc.</i>	<i>NTB Associates, Inc.</i>	<i>Terracon Consultants, Inc.</i>	<i>Marrero, Couvillon & Associates, L.L.C.</i>	<i>Each Discipline must total to 100%</i>
Bridge	60.00%	67.50%	32.50%	-	-	-	-	-	100%
Road	10.00%	90.00%	5.00%	5.00%	-	-	-	-	100%
Traffic	8.00%	1.00%	-	49.00%	50.00%	-	-	-	100%
Survey	10.00%	-	-	-	-	100.00%	-	-	100%
Geotech	8.00%	5.00%	-	-	-	-	95.00%	-	100%
Environmental	1.00%	90.00%	-	-	-	-	10.00%	-	100%
Other (SUE)	2.00%	-	-	-	-	100.00%	-	-	100%
Other (Electrical)	1.00%	2.50%	-	-	-	-	-	97.50%	100%
<i>Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.</i>									
<i>Percent of Contract</i>	100%	50.91%	20.00%	4.42%	4.00%	12.00%	7.70%	0.97%	100%

13. Team Size:

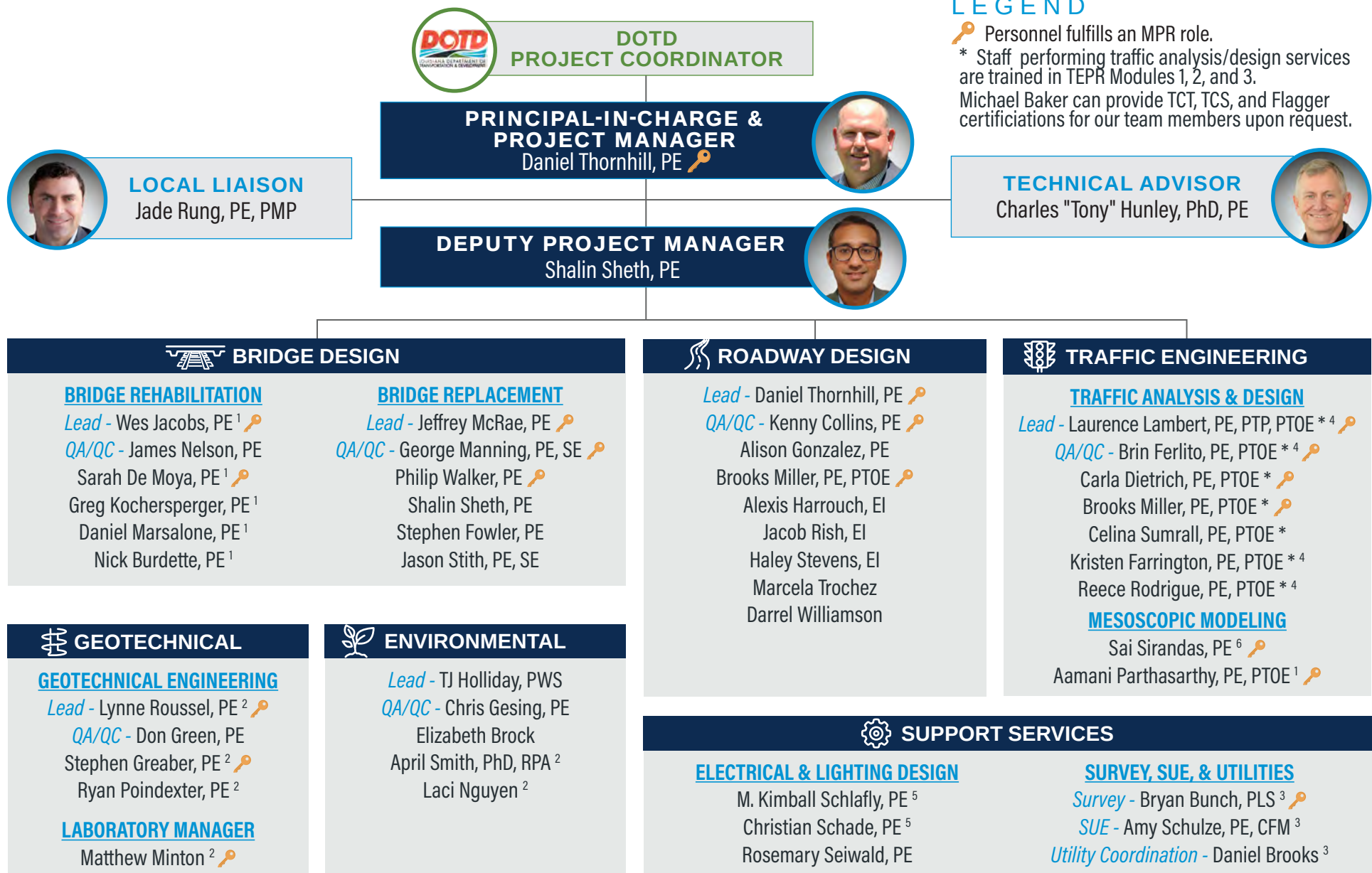
SCALABLE RESOURCES TO ENSURE APPROPRIATE COVERAGE & AMPLE REDUNDANCY

We have structured the Michael Baker team to offer DOTD **ample personnel, ensuring redundancy and providing the ability to ramp up staffing** to accommodate complex or expedited project tasks. With that in mind, it is not anticipated that the total available staff will be assigned concurrently. Our approach and methodology details our plan to work with DOTD's Project Manager to scale staffing up or down **to best meet the needs of the contract.**

<i>Firm name</i>	<i>DOTD Job Classification</i>	<i>Number of personnel committed to this contract</i>	<i>Total number of personnel available in this DOTD Job Classification (if needed)</i>
Michael Baker International, Inc.	Biologist/Wetlands	1	3
	Engineer	3	10
	Engineering-Aide	1	1
	Engineer Intern	2	12
	Engineer - Other	0	8
	Environmental Manager	1	3
	Environmental Pro	1	2
	Principal	1	2
	Senior Technician	2	5
	Supervisor - Eng	2	10
	Supervisor - Other	0	8
HDR Engineering, Inc.	Engineer	1	15
	Engineer - Other	2	52
	Principal	1	10
	Supervisor - Eng	2	46
Terracon Consultants, Inc.	Driller	5	5
	Engineer	1	2
	Engineer Intern	1	3
	Geologist	1	1

Terracon Consultants, Inc.	Principal	1	1
	Supervisor - Eng	1	1
	Supervisor - Other	2	2
	Technician	2	3
NTB Associates, Inc.	CADD Drafter	1	5
	CADD Technician	1	7
	Engineer	1	1
	Engineer Intern	1	1
	Instrument Man	2	9
	Party Chief	2	18
	Principal	1	1
	Rodman	4	11
	Senior Technician	0	1
	Supervisor - Other	1	4
	Surveyor	2	7
	Technician	1	2
Vectura Consulting Services	Clerical	1	1
	Engineer	2	4
	Engineer Intern	2	2
	Senior Technician	0	2
	Supervisor - Eng	2	2
	Supervisor - Other	0	1
	Technician	0	2
Marrero, Couvillon & Associates, LLC	Engineer	1	1
	Supervisor - Eng	2	5
CDM Smith Inc.	Engineer	1	1

14. Organizational Chart:



PROJECT TEAM

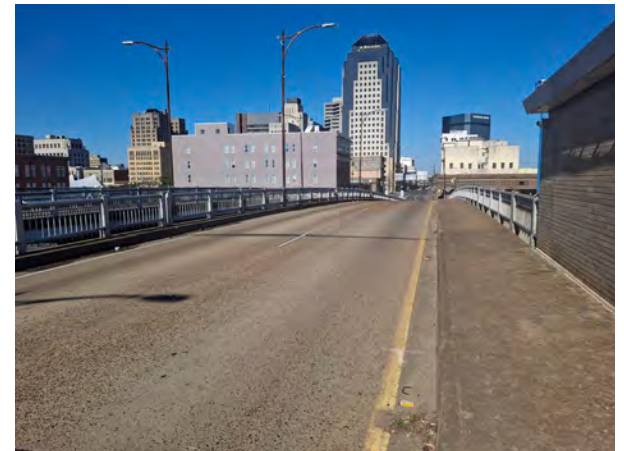
Michael Baker International | HDR Engineering (1) | Terracon (2) | NTB Associates (3) | Vectura Consulting Services (4) | Marrero, Couvillon & Associates (5) | CDM Smith (6)

15. Minimum Personnel Requirements:

<i>MPR No. Do not insert wording from ad</i>	<i>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)</i>	<i>Firm employed by</i>	<i>Type of license and discipline meeting MPR/ certification & number (Ex: PE # - Civil)</i>	<i>State of license</i>	<i>License/certification expiration date</i>
1	Daniel Thornhill, PE	Michael Baker International, Inc.	PE No. 32367 - Civil	Louisiana	09/30/26
2	Daniel Thornhill, PE	Michael Baker International, Inc.	PE No. 32367 - Civil	Louisiana	09/30/26
3	Jeffrey McRae, PE	Michael Baker International, Inc.	PE No. 34554 - Civil	Louisiana	09/30/27
4	George Manning, PE, SE	Michael Baker International, Inc.	PE No. 50197 - Civil, Structural	Louisiana	09/30/27
	Philip Walker, PE	Michael Baker International, Inc.	PE No. 46394 - Civil	Louisiana	09/30/26
	Sarah De Moya, PE	HDR Engineering, Inc.	PE No. 38011 - Civil	Louisiana	03/31/27
5	Bryan Bunch, PLS	NTB Associates, Inc.	PLS No. 5014 - Survey	Louisiana	03/31/26
6	Lynne Roussel, PE	Terracon Consultants, Inc.	PE No. 35152 - Civil	Louisiana	03/31/28
	Stephen Greaber, PE	Terracon Consultants, Inc.	PE No. 26107 - Civil	Louisiana	09/30/27
7	Matthew Minton	Terracon Consultants, Inc.	N/A	N/A	N/A
8	Kenny Collins, PE	Michael Baker International, Inc.	PE No. 33109 - Civil	Louisiana	09/30/27
	Brooks Miller, Jr., PE, PTOE	Michael Baker International, Inc.	PE No. 34472 - Civil	Louisiana	09/30/27
9	Sheelagh Brin Ferlito, PE, PTOE	Vectura Consulting Services, LLC	PE No. 25383 - Civil PTOE No. 932	Louisiana	09/30/27 (PE) 09/09/27 (PTOE)
	Laurence Lambert, PE, PTP, PTOE	Vectura Consulting Services, LLC	PE No. 29901 PTOE No. 1303	Louisiana	3/31/28 (PE) 02/03/28 (PTOE)
	Carla Dietrich, PE, PTOE	Michael Baker International, Inc.	PE No. 35480 - Civil PTOE No. 2468	Louisiana	09/30/26 (PE) 11/24/26 (PTOE)

10	Sai Sirandas, PE	CDM Smith Inc.	PE No. 53244 - Civil Berryessa Multimodal Transportation Improvement Plan, San Jose, CA City of San Jose: Wilson Tam 408-975-3295 wilson.tam@sanjoseca.gov I-80 Design Alternatives Assessment Bay Area Metropolitan Transportation Commission: Kevin Chen 415-778-5338 kchen@bayareametro.gov Better Market Street Environmental Impact Report, San Francisco, CA City of San Francisco: Wade Wietgreffe Wade.Wietgreffe@sfmta.com State Route 239 Project Approval and Environmental Documentation Stephanie Hu — Director, Projects stephanieh@ccta.ca.gov South San Francisco General Plan, San Francisco, CA City of South San Francisco: Billy Gross, 650-877-8535 Billy.Gross@ssf.net	Washington	02/07/27
	Aamani Parthasarthy, PE, PTOE	HDR Engineering, Inc.	PE No. 146113 - Civil Master Thoroughfare Plan (MTP) and Walsh Ranch Analysis, Fort Worth, TX City of Fort Worth: Dana Burghdoff 817-392-1234 Dana.Burghdoff@fortworthtexas.gov Tornillo Port of Entry (POE) Study, Tornillo, TX El Paso Metropolitan Planning Organization (MPO): Salvador Gonzalez-Ayala, PhD 915-212-0258 sgonzalez@elpasompo.org Border Highway Connector Phase 2 Traffic Impact and Improvements Feasibility Study, El Paso, TX El Paso MPO: Salvador Gonzalez-Ayala, PhD 915-212-0258 sgonzalez@elpasompo.org Northwest Highway (Loop 12) / Bachman Traffic Study, Dallas, TX TxDOT Dallas District: Stephen Endres 214-320-4469 Stephen.Endres@txdot.gov Reimagine I-10 Downtown, El Paso, TX TxDOT El Paso District: Sheetal Patel, PE 915 790-4436 Sheetal.Patel@txdot.gov	Texas	06/30/26
11	Wes Jacobs	HDR Engineering, Inc.	PE No. 30774 - Civil Maintenance and Rehabilitation of Historic Bridges, completed 04/12/2016	Louisiana	09/30/26

STAFF EXPERIENCE



DOTD will benefit from the Michael Baker Team's depth of experience and redundancy of staff. Our local experts can draw on the national resources of the team, ensuring the Department works with familiar faces who are equipped with the latest innovative techniques and technologies to streamline this project.

KEY PERSONNEL

**PROJECT MANAGEMENT TEAM, STAFF
FULFILLING MPRS, & KEY DISCIPLINE LEADS**

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Daniel Thornhill, PE		Years of relevant experience with this employer	6
Title	Office Executive/Associate Vice President		Years of relevant experience with other employer(s)	22
Degree(s) / Years / Specialization			BS / 1997 / Civil Engineering, Louisiana State University and A & M College	
Active registration number / state / expiration date			PE No. 32367 / Louisiana / 09/30/26	
Year registered	2006	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			MPR 1 & 2; Principal-in-Charge & Project Manager; Roadway Design Lead	
Daniel has more than 25 years of consulting experience in a variety of engineering projects including bridge and roadway design, corridor/traffic operation concept analysis, hydraulics and subsurface drainage design, and sidewalk beautification projects. He has served as Project Manager/Senior Engineer in the Greater Baton Rouge area since 2006, serving as the responsible-in-charge for Roadway/Transportation Design and Corridor Studies for EBR DOTD, DOTD, Lafayette Consolidated Government and St. Tammany Parish Department of Public Works. Daniel accepted the role as Office Executive for Michael Baker's Baton Rouge office in January of 2021, and manages our local team of experts.				

- ✓ **Meets MPR 1 & 2:** LA PE (Civil) & Principal of Michael Baker
- ✓ Familiarity with DOTD staff, procedures, and projects will streamline communication and enhance technical oversight
- ✓ Served as Project Manager, Principal-in-Charge, or Senior Engineer on 75+ transportation projects across Louisiana

03/13 - 04/14, 08/14 - 01/16	US 190 (Collins Blvd) Traffic Operations Study, Covington, (Stage 0) and Line & Grade Study for New Orleans Regional Planning Commission (Stage 1). <i>DOTD. Project Manager/Lead Design Engineer.</i> Responsible for Roadway Geometrics during the Stage 0 for US 190 (Collins Blvd) from US 190 Business to US 190 (Ronald Reagan Blvd). The project widened US 190 (Collins Blvd) from an existing 2-lane roadway to a 4-lane boulevard to include the complete streets initiative of sidewalks, bikepaths, and/or combination of both. DOTD wanted a traffic operations analysis done for this corridor as it is a major traffic route for commuters from north part of St. Tammany Parish to Covington, Mandeville, Slidell and to New Orleans via the Pontchartrain Causeway. Traffic analysis showed that a series of roundabouts in conjunction with J-turns and dual bridge crossing over the Bogue Falya would provide the best traffic movement. Stage 0 included using As-Built drawings along with Aerial photography to create Plan View Sketches that were included in a Stage 0 report along with project implementation cost. DOTD accepted the Stage 0 study. During coordination with stakeholders during the Stage 0, it was discovered that New Orleans Regional Planning Commission was already under contract for a Stage 1 Environmental Assessment for the same project corridor. Mr. Thornhill and his previous employer were then added to the Stage 1 team as a subconsultant to perform the Line & Grade study to obtain Environmental Clearance. Recommendations from the Stage 0 Traffic Operations study was carried forward. Mr. Thornhill was Project Manager/Lead Design Engineer over the Line & Grade portion of the Environmental Assessment. He was responsible for the development of the Plan & Profile sketches for the Stage 1 report, development of project implementation cost, and creation of public meeting exhibits. For the Line & Grade, LiDAR was utilized with the Horizontal Alignments and Aerial Photography from the Stage 0 report. The updated sketches were used to develop the opinion of probable construction cost from the Line & Grade improvements along with developing estimated cost for relocation of utilities, acquisition of additional right-of-way, engineering cost (design & survey) and CE&I. A staging phase approach was required to break the project out in several phases to be designed and constructed as funding became available. A priority matrix was created to determine the order in which the different phases should be constructed to provide the best Traffic Operation.
04/22 - Ongoing	LA 30: EBR PL - I-10, East Baton Rouge, Iberville, and Ascension Parishes, LA. <i>DOTD Headquarters. Principal/Project Manager.</i> Responsible for the oversight of the Environmental Assessment (EA) of the widening of LA 30 from a 2-lane roadway to 4-lane roadway. Project limits is roughly 14 miles from the East Baton Rouge/Iberville Parish line to the terminus at I-10 interchange. Project is currently in Part 1 of the EA which main focus on traffic count/study/analysis along with some early environmental field screening, initial geometric improvements at existing 5 intersections, SUE services, and development of existing hydraulic flows for existing 6 bridge/culvert structures. Additional responsibilities include oversight of existing alignments along with existing right-of-way lines. Additional coordination required is with DOTD new Mississippi River Bridge Environmental on-going project. Addition 7 miles of project has recently been added to the project to include LA 30 from Brightside/Lee Drive Intersection to the East Baton Rouge/Iberville Parish line. Project challenges are the number of industrial pipelines that parallel LA 30 on both sides of the roadway along with railroad on the west side of LA 30 from Brightside Intersection to just south of East Iberville High School.
03/15 - 01/16	Espasie Bridge Replacement, Lafayette Parish, LA. <i>DOTD. Project Manager.</i> Repsonsible for the oversight for the development of bridge replacement plans to remove an existing concrete decked bridge on timber substructure with a new concrete Arch Span bridge. Additional responsibilities included preparing the bid documents and assisting the Parish with letting of the project. After letting, Mr. Thornhill was responsible for the oversight of the construction of the project to make sure the structure was being built per the plans and coordination between the inspectors and the parish engineers. Mr. Thornhill reviewed and approved all pay request and change orders requested by the contractor.
03/21 - 03/22	Pearl River Truss Replacement, Pearl River, LA. <i>Norfolk Southern Corporation. Senior Engineer.</i> Worked with CE&I Field Engineer in regards to allocations and/or re-allocation of resources for the duration of the project. Michael Baker acted as part of the project team for replacement of the Lindbergh Norfolk Southern Bridge crossing the East Pearl River in Louisiana. Tasks included traffic maintenance, protection of environmental areas, and lead-based coatings demolition.
03/20 - 12/21	Pecue Lane / I-10 Interchange. <i>DOTD. Project Manager.</i> Responsible for handling all Requests for Information (RFIs) or Shop Drawings from the contractor. Project involved a 2 span bridge over I-10 for a new interchange that abutment earthwork was being supported by retaining walls.
08/22 - 05/23	Barksdale AFB Entrance Roads, Bossier Parish, Louisiana. <i>NAVFAC Southeast. Project Manager.</i> Responsible for the development of construction plans for new entrance roads for Barksdale AFB. The project includes a new roundabout at the Air Force Base gates along with new 4-lane divided highway to tie into the new LA 1267 highway constructed by DOTD under the I-20/I-220 Design Build interchange improvements. Additional responsibilities include coordination with the DOTD I-20/I-220 Project Manager and Design Build Owner Verification Managers along with overseeing new roadway drainage that meets DOTD Hydraulic requirements. Re-designed the proposed roundabout from the EA document to reduce the footprint by reducing the inscribed circle from 230'+ to 180' to meet DOTD Roundabout criteria along with reducing the median on the approach to the roundabout to encourage motorist to reduce speed as it approached the roundabout.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.			
Name	Shalin Sheth, PE			Years of relevant experience with this employer	3
Title	Bridge Engineer			Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization		MS / 2019 / Civil Engineering (Structural); BTech / 2016 / Civil Engineering			
Active registration number / state / expiration date		PE No. 48337 / LA / 03/31/2028			
Year registered	2023	Discipline	Civil		
Contract role(s) / brief description of responsibilities		Deputy Project Manager; Bridge Design Support			





Shalin's experience includes structural design bridge design, bridge load rating, bridge load testing, and project management, for a variety of projects. He has worked in the structural forensics field as an intern, before working as a bridge EI. He has experience with drafting and detailing bridge widening plans, along with structural designing of bridge components. His professional experience also includes load rating bridges of various types, performing field load testing of bridges, computing bridge quantities and cost estimates, preparing bridge rehabilitation plans, conducting GPR surveys of bridge decks, training junior engineers, and various administrative tasks.

- ✓ Performed hundreds of load ratings for DOTD structures
- ✓ Well-versed in DOTD bridge design guidelines
- ✓ Highly proficient in a wide range of bridge design and load rating software, and in instructing others in its use

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).				
11/21 - Ongoing	US 371: KCS RR Overpasses HBI, Webster Parish, Louisiana. DOTD. Bridge Engineer. Responsible for computation of engineering design calculations, determining structural feasibility of bridge geometry, structural design of all bridge components, computation of bridge quantities, and plan production at various preliminary and final submittal stages/milestones. Ensured that bridge plans meet both DOTD and KCS Railroad Design Guidelines. Project includes the replacement of the twin bridges for the site at Minden with a single wider structure. The new bridge will be prestressed concrete girder-type and uses LG 63 and LG 36 girders and fulfils KCS/CPKC crash-wall requirements. Michael Baker is currently evaluating phase construction and rehabilitation alternatives for the existing bridge at Sibley.				
11/22 - Ongoing	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program. DOTD, District 07. Bridge Engineer. Responsible for developing engineering design calculations, bridge geometry, bridge quantities, and design plans. Michael Baker was selected by DOTD to provide bridge, roadway and environmental services for the replacement of off-system bridges in the five parishes located in DOTD District 07. Structures replaced by this program include numerous culverts, box culverts, and slab span bridges. Currently, Michael Baker has submitted stamped final plans for two projects (4 bridges/culverts) while other six projects are at various final submittal stages. There are a total of 12 bridges and culverts among the eight projects under this contract.				
07/19 - 08/22	Macarthur Interchange Completion Phase II at US90-Z Eastbound, Jefferson Parish, Louisiana. DOTD. Engineer Intern. Responsible for structural analysis and girder capacity verification of prestressed concrete girders, developing spreadsheets and Mathcad files for computing development lengths and splice lengths, and deck reinforcement design. Also developed computing bridge quantities, girder riser elevations, riser thicknesses, deck elevations for the bridge, along with drafting CAD sheets in MicroStation for framing plans, pier cap details, and deck reinforcement plans in compliance with DOTD standards. This project consisted of demolition of an off-ramp and an on-ramp, along with reconstruction of both at different locations in addition to new construction to facilitate bridge widening.				
05/21 - 08/21	Mermentau River Swing Span Truss Bridge Repairs at Grand Cheniere, Louisiana. DOTD. Engineer Intern. Responsible for preparing a structural rehabilitation solution to repair a steel truss member with structural deficiency, along with repair solutions for floorbeams and stringers using steel cover plates. Drafted and redrew the fender system plans and railing repair plans and reviewing overall bridge repair quantities and the plan set. Assisted with bridge inspection and load rating services in the preliminary stage, and later prepared repair and rehabilitation plans and procedures for the entire superstructure and substructure along with the fender system for the movable bridge span.				

07/19 – 02/21	Load Rating of 311 Bridges, Louisiana. DOTD. Engineer Intern. Responsible for load rating 51 bridges of various types such as concrete slab bridges, reinforced concrete girder bridges, prestressed girder bridges, prestressed and reinforced channel bridges, reinforced concrete culverts, and timber beams/timber trestle bridges. For a typical bridge, the load rating process involved developing and analyzing the superstructure structural model in AASHTOWare BrR, substructure structural model in RC Pier (now LEAP Bridge Concrete), and post processing the analysis results using Mathcad to effectively determine the load carrying capacity of the bridge (load rating factors) and accordingly recommending the posting load to DOTD. This project's scope was initially the load rating of 311 bridges located across Louisiana, however later another 300+ bridges and culverts were added to the scope.
07/22 – 08/22	Load Rating of 176 Bridges, Louisiana. DOTD. Engineer Intern. Responsible for performing load rating for a total of 43 culverts out of 176. The typical process mainly involved developing and analyzing the structural model for concrete box culverts in AASHTOWare BrR, and then preparing reports with load posting recommendations, if applicable.
07/22 – 08/22	Load Rating of 114 Bridges, Louisiana. DOTD. Engineer Intern. Responsible for performing load rating for a historic steel beam bridge, and a prestressed concrete girder bridge. The typical load rating process involves modeling the superstructure and substructure in AASHTOWare BrR and LEAP Bridge Concrete respectively, along with compiling the load rating report. Also reviewed over 40 concrete slab bridges to be load rated by three junior engineer interns.
03/23 – 03/24	I-2/I-69C Interchange Construction Support (Design-Build). Texas DOT. Bridge Engineer. Responsibilities include addressing RFIs, FDCs (Field Design Change), NDCs (Notice of Design Change) by performing structural analysis, making changes to the construction plan set sheets using Microstation as required, reviewing changes and drawings by other engineers, ensuring conformance to TXDOT construction specifications, coordinating with subconsultants and prime contractor DPJV (Dragados-Pulice Joint Venture), working with Bentley and Axiom to prepare custom drawing configuration files to prepare record drawings in accordance with TxDOT's requirements for 19 bridges (steel, prestressed concrete, concrete slab bridges).
10/23 – 07/25	Load Rating based on 2023 & 2024 Bridge Inspection Recommendations. Mississippi OSARC. Bridge Engineer. Responsibilities include performing load rating evaluation for various types of bridges (concrete slabs, steel girders, steel and timber girder/stringer/floor-beam systems, steel railcar bridges) using AASHTOWare BrR for superstructure analysis and an in-house spreadsheet developed for substructure analysis, preparing load rating summary reports and critical finding recommendations if applicable, and providing guidance to engineer interns.
09/23 – 09/24	Bridge Inspections. Mississippi OSARC. Assistant Team Lead. Responsibilities included performing a preliminary study of previously available inspection reports, filling out inspection forms as required by OSARC both prior and after inspections, conducting in-depth inspections of bridges (concrete channels, concrete slabs, reinforced concrete girders, steel girder bridges), noting defects in both superstructure and substructure, documenting photographs and measurements, assigning condition ratings to bridge elements, and recommending bridge closures based on critical findings if applicable, for 43 bridges.

16. Staff Experience:

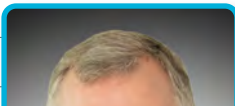
Firm employed by		Michael Baker International, Inc.		
Name	Jade Rung, PE, PMP		Years of relevant experience with this employer	5
Title	Senior Vice President		Years of relevant experience with other employer(s)	26
Degree(s) / Years / Specialization		MBA, 2024, Executive/General Management, Louisiana Tech University; BSCE, 1995, Civil Engineering - Structural, Louisiana State University		
Active registration number / state / expiration date		PE No. 29081 / Louisiana / 09/30/2026; PMP No. 1284298 / 7/19/2026		
Year registered	2000 (PE); 2009 (PMP)	Discipline	Civil	
Contract role(s) / brief description of responsibilities		Local Liaison		
Jade is experienced in all phases of delivery for multi-million-dollar capital projects. He has a proven history of domestic and international business development and program/project management for commercial, municipal, industrial, marine, and heavy civil construction. He has substantial experience in design and construction management including delivery in all phases of the project life cycle. In addition, he has successfully led the delivery of multiple Design-Build facility construction projects, both as a designer and as a general contractor. His skills include scheduling, cost management, construction coordination, scope compliance, issues/change management, conflict resolution, standardized status reporting, and community outreach.				✓ Offers valuable insight into strategies that have helped deliver multiple large, complex projects ✓ Louisiana native with extensive local network ✓ Jade brings his knowledge of DOTD's approach to complex projects, ensuring our team delivers client-focused results
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
06/22 - 05/23 (est.)	Parish Comprehensive Drainage Plan, Covington, Louisiana. <i>St. Tammany Parish. Local Project Advisor.</i> Responsible for project acquisition and stakeholder engagement; client management, public outreach coordination, local representation. Michael Baker conducted a comprehensive drainage plan for the Saint Tammany Parish located on the north shore of Lake Pontchartrain, Louisiana. The plan evaluated the existing state of drainage in the parish including flood risk, water quality and development guidelines, recommended capital projects, and potential policy changes that would lead to reduced flood damaged and increased safety. The Michael Baker team provided data gathering efforts, ranked list of problem areas and provided four in-person public and stakeholder outreach throughout Phase I of this project.			
03/18 - 08/21	MRB South GBR LA1 to LA30 Connector, West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes. <i>DOTD. Executive Sponsor - Bridge Services.</i> Provided project development, project procurment, contract development, and community engagement services for the Enhanced Planning Study for the new bridge crossing of the Mississippi River to alleviate traffic congestion in the Capital Region. The five-parish Baton Rouge Metropolitan Area includes Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge Parishes. The new "south" Mississippi River Bridge and approaches will be a conventional highway/expressway facility connecting to LA 1 on the west side of the Mississippi River and to LA 30 (and widening of LA 30) on the east side of the Mississippi River. It is planned that the new crossing will be funded in part through the collection of tolls. Three alternatives have been identified from the Enhanced Planning Study and will be analyzed further in Part 2 of the project, which consists of preparing the NEPA document to identify a preferred alternative.			
2008 - 2010	Infrastructure Rehabilitation Program, New Orleans, LA. <i>City of New Orleans, Office of Recovery and Development. Program Manager.</i> Responsible for the design management, project coordination, project procurement, and construction management program; coordinate the City of New Orleans, architectural/engineering design firms, and general contractors for the recovery projects. Spearheaded the approval for the first design-build projects for the City of New Orleans and the State of Louisiana. Following Hurricane Katrina, we engaged to provide program management services for the City of New Orleans Office of Recovery and Development Administration multi-facility, \$1.5B dollar evaluation and rehabilitation program. Provided procurement and management for the facilitation of architectural/engineering design firms, and general contractors in the repair of approximately 300 city infrastructure projects. Assisted the City of New Orleans in the procurement of FEMA, CDBG, and other funding sources to accommodate the projects. Managed the development and delivery of the State of Louisiana's first design-build projects which required the legislature approval to provide the delivery of five new libraries using the "new" contract delivery method.			



2011 - 2012	Union Passenger Terminal to Canal Street Rail Expansion, New Orleans, LA. <i>City of New Orleans, Regional Transit Authority.</i> Project Executive. Facilitated communications for the project between the internal project management team, City of New Orleans, project designer, and general contractor; provided updates on the progress and schedule look-ahead for the project progress. Provided the owner's representative services to manage and coordinate the delivery of the \$15M streetcar rail improvements and expansion in the City of New Orleans for the Regional Transit Authority.
2011 - 2012	Sewer System Evaluation and Rehabilitation Program, New Orleans, LA. <i>Sewerage and Water Board of New Orleans.</i> Project Executive. Facilitated communications for the project between the internal project management team, City of New Orleans, project designer, and general contractor; provided updates on the progress and schedule look-ahead for the project progress. Provided the owner's representative services to manage and coordinate the delivery of the \$160M sewer and drainage improvement program for the Sewerage & Water Board of New Orleans (SWBNO). The improvements as required by the US Environmental Protection Agency (EPA) and Louisiana Department of Environmental Quality (DEQ) were evaluated, designed, procured, construction managed, and documented by MWH for the SWBNO for verification.
01/16 - 01/17	Ocean Cay MSC Marine Reserve, Ocean Cay, Bahamas. <i>MSC Cruises.</i> Project Development Manager. Facilitated the scope development and coordination for the Design-Build project; investigated scope alternatives, provided detail adjustments and facilitated value-engineering options for the construction of the project; coordinated scope and bid evaluations for the dredging, sitework, port improvements, building construction, and utility systems for the island development. The project work includes dredging, demolition, clearing and grubbing, mass grading, beach grading and re-nourishment, bulkhead for cruise ship berth and marina basin, breasting and mooring dolphins, CIP reinforced concrete, hardscape, buildings, utilities, water intake wells, and deep injection wells.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Charles "Tony" Hunley, PhD, PE, SE		Years of relevant experience with this employer	3
Title	National Director - Bridge Services		Years of relevant experience with other employer(s)	25
Degree(s) / Years / Specialization		PhD / Structural Engineering, University of Kentucky; MSCE / Structural Engineering, University of Kentucky; BSCE / Structural Engineering, University of Kentucky		
Active registration number / state / expiration date		PE No. 38940 / Louisiana / 09/30/2026; SE No. 081005839 / Illinois / 11/30/2026		
Year registered	2000 (PE); 2001 (SE)	Discipline	Civil; Structural	
Contract role(s) / brief description of responsibilities		Technical Advisor		





Tony offers more than 27 years of experience leading teams of bridge engineers and directing efforts to cultivate innovation and deliver technical excellence across North America. Earlier in his career, he developed a diversified complex Bridge practice as an Owner and Principal at ENTRAN (formerly American Consulting Engineers). His vast experience with projects of different scales allows our team to assist DOTD in ensuring sound decisions are being made. He provides nationwide technical assistance to the Michael Baker Bridge Practice for complex and unusual projects. Tony can offer valuable insight into the efficient and sound design of DOTD's structures. His project delivery includes design oversight on design projects for significant alternative delivery efforts. ***Tony's vast experience will provide a holistic view of project delivery best practices, help ensure client satisfaction.***

- ✓ Louisiana PE with 25+ years designing bridges over major and/or complex bridges
- ✓ Offers valuable insight into strategies that have helped deliver multiple large, complex projects

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
02/18 - 01/22	Bridging Kentucky Program General Engineering Consultant, Multiple Locations, Kentucky. Kentucky Transportation Cabinet (KYTC). Program Manager. This expansive statewide bridge restoration program was launched by KYTC in 2018 with an initial mandate to address more than 1,000 bridges across the state over six years with an initial estimated budget of \$700M. The program is rehabilitating, repairing, or replacing critical bridges that are either closed to traffic, weight-restricted, or rated in poor condition. The program focuses on smaller bridges across the state that have historically struggled to get the necessary funding. Tony led a team of 22 firms collaborating with several in-house divisions of KYTC to provide program management oversight, document and process management, scheduling, internal and overall program financial management, information management, and program-level communications services; screening and prioritization of bridges, preliminary and final design, environmental services, utility coordination, right-of-way acquisition, construction procurement support for design-bid-build and design-build projects, design-build owner's engineer services, and construction management and inspection support. During the 120-day kick-off phase of the program, the team established organization and communication protocols; finalized the program brand and internal/external communication strategies; developed a Program Charter in collaboration with KYTC, FHWA, and various stakeholder and oversight agencies to establish authority and critical streamlining approaches to project development design, environmental studies and approvals, right-of-way acquisition, and utility relocation coordination; established the document and progress management system; utilized e-Builder Program Management Information Software system; screened more than 1,100 bridges to determine recommended scope, preliminary cost, and critical design/schedule challenges, and initiated design of several bridges to be rehabilitated. The program is being delivered utilizing a variety of delivery methods including individual bridge construction projects, bundling of bridge projects, and a design-build bundle contract of 106 bridges.
1997 - 2000	US 62/68 Cable-Stayed Bridge over the Ohio River, Maysville, Kentucky. Structural Engineer. Responsible for construction engineering services, including developing post-tensioning and stay-cable installation verification procedures and calculations to verify the final cable stay forces. Calculations utilized a post-tension/cable tension program developed to evaluate the effects of various loss effects on final cable/strand forces. <i>The bridge is a 2,100-foot long five-span cable stayed bridge featuring a 1050-foot-long channel span.</i> The superstructure is supported by variable depth steel plate edge girders with a floor beam and sub-stringer system. The 332-foot-tall towers have a goal post configuration with upper and lower struts.

2000 - 2010; 2021 - 2022	Cable-Stayed Bicycle Bridge over Navigation Lock Chambers Lock Unit, Kentucky Lock Addition, Grand Rivers, Kentucky. KYTC. Assistant Program Manager - Structures. Responsible for preliminary design and QA/QC of final design of a 366-ft long, 155.54' – 52.92' – 157.54', three-span cable-stayed concrete bridge over the existing and proposed lock chambers. The lock unit is the central feature of a 1359-ft long signature bicycle/pedestrian structure. The cable stayed bridge features two A-frame towers supporting the tail spans and connected by horizontal steel cables. Between the towers, a widened bulb-out area supported by precast outriggers post-tensioned to the main concrete beams, allows for viewing of the lock operations. Cazaly hangers are utilized to allow for precast concrete beams spliced in the air for continuity and to facilitate erection.
01/21 – 09/22	I-49 Lafayette Connector, Lafayette, Louisiana. DOTD. Deputy Structures Lead. Responsible for a conceptual design analysis of the multi-level Kaliste Saloom Interchange. The 3-level interchange connects the new I-49, Evangeline Thruway, and Kaliste Saloom Road. The interchange consists of nine bridges, of which several feature significant flared spans and most on curved alignments (minimum radius = 515-feet). crossing multiple roadways and a BNSF Railroad track. The conceptual design phase included type, size, and span arrangement development. Steel plate girder, trapezoidal steel box girder, and precast segmental box girder superstructure types were evaluated. Span lengths vary up to 210-feet and complex features included integral post-tensioned pier caps and integral straddle caps over the BNSF Railroad.
03/05 – 04/06	Relocated US 25E over Cumberland River. KYTC. Construction Inspector. Performed materials testing, fields surveying and inspection of construction activities and methods during drilled caisson and pile foundation construction, and substructure and superstructure construction. The project included two sets of twin structures during the widening and relocating of US 25E. The four structures were 10-span PC I-beam bridges with total bridge lengths of more than 1,100 feet.
04/07 – 06/09	River Road Bridge Widening over Harrods Creek, Prospect, Kentucky. KYTC. Department Manager. Responsible for construction phase engineering services for the widening and rehabilitation of a three-span reinforced concrete filled-spandrel arch bridge. The existing one-lane historical bridge was widened to two lanes by removing the existing concrete balustrade railings and excavating enough of the cobble infill to "hide" a new prestressed concrete beam superstructure with PPC deck panels cantilevered beyond the existing spandrel walls. The concrete arch and spandrel walls were inspected and rehabilitated. <i>This project won the 2010 APWA-KY Chapter "Project of the Year" award in the Historic Preservation Category over \$1 Million, the 2011 PCI Design award in the Rehabilitated Bridge Category, and the 2012 ACEC-KY Engineering Excellence Grand Award, and the ACEC Engineering Excellence National Recognition Award in the Structural Systems category.</i>
10/04 – 07/05	I-75 over Rockcastle River, Laurel and Rockcastle Counties, Kentucky. KYTC. Structural Engineer. Responsible for preliminary and final designs and plans for the widening and rehabilitation of two existing five-span structures. The structures originally consisted of two units; a three-span (160 feet, 200 feet, 160 feet) and a two-span (160 feet by 160 feet) with non-composite 96-inch welded steel plate girder framing. The new structure connects and widens the existing substructures and replaces the existing steel girder superstructures. The 258.036-meter long, five-span continuous 1,975-millimeter composite welded steel plate girder structure has a deck width of 39.01 meters and a 33-degree skew. The removal and construction of the new structure was performed in three construction stages to accommodate maintenance of traffic. The concrete multi-column piers were connected and retrofitted for the new superstructure. Drilled shafts were used on two of the pier in-fills to avoid deep excavations adjacent to the existing piers.
08/04 – 05/06	KY 922. Newtown Pike. over UK Agricultural Station Branch, Newtown Pike Design-Build, Lexington, Kentucky. KYTC. Structural Project Manager. Responsible for preliminary and final design and structure plans for a new three-span (14 feet, 22 feet, 14 feet) cast-in-place concrete slab bridge. Aesthetic design features incorporated into the structure include a stone veneer and concrete barrier with 4-inch KY River Marble Cut Stone lay on both faces of the barrier. The bridge is situated on a 22.9-degree right skew. Substructures for the bridge included wall piers and breastwall abutments founded on spread footings keyed into bedrock.

16. Staff Experience:

Firm employed by		HDR Engineering, Inc		
Name	Wesley Jacobs, PE		Years of relevant experience with this employer	11
Title	Transportation Group Manager/Associate Vice President		Years of relevant experience with other employer(s)	17
Degree(s) / Years / Specialization			BS / 1998 / Civil Engineering	
Active registration number / state / expiration date			PE No. 30774 / LA / exp. 09/30/26; Maintenance and Rehabilitation of Historic Bridges /compl. 4/12/2016	
Year registered	2003	Discipline	Civil	
Contract role(s) / brief description of responsibilities			MPR 11; Bridge Rehabilitation Lead	
Wes has over 28 years of demonstrated expertise in several aspects of civil and structural design/inspection, including bridges (high-level river crossings, movable bridges, RR overpasses, rail bridges with common elements such as complex geometry, PPC girder, steel plate girder, curved steel plate girders, pier design/protection, cofferdams, column and pile bent design), sign structures, and urban/rural roadway/drainage design. Through this experience, he has gained a solid foundation in civil and structural design expertise, driven by the complexity of the projects completed, including CMAR/ECI and D/B (estimated construction costs totaling more than \$10 billion). His responsibilities have included independent technical review, plan production, structural design, seismic review, forensic analysis, civil design, geometrics, drainage design, structural inspection, specification development, cost estimation, bridge rehabilitation, and project management.			✓ Extensive DOTD Bridge Design Experience ✓ Specializes in Railroad Overpass Rehabilitation and Replacement ✓ DOTD-Trained in Historic Bridge Preservation	
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
11/22 – 01/25		Bridge Preservation IDIQ, LA 577 Overpass at I-20 Repair PS&E, Waverly, LA. DOTD. Project Manager and Engineering Lead. Task orders were issued for inspection, rehabilitation design, and load rating of the LA 577 precast concrete girder overpass in North Louisiana, which was damaged by a dump truck collision. The scope included emergency services for inspection, load rating, and PS&E for the demolition of the existing span and the redesign of a new AASHTO T3 PPC span. Wes led the emergency inspection and was responsible for the engineering design of the PS&E.		
04/25 – Ongoing		Contract 5 for Movable Bridges (6), Statewide LA. DOTD. HDR Project Manager and Engineering Lead. Wes led the movable bridge multi-disciplinary team (structural mechanical, electrical, and architectural) to develop and perform NBIS In-Depth and routine inspections/reports, LRFR load ratings, scope of work/report development to rehabilitate six (HBI) vertical lift bridges: Old Abbeville, Abbeville Bypass, Parks, Milton, West Fork, and Ellender. He coordinated subconsultants and teams to inspect six bridges in two mobilizations, including rope access inspectors.		
11/19 – 03/24		Statewide In-Depth Complex Bridge Inspections, Statewide LA. DOTD. HDR Project Manager and (Subconsultant) Engineering Lead. Wes led the movable bridge main span inspections (fieldwork and report preparation) of the Jackson Street Lift Bridge spanning the Red River and the lift bridges spanning Teche Bayou. Wes oversaw the team that performed structural, mechanical, and electrical inspections of the towers, main span truss, substructure, and machinery, using rope access and manlift methods for in-depth inspection. Additionally, over 25 more bridges were inspected as part of the contract, including seven steel girder swing span bridges in St. Tammany, Tangipahoa, and Livingston Parishes, one steel swing truss bridge (US 90 East Pearl River), and 17 smaller concrete slab span and timber bridges.		
10/23 – 05/25		Movable Bridge Inspection On-Call Contract, New Orleans, LA. Port of New Orleans. Project Manager. Wes led the annual in-depth movable bridge inspections for the Seabrook and Almonaster single-leaf truss bascule bridges (117 ft main span with 240 ft total). The bridges were built in 1923 and 1919, respectively, and span the Inner Harbor Navigation Canal (river crossing). Wes led a multidisciplinary team of structural rope access, mechanical, and electrical inspectors to conduct annual in-depth inspections, prepare reports, and issue remediation recommendations.		



01/08 – 02/09	Calton Road Union Pacific RR Overpass, Laredo, TX. <i>City of Laredo.</i> Engineer of Record. Wes developed the final designs, plans, and specifications for this railroad overpass project using AASHTO–LRFD specifications. The bridge spans Union Pacific RR main lines and spur tracks which the layout provided the horizontal and vertical clearances required by UPRR. Wes designed the steel-welded composite plate girders for a total length of 866 ft, reinforced concrete column bents, and drilled shaft foundations.
01/10 – 10/11	Chef Menteur Pass Bridge Replacement EA, Orleans Parish, LA. <i>DOTD.</i> Structural Lead. Wes developed high-level (75 ft vertical clearance) fixed bridge alternatives for replacing a historical swing span bridge in Orleans Parish for this river crossing. The span arrangements comprised PPC AASHTO Type 3 (80 ft) and BT 78 (130 ft) approach spans, with steel-composite girders for the main spans (200 ft and 270 ft). Wes developed conceptual designs for deep river concrete piers with water-level footings supported by large-diameter PPC cylinder piles.
02/05 – 10/06	US 84 at Mexia Bridge Replacement/Railroad Overpass, Waco, TX. <i>TxDOT Waco.</i> Engineer of Record. The bridge included prestressed concrete girders and concrete column bents supported by drilled shafts. The bridge geometry was set to accommodate the required horizontal and vertical clearances for the Union Pacific Railroad. The overall bridge length was 715 feet and 81 feet wide, accommodating four lanes of traffic through split-phased construction. Wes designed the PPC girders, column bents and drilled shaft foundations.
05/02 – 06/03	Traffic Street Railroad Bridge, Bossier, LA. <i>City of Bossier.</i> Project Engineer. Project engineer for the preliminary and final design of this \$1.5 million project that encompasses widening the existing roadway underpass, such that the railroad bridge (built in 1920) above spanned the road in one welded composite steel span of 74 feet. The steel girder span units were designed to be lifted into place with minimal interruption to the track. Three separate units were designed and constructed. Substructure/ foundation rehab, removal, and retrofit are also included in the scope of this project. The existing concrete gravity abutment footing had to be extended and supported by drilled shafts to support the new single-span loads. Wes designed the new steel span, and abutment substructure retrofit including the drilled shaft foundations along with the construction phasing.
10/11 – 05/15	US 84 Sabine River Bridge, Logansport, LA. <i>TxDOT/DOTD.</i> Engineer of Record. Wes was responsible for the development of the final design, plans and specifications for two bridge structures (eastbound and westbound) spanning the Sabine River in Logansport, LA using AASHTO–LRFD specifications. Wes designed the PPC Tx Girders (Tx62's and Tx70's). The span lengths range from 120 ft to 160 ft. Wes designed the multi-column reinforced concrete bents/piers with strutted columns at the main channel locations along with the drilled shaft foundations (river shafts were 6 ft diameter).
06/03 – 05/05	US 171 Southern Railroad Overpass, Mansfield, LA. <i>DOTD.</i> Engineer of Record. Wes was responsible for the \$4M twin bridge structures in concentric curves with bobtail and skewed spans crossing the KCS railroad main line for the TIMED program. Each bridge was approximately 700 feet long. Wes designed the PPC girders and pile bents substructures.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.	
Name	Jim Nelson, PE	Years of relevant experience with this employer	<1
Title	Technical Manager - Bridge	Years of relevant experience with other employer(s)	28
Degree(s) / Years / Specialization		MSCE / 2005 / Civil Engineering, Iowa State University; BS / 1997 / Civil Engineering, Iowa State University	
Active registration number / state / expiration date		Professional Engineer No. P16032 / Iowa / exp. 12/31/2027	
Year registered	2002	Discipline	N/A
Contract role(s) / brief description of responsibilities		Bridge Rehabilitation QA/QC	



Mr. Nelson has nearly three decades of Department of Transportation (DOT) experience and national committee leadership. As Iowa DOT's State Bridge Engineer, he oversaw one of the nation's largest bridge inventories and led a bureau of 79 staff. He was chair of AASHTO's Technical Committee on Bridge Preservation and contributes to AASHTO, FHWA, and TRB initiatives. His deep understanding of preservation policy, technical innovation, and interagency coordination ensures he can provide meaningful review and direction for the planning and research elements.

- ✓ State Bridge Engineer for Iowa DOT, providing oversight for the maintenance and development of more than 20,000 bridges statewide
- ✓ AASHTO Technical Committee Chair for Bridge Preservation
- ✓ Nearly 30 years of experience leading/reviewing designs for complex bridge projects across the nation

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/26 - Ongoing	US 371: KCS RR Overpasses HBI, Webster Parish, Louisiana. DOTD. Technical Advisor. Responsible for evaluating the rehabilitation alternative for the existing bridge at Sibley. Project includes the replacement of the twin bridges for the site at Minden with a single wider structure. The new bridge will be prestressed concrete girder-type and uses LG 63 and LG 36 girders and fulfills KCS/CPKC crash-wall requirements. Michael Baker is currently evaluating phase construction and rehabilitation alternatives for the existing bridge at Sibley.
09/17 - 12/25	Various Projects, Statewide. Iowa DOT. Director of Bridges and Structures Bureau & State Bridge Engineer. Responsible for leading the Bridges and Structures Bureau comprised of 79 full-time employees. The Bureau consists of a Bridge Maintenance and Inspection Section and two Bridge Project Development Sections. The Bridge Maintenance and Inspection Section inspects over 4,100 bridges on the primary roadway system and provides oversight for approximately 19,700 bridges on secondary roads. The Bridge Project Development Sections produces and oversees the production of approximately 100 bridges and structures designs annually with an estimated construction cost of approximately \$260 million. Oversees the development and implementation of standards, policies, procedures and research for bridges and structures. Serves on national committees responsible for developing specifications for bridge design and construction
01/10 - 09/17	Various Projects, Statewide. Iowa DOT. Transportation Engineer Manager. Responsible for leading and managing a section of 6 engineers and 3 design technicians. The section prepares plans for bridges, culverts, sign trusses, bridge repairs and miscellaneous structural plans. Providing guidance to final design engineers and technicians on Iowa DOT design philosophy and ensuring the quality and on-time completion of plans for letting. Also served as Designer for the State of Iowa's first accelerated bridge construction lateral bridge slide design. Designed to construct the bridge superstructure adjacent to the existing bridge and slide the bridge laterally on stainless steel and PTFE sliding bearings
02/02 - 04/07	Various Projects, Statewide. Iowa DOT. Transportation Engineer. Responsible for review of consultant plans, coordination of project issues, providing guidance to consultants on Iowa DOT design philosophy and ensuring the on-time completion and turn-in of plans for letting. Plans reviewed include steel bridges, standard and non-standard pretensioned prestressed concrete beam bridges, and bridges with special designs and aesthetics. Also responsible for providing guidance to field personnel in resolution of construction problems and coordinating revisions to plans to correct errors found during the construction phase. Served as team leader for the 2002 and 2003 selections of consultants for statewide "on-call" bridge design services. Also served as team member for CEC/DOT/FHWA partnering team for plan quality. The CEC/FHWA/DOT Partnering Council and the Iowa DOT Highway Division accepted the team's recommendations. Jim implemented these recommendations by working with the Office of Construction to develop a Microsoft Access database for project specific QA/QC input and feedback for bridge projects.

16. Staff Experience:

Firm employed by		HDR Engineering, Inc	
Name	Sarah De Moya, PE		Years of relevant experience with this employer
			13
Title	Bridge Group Lead		Years of relevant experience with other employer(s)
			7
Degree(s) / Years / Specialization		MS / 2007 / Structural Engineering BS / 2006 / Civil Engineering	
Active registration number / state / expiration date		PE No. 38011 / LA / exp. 3/31/27	
Year registered	2013	Discipline	Civil
Contract role(s) / brief description of responsibilities		MPR 4; Bridge Rehabilitation Support	
Sarah's experience includes structural design and analysis of bridges. She has experience in each stage of bridge design, including preliminary planning, structural design, and construction phase services. Sarah has served as a bridge engineer for numerous public clients, including DOTD, TxDOT, FDOT, NYSTA, ADOT, USACE, and various cities and counties in Texas.			✓ Experienced in LA and familiar with DOTD Requirements ✓ 20 years of experience in bridge design ✓ Experienced with bridge preservation and rehabilitation
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
11/22 - 07/23	Bridge Preservation IDIQ - LA 577 at I-20 Repair PS&E, Waverly, LA. DOTD. Senior Bridge Engineer. Sarah developed demolition and rehabilitation plans, specifications, and estimates to replace the bridge span damaged by a truck impact. The existing bridge was partially damaged, including prestressed concrete beams, bridge railing, and bridge deck. In Phase 1, Sarah load-rated the damaged bridge to determine if a portion of the bridge was safe to open to traffic. Sarah developed a letter bid plan for demolishing damaged beams and bridge deck, along with temporary traffic control, immediately following the load rating. The bridge reopened to one lane of traffic while the design for span replacement was ongoing. Phase 2 design included AASHTO Type 3 girders designed using LEAP Bridge Concrete with modifications to the existing substructure for additional girders due to phased construction. The design and LRFR load rating followed DOTD BDEM, and the team developed bridge design technical memos and plans using DOTD CadConform.		
08/22 - 02/24	Corsicana Bridge Replacements, Navarro County, TX. TxDOT Dallas. Senior Bridge Engineer. Sarah led the design for five rural bridge replacements. The SH 31 over Post Oak Creek bridge is one-half of a 4-lane divided highway utilizing a concrete slab beam superstructure, concrete piers, and drilled shaft foundations designed for 12 feet of scour. Low chord elevation was set above the 100-year design flood event, necessitating retaining walls on the bridge approaches to keep final grading within the existing state ROW. Abutment slopes were armored with 18-inch diameter stones for scour protection.		
4/20 - Ongoing	US 77 Schematic and PS&E, Sinton, TX. TxDOT Corpus Christi. Bridge Lead. Sarah led the design for four new bridges, four bridge replacements, and six bridge rehabilitations. She performed a cost-comparative analysis to determine the optimum bridge length and retaining wall limits. Sarah designed prestressed concrete beams, concrete bents, and drilled shaft foundations. The four bridges over Chiltipin Creek were designed for 12 feet of scour, and the low chord was set above the 100-year design flood event. The overpass bridges were designed with pier protection for vehicle collision loading. The bridge rehabilitation plans incorporated typical TxDOT repair solutions to prolong the bridges' service life while reducing costs.		
08/15 - Ongoing	Sam Houston Tollway East - Ship Channel Bridge Replacement, Harris County, TX. Harris County Toll Road Authority. Bridge Lead Engineer/Deputy Project Manager. Sarah designed bridge substructure and foundation elements for new twin bridges to replace the existing Houston Ship Channel Bridge, which carries Sam Houston Tollway-East over the Houston Ship Channel. Each approach bridge is over a mile long with a combined deck area of nearly 800,000 square feet. Sarah led the bridge layout and structural design, influenced by difficult site constraints, including nine railroad tracks, access roads, existing bridge foundations, poor soil, highly skewed box culverts, an operating petcoke facility, and roughly 90 utilities. Despite many obstacles, the new bridge was designed so that only overhead power lines required relocation. Sarah checked superstructure designs and developed go-by details utilized by the bridge design teams.		
01/18 - 09/19	FM 528 Extension from SH 35 to SH 6 - Bridge over BNSF Railroad, Alvin, TX. City of Alvin. Bridge Lead Engineer. This two-lane rural bridge on the new location was designed for future widening. Sarah led the design of prestressed concrete I-girders, concrete piers, and drilled shaft foundations. She also developed Exhibit A and located bridge piers outside the BNSF railroad ROW. Sarah developed the design of noise walls, retaining walls, and custom project aesthetics.		



06/19 – 12/20	Old US 90 at Baird's Bayou Bridge Replacement, Orange County, TX. <i>TxDOT Beaumont.</i> Deputy Project Manager/Bridge Lead. Sarah coordinated with TxDOT, subconsultants, and the internal production team to progress design and deliver this project on a tight schedule. Sarah coordinated the environmental documentation, utility relocation, and retaining walls. She developed a scheme for end-on-end bridge demolition and construction due to existing bridge conditions and difficult site access in a rural area. Sarah checked prestressed concrete pile trestle bents and slab beam superstructure designs.
01/14 – 06/15	UPRR Harrisburg Overpass, Houston, TX. <i>Metropolitan Transit Authority of Harris County.</i> Structural Engineer. This fast-track project included bridge design services for a nine-span bridge consisting of two light rail tracks, two highway lanes, and two sidewalks over UPRR tracks. Bridge design included pre-stressed concrete I-girders, deck design, substructure design, special railing details, track plinth design, rail structure interaction model, approach slab design, cased drilled shafts due to contaminated soil, OCS pedestal details, and OCS/light pole anchorage design. Sarah checked the design of prestressed concrete girders, substructure, foundations, OCS pedestals, and anchorage.
01/12 – 11/12	US 290 Manor Expressway, Manor, TX. <i>Central Texas Regional Mobility Authority.</i> Structural Engineer. Sarah designed and analyzed truss structures for overhead sign bridges, cantilever sign structures, DMS structures, and toll gantries, utilizing RISA and AASHTO LTS criteria. Sarah reviewed the shop drawings and approved sign structure/DMS/toll gantry trusses, sealed expansion joint assemblies, drainage structures, pedestrian railing, and prestressed concrete beams. The design includes 6.2 miles of a six-lane, grade-separated tollway reconstruction with three general-purpose lanes in each direction. It includes a roadway, 32 bridges, retaining walls, drainage, sign structures/toll gantries, and a 10-foot shared path, in accordance with AASHTO LRFD, TxDOT, FHWA, and ADA design criteria.
01/10 – 10/11	Grand Parkway Segment D5 – Northbound Mainlane and Southbound Mainlane Bridges over Harlem Road, Fort Bend County, TX. <i>Fort Bend Toll Road Authority.</i> Bridge Engineer. Sarah performed structural calculations and detailed structural elements for these twin rural bridges. This four-lane divided highway overpass was designed for future U-turns underneath and for the future bridge to widen towards the median. Sarah designed bridge layouts, prestressed concrete I-girders, curved steel plate girders, and heavily skewed bents on a curved alignment with super-elevation. She designed abutments for ultimate condition and used client-provided aesthetic guidelines and CADD standards.
06/11 – 10/11	Sweetwater, Harman, and Dulles Avenue Bridge Condition Assessments and Rehabilitation, Sugar Land, TX. <i>City of Sugar Land.</i> Bridge Engineer. Sarah performed a condition assessment of the existing bridges at Sweetwater Boulevard over Steep Bank Creek, Harman Street over Oyster Creek, and Dulles Avenue over Oyster Creek. She developed rehabilitation plans and specifications to repair the bridge deficiencies.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Jeffrey McRae, PE		Years of relevant experience with this employer	29
Title	Technical Manager - Bridge		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS / 1996 / Civil Engineering	
Active registration number / state / expiration date			PE No. 34554 / LA / exp. 09/30/2027; PE No. 15153 / MS / exp. 12/31/2027	
Year registered	2001 (MS); 2009 (LA)	Discipline	Civil	
Contract role(s) / brief description of responsibilities			MPR 3; Bridge Replacement Design Lead	
With nearly 30 years of experience focused on a wide range of bridge design projects, Jeff is responsible for overseeing the completion of contract plans from the conceptual stage through final design on numerous bridge projects, generation of bridge quantity calculations, checking of concrete and steel bridge shop drawings, and generation of substructure and superstructure design calculations. He has extensive experience leading the design of steel plate girder bridges and railroad crossings in Louisiana, Mississippi, and the Southern U.S.			✓ Meets MPR #3: LA Civil PE & Responsible Firm Memeber with 25+ years in responsible charge of a wide range of new, replacement, or rehabilitation bridge design projects ✓ Bridge Design Lead on the US 371 KCS RR Overpass project for DOTD	
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
01/99 - 12/10		I-55/I-20/ US 49 Rehabilitation; Stack #3 Design Phase, Jackson, MS. MDOT. Bridge Technical Manager and Engineer. Responsibilities included generation and checking of engineering design calculations, bridge quantities, and final design contract plans for the substructure and AASHTO beam superstructure spans, as well as checking curved steel girder design for Ramp G-6 over I-20 and U.S. 49. Also responsible for checking and regeneration of form grades, beam seats, etc. at four other bridge sites. Michael Baker provided engineering services (field surveys, preliminary through final design, and certain construction phase services including public relations assistance) for the rehabilitation of the interchanges of I-20 with both I-55 and U.S. Highway 49 in Jackson, MS. The total project was built through a series of four separate construction contracts all designed by Michael Baker, with this project being Stack #3. The project was awarded the 2010 Grand Conceptor Award for Engineering Excellence presented by the American Council of Engineering Companies of Mississippi.		
03/22 - Ongoing		US 371: KCS RR Overpasses HBI, Webster Parish, Louisiana. DOTD. Bridge Deisgn Lead. Responsible for checking engineering design calculations, determining structural feasibility of bridge geometry, structural design of all bridge components, and overseeing plan production at preliminary and final submittal milestones. Ensured that bridge plans meet both DOTD and KCS Railroad Design Guidelines. Project includes the replacement of the twin bridges for the site at Minden with a single wider structure. The new bridge will be prestressed concrete girder-type and uses LG 63 and LG 36 girders and fulfils KCS/CPKC crash-wall requirements. Michael Baker is currently evaluating phase construction and rehabilitation alternatives for the existing bridge at Sibley.		
06/12 - 04/13		S.R. 471 from U.S. 80 to Grants Ferry Road, Rankin County, MS. MDOT. Bridge Design Lead. Michael Baker provided engineering services for the widening of S.R. 471 from U.S. 80 in Brandon to Grant's Ferry Road from two lanes to five lanes. Michael Baker's services include the development of roadway and bridge construction plans for the roadway improvements.		
03/24 - Ongoing		IJA Off-System Bridge Program. DOTD, District 07. Bridge Engineer. Responsible for developing engineering design calculations, bridge geometry, bridge quantities, and design plans. Michael Baker was selected by DOTD to provide bridge, roadway and environmental services for the replacement of off-system bridges in the five parishes located in DOTD District 07. Structures replaced by this program include numerous culverts, box culverts, and slab span bridges. Currently, Michael Baker has submitted stamped final plans for two projects (4 bridges/culverts) while other six projects are at various final submittal stages. There are a total of 12 bridges and culverts among the eight projects under this contract.		
12/16 - 04/18		Mayes Street Bridge Replacement, Jackson, MS. City of Jackson. Bridge Design Lead. Michael Baker developed final roadway and bridge construction plans to replace an existing bridge on Mayes Street that spans the ICRR railroad in Jackson, Mississippi. This project replaced the existing 160-foot-long bridge with a 224-foot-long prestressed concrete bridge.		





10/11 - 10/13	S.R. 4 Bridge Replacement over Burlington Northern Railroad, Holly Springs, MS. MDOT. Bridge Design Lead. Michael Baker prepared preliminary bridge plans and final right-of-way plans for the replacement of the S.R. 4 bridge over the Burlington Northern Railroad . The existing bridge, which was constructed in 1950, is a three-span steel girder bridge with spans of 50 feet, 50 feet, and 43 feet . The new bridge structure was prestressed AASHTO girder spans with spans of 65 feet, 110 feet, and 65 feet, on drilled-shaft bents, which span the railroad right-of-way. Michael Baker developed the final right-of-way plans, designating a detour route , as S.R. 4 was closed during construction.
12/00 - 01/04	S.R. 22 / Nissan Roads, Madison County, MS. MDOT. Assistant Engineer. Responsible for generation and checking of engineering design calculations, bridge quantities and final design contract plans. Also responsible for generating all bridge design calculations and contract plans for an AASHTO beam bridge located at Nissan Drive over the Illinois Central Railroad . This Nissan project was for the development of contract plans for three access roads to the site of the Nissan Plant in Canton, MS.
08/18 - 12/18	Reunion Parkway Design Services Phase 3, Madison County, MS. Madison County Board of Supervisors. Bridge Task Manager. Oversaw design services for two bridge sites along Phase 3 of the Reunion Parkway in Madison County, MS. The scope included developing Phase B Final Bridge Plans for an 880-foot-long bridge over Bear Creek and a 530-foot-long bridge over the Illinois Central Railroad .
04/07 - 10/08	Reunion Parkway Over I-55 Interchange, Madison County, MS. Madison County. Project Manager. Responsible for project management duties and generation of engineering design calculations, bridge geometry, bridge quantities, and conceptual through final design contract plans. This project includes bridge and retaining wall design, as well as surveying for a Single Point Urban Interchange (SPUI) located at the intersection of I-55 and Reunion Parkway in Madison County, MS. The bridge is a curved steel box girder design.
06/91 - 12/05	Shepherdstown Bridge Replacement, Jefferson County, WV, and Washington County, MD. West Virginia DOT. Engineer. Responsible for assisting with design and development of preliminary and final bridge plans for the replacement of this historical bridge structure over the Potomac River in Shepherdstown, WV. Generated and checked engineering design calculations using AASHTO LRFD Bridge Design Specifications. Michael Baker was selected by the West Virginia Division of Highways (WVDOT) to provide all environmental and engineering services for the replacement of the James Rumsey Bridge. The bridge is a historic structure of Wichert Truss design originally constructed in 1937. It is listed on the National Register of Historic Places, and carries WV Route 480 and MD Route 34 over the Potomac River. The bridge has sidewalks on both sides that carry pedestrians and bicyclists. The bridge also crosses over the C&O Canal National Park and National Register listed C&O Canal on the Maryland side. The replacement of the bridge was necessitated by its rapidly deteriorating condition.
03/04 - 09/04	I-55 Widening and Reconstruction from Relocated S.R. 304 to Church Road, DeSoto County, MS. MDOT. Engineer. Responsibilities included generation of engineering design calculations, bridge geometry, bridge quantities, and conceptual through final design contract plans. Michael Baker provided engineering services, including preliminary and final contract plans, right-of-way appraisal maps, deeds, and individual parcel plats for the reconstruction of approximately 4 miles of I-55 from the relocated S.R. 304 Interchange to just south of the Church Road Interchange in DeSoto County.
03/96 - 11/03	S.R. 302/U.S. 78 Hacks Crossing Road, Construction Management and Inspection Services, DeSoto County, MS and Memphis, TN. MDOT. Assistant Engineer. Responsible for bridge construction inspection, including concrete foundations, piers and pier caps, erection of steel plate girder superstructure and deck construction. Other inspections included earthwork and drainage structures. Michael Baker served as project engineer, managing construction activities, and acting on behalf of MDOT for grading, drainage, bridge and paving projects on State Route 302.
05/14 - 04/16	U.S. 49 Florence to Scales Construction Engineering and Inspection, Rankin County, MS. MDOT. Assistant Engineer. Responsible for generation of bridge design calculations and final contract plans, as well as QA/QC. Michael Baker provided engineering services, including field surveys, preliminary through final design, construction phase services, and public relations support, for the construction of U.S. 49 from Florence to the Scales Area. Working as an extension of client staff, Michael Baker provided construction management, Phase C Design (RFI/submittals), utility coordination, scheduling review (Primavera P6), material testing, erosion control, surveying, traffic control, and public relations support, for the construction of U.S. 49 from Florence to the Scale Area.
02/16 - 03/16	I-20 Valley Street Bridge Repair, Hinds County, MS. MDOT. Bridge Engineer. Michael Baker prepared contract plans for the repair of the dual (westbound and eastbound) I-20 bridges that carry I-20 over Valley Street, Lynch Creek, and Raymond Road. Previous bridge inspections had documented various fatigue cracks in certain steel girders, transverse stiffeners, and the top flange of the steel girder. Michael Baker developed contract plans for the repair of both bridges, prepared quantities and estimated construction costs, and assisted in preparing special provisions. Michael Baker also developed traffic control plans for temporary lane closures on Valley Street and Raymond Road.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.	
Name	George Manning, PE, SE	Years of relevant experience with this employer	11
Title	Lead Structural Engineer	Years of relevant experience with other employer(s)	15
Degree(s) / Years / Specialization		MS / 1998 / Civil Engineering, University of Illinois at Urbana-Champaign; BS / 1994 / Civil Engineering, Rensselaer Polytechnic Institute	
Active registration number / state / expiration date		PE No. 50197 / Louisiana / exp. 09/30/2027; PE No. 62055771 / Illinois / exp. 11/30/2026; SE No. 81006203 / Illinois / exp. 11/30/2026	
Year registered	2002 (IL PE); 2005 (IL SE); 2025 (LA PE)	Discipline	Civil, Structural
Contract role(s) / brief description of responsibilities		MPR 4; Bridge Replacement - QA/QC	



George brings more than 26 years of comprehensive bridge design experience, including PSC beam, steel plate girder, and concrete bridges on various foundations, as well as cast-in-place retaining walls and layout of envelopes for MSE retaining walls and sound barrier walls. As the Lead Structural Engineer on the nearly identical Courtland Street Bridge over CSX project in Atlanta, GA, George brings specialized expertise in the design of bridges over highway in tightly constrained urban environments, and offers his familiarity solving similar problems of stakeholder and utility coordination, phasing, and maintenance of traffic.

- ✓ **Meets MPR #4:** 26+ years' experience managing designs for major bridges across the Southern U.S.
- ✓ Lead Structural Engineer on numerous bridges over railroads, including the **nearly identical Courtland Street Bridge project** in Atlanta, GA
- ✓ Specialized experience in the design of rail crossings

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
08/17 - 10/18	Courtland Street Over CSX Design-Build, Atlanta, GA. Georgia DOT. Lead Structural Engineer & Structural Engineer-of-Record. Responsible for structural engineering for this design-build project. Led a team of four engineers for this bridge replacement project. Major elements included the design of micro-piles, foundations, substructure, and superstructure. Managed the team for the aggressive schedule. Michael Baker provided engineering services for the replacement of the Courtland Street Bridge over the CSX Railroad and MARTA transit system in downtown Atlanta through a design-build project delivery method. Services included project management, roadway design, structure design, traffic engineering, survey, lighting, utility coordination, and construction support.
01/19 - 04/19	S.R. 20 Widening, Gwinnett County, GA. Gwinnett County DOT. Structural Design Lead & Structural Engineer-of-Record. Responsible for leading design of the bridge widening over existing railroad tracks and local road . Managed and supervised a team of structural engineers in the analysis and design for the project. Bridge widening included additional steel beams on concrete substructures with crash walls and jacking the existing bridge to meet railroad clearance requirements. Project also included layout for concrete retaining walls. Michael Baker provided engineering services for the widening of Buford Drive/S.R. 20 from Peachtree Industrial Boulevard to Buford Highway/S.R. 13 from two lanes to three lanes in each direction. Michael Baker provided services for conceptual design, roadway, drainage, erosion control, right-of-way, traffic signals, bridge widening, and wall design and managed subconsultant services for survey, geotechnical, traffic counts, and MS4 design. This work was provided under an on-call task order arrangement.
02/24 - Ongoing	Albany Avenue Bridge Replacement at CSX Grade Separation, Tucker, GA. Ware County Commission Office. Lead Structural Engineer & Engineer-of-Record. Responsible for coordinating with the railroad, performing quality reviews, and leading a team of three structural engineers in preparation of bridge plans to replace a railroad at-grade crossing with a grade separated bridge. The three span (110-110-110) 330-foot long proposed bridge consisted of PSC beam superstructure supported by concrete intermediate bents on H-pile footings. As a subconsultant, Michael Baker is providing traffic and structural engineering services.
08/24 - Ongoing	St. Augustine Road over Railroad Grade Separation. Georgia DOT. Lead Structural Engineer & Engineer-of-Record. Responsible for coordinating with the railroad, performing quality reviews, and leading a team of three structural engineers in preliminary and final design for bridge plans to replace a railroad at-grade crossing with a grade separated bridge . The three span, 360-foot long bridge consisted of PSC beam superstructure supported by concrete intermediate bents on H-pile footings. The new bridge used staged construction to facilitate maintenance of traffic , accommodate pedestrian access, and provided MSE wall abutments to limit the required right of way. Services also include survey, traffic analysis, environmental studies, NEPA documentation, utility coordination, and drainage design.

01/24 - Ongoing	Cedar Grove Road over Norfolk Southern Bridge Replacement Design-Build, Conley, GA. <i>DeKalb County.</i> Lead Structural Engineer & Engineer-of-Record. Responsible for preliminary design, final design, and construction support services for this design build project. Lead a team of two engineers, coordinated with the geotechnical subconsultant and the railroad representative. This 0.3-mile-long design-build project is replacing an existing three-span bridge with a new 140-foot-long, single-span prestressed concrete beam bridge built on the existing alignment over the Norfolk Southern Railroad . The project requires reconstruction of the roadway approaches to tie into the existing road on both sides of the proposed bridge with two 12-foot lanes and urban shoulders with curb and gutter, sidewalk and retaining walls. The project also required acquiring right-of-way and easement from multiple parcels. Services include survey, concept development, preliminary and final design, bridge and wall design, traffic analysis, environmental studies, NEPA documentation, utility coordination, and drainage design.
10/04 - 06/05	Jones Simpson Alexander Corridor Improvement, Fulton County, GA. <i>Georgia DOT.</i> Structural Engineer. Responsible for preliminary design, final design and construction support services. This project included replacing the existing bridge over the Norfolk Southern and CSXT railroads. The bridge is located in downtown Atlanta and crossed over a total of 5 tracks with provisions for future expansion by each railroad. This highly urban bridge required extensive coordination with both railroads. The structure was a two span continuous curved steel bridge with tapering plate girders . The intermediate bent was strategically placed between railroad tracks and included a crashwall as required by the railroads. The multi-column bents were supported by an H-pile foundation. The end bents consisted of pile bents located behind MSE retaining walls. In addition to the main structure, two MSE wall plans were required.
09/19 - 10/23	Elachee Drive at I-985 Bridge Replacement, Gainesville, GA. <i>Georgia DOT.</i> Lead Structural Engineer & Engineer-of-Record. Responsible for design and discipline management for this two span bridge replacement project over I-985. Coordinated with geotechnical and roadway subconsultants. Lead a team of three engineers in preparation of final bridge and wall plans. Design incorporated desired architectural elements by the City of Gainesville which included a decorative fence, decorative logo, lighting for bridge, and decorative cladding for the center wall pier. This 0.3-mile-long project replaced the existing Elachee Drive bridge which provides access to the Elachee Nature Center. The new 254-foot-long, two-span PSC beam bridge was constructed parallel to the existing structure to allow traffic to remain open during construction. The new bridge is a gateway to the City of Gainesville with decorative fencing, lighting, and architectural lettering. The substructure had a concrete intermediate bent covered with decorative stone supported by drilled caissons . The roadway approaches were reconstructed to tie into the existing road on both sides of the proposed bridge with two 11-foot lanes, an urban shoulder with multi-use path and bike lanes on one side and rural shoulder on the other side . ROW and easement were acquired from multiple parcels including the Chicopee Woods Area Park Commission which required extensive coordination. Services included survey, concept development, preliminary and final design, bridge design, wall design, traffic analysis, environmental studies, NEPA documentation, public involvement, utility coordination, and drainage design.
11/16 - 11/18	I-285 & SR 400 Reconstruction Design & Review Services, Atlanta, GA. <i>Georgia DOT.</i> Structural Engineer. Responsible for review and independent design for structural components for this project. Reviewed design-build engineer plans and calculations for conformance with client requirements. Michael Baker is serving as the submittal review consultant for the reconstruction of the I-285 and S.R. 400 interchange in Atlanta, Georgia. Michael Baker is responsible for reviewing all developer submittals on the project, which consists of about 4 miles of improvements on I-285 and 5 miles on S.R. 400. The project includes the construction of barrier-separated collector-distributor lanes along the roads to help reduce weaving, merging, and accelerating and decelerating conflicts, and involves the reconstruction of existing ramps and bridges in the interchange, the replacement of the bridge on Mt. Vernon Highway, and the construction of new flyover bridges.
08/16 - 9/17	I-16/I-95 Interchange and I-16 Widening, Chatham County, GA. <i>Georgia DOT.</i> Senior Structural Engineer. Responsible for providing costing plans for 8 bridges as part of the I-16 Corridor improvements. Bridges consisted of bridge maintenance, widening, replacement, and new parallel bridge. Michael Baker served as the general engineering consultant to provide development of costing plans and environmental documentation for a future design-build project. As a subconsultant, Michael Baker is providing support for roadway and bridge design and ecology services for the widening of 7.5 miles of I-16 from two to three lanes, replacement of bridges over CSX railroad, and improvements to the interchanges at I-95 and I-516.
02/19 - 02/20	Bell Road over Chattahoochee River Tributary Bridge Replacement, Johns Creek, GA. <i>City of Johns Creek.</i> Lead Structural Engineer & Engineer-of-Record. Responsible for leading structural engineering team to perform analysis and design to replace this structurally deficient bridge. Provided technical support and quality control review for the project. Managed the team including budget and schedule. This 0.2-mile-long project replaced an existing bridge with a new 45-foot-long, single-span prestressed concrete beam bridge that was built on the existing alignment over a Chattahoochee River tributary. The roadway approaches were reconstructed to tie into the existing road on both sides of the proposed bridge with two 11-foot lanes and urban shoulders with curb and gutter, sidewalk, multi-use path and guardrail.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.	
Name	Philip Walker, PE	Years of relevant experience with this employer	7
Title	Technical Director - Complex Bridges	Years of relevant experience with other employer(s)	27
Degree(s) / Years / Specialization		MSCE/1991/Structural Engineering; BSCE/1990/Structural Engineering	
Active registration number / state / expiration date		PE No. 46394 / Louisiana / 9/30/2026; PE No. 50854 / Florida / 02/28/2027	
Year registered	1996 (FL); 2022 (LA)	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		MPR 4; Bridge Replacement - Design Support	



Philip's experience focuses on the evaluation, design, and construction of long span bridge structures, with a specialty in segmental concrete bridges. He has either managed, peer reviewed, load rated, or been responsible for the design of bridges ranging from short span top-down constructed structures to bridges crossing navigational channels with up to 650-foot spans. He has been responsible for structures ranging from segmental concrete bridges to either curved steel girder or steel truss structures. He is an instructor at USF for concrete bridges, instructor for the NHI Strut and Tie Concrete course.

- ✓ **Meets MPR 4:** LA PE (Civil) & Responsible Member of Firm with 30+ years of diverse bridge design experience
- ✓ USF Instructor for Concrete Bridge
- ✓ Responsible Engineer for award-winning Marc Basnight Bridge in NC, and St. Croix River Crossing in MN

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
06/12 - 06/17	St. Croix River Crossing Project, Stillwater, MN. Minnesota DOT. Structural Lead. Served as Structural Lead for the project and Technical Advisor for the Independent Design Check conducted on the six-span extradosed superstructure unit (600-foot spans). Responsible for the design of 5,000 feet of the approach structure to the extradosed main spans. Developed all preliminary concepts and developed or reviewed/verified/approved all final design calculations of a team of 100 staff for the six approach units leading to the Extradosed Main Spans for this major cable-stayed bridge over the St. Croix River. The approach units consist of post-tensioned concrete box cross-sections constructed using either the precast balanced cantilever erection techniques or cast-in-place on falsework approach. Provided geometry for all concrete material sizes and post-tensioning tendon configurations for both the bridge superstructure as well as the columns/foundations. Both the end and intermediate pier diaphragms of the cast-in-place superstructure units were transversely post-tensioned. The intermediate pier diaphragms required use of loop tendons. He guided preparation of the 1300 sheet construction plans. Coordinated between the design team and the owner both during design and construction. To accelerate construction of the project, plans for the river foundations went to bid within five months of the start of the project.
04/07 - 09/08	24th Street Bridge over I-80 (BRFIM-080-1(308)2-05-78), Pottawattamie County, IA. Iowa DOT. Structural Engineer. Developed the construction specification, inspection processes, forms, and onsite review of contractor operations for post-tensioning. The project was the first use of precast post-tensioned full-depth slab panels for a bridge's deck by the Iowa DOT. The bridge was a two-span steel plate girder structure with a deck constructed of full-depth precast panels. Inspection of duct installation, panel forms, post-tensioning measurements, duct grouting operation, and panel installation was required.
05/92 - 02/93	Cypress Freeway Replacement (I-880), Oakland, California. Structural Engineer. Served as a design engineer for multiple segments of the large freeway project. Responsibilities included deck design for 18 steel plate girder spans , seismic joint analysis and review, substructure design and review, review of post-tensioned concrete box superstructure, design review and detailing of the concrete box superstructure for special seismic loadings.
07/17 - 09/18	Links IV Project, Tampa, Florida Links IV Project, Tampa, Florida. Florida DOT. Structural Lead. Structural lead for the project containing 61 bridges. The interchange project updates the existing freeway connection between the airport and the I-275 corridor by incorporating a dedicated managed lane system. All effort is part of the FDOT TBNext Initiative. The project requirements are for development of conceptual level structural plans for a future design-build project.
2010	SR 559 over CSX Railroad, Polk County, Florida. Florida DOT, District 1. Structural Project Manager and Engineer of Record. Responsible for design of this 422' AASHTO Type VI girder bridge over rail. Adjacent storage tanks necessitated requirement of drilled shaft foundations at both intermediate piers and end bents to minimize construction vibrations.

08/11 – 01/12 (Bridge 3) 10/11 – 03/12 (Bridge 5) 03/11 – 07/11 (Bridge 6) 12/10 – 01/11 (Bridge 9/10)	Foothills Parkway Section 8E Design-Build Project, Blount County, TN. <i>FHWA Eastern Federal Lands.</i> Lead Engineer. Assisted in the superstructure design of four concrete box girders bridges cast-in-place on falsework. The bridges utilized external post-tensioning tendons. Bridge 3. Led the superstructure design of the single cell post-tensioned concrete box that was cast-in-place on falsework. The superstructure spanned 150 feet with a deck width of 37'-6". The bridge was constructed with a 4.6% cross-slope along an 8% profile. The bridge utilized external post-tensioning tendons. The foundations were supported on 7 5/8" diameter micropiles. Bridge 5. Led the superstructure design of the single cell post-tensioned concrete box that was cast-in-place on falsework. The two-span bridge had a total length of 336'-5". The superstructure maximum span was 164 feet with a deck width of 37'-6". The bridge was located centered on a reverse curve with cross-slopes incorporating spiral curve requirements. The bridge utilized external post-tensioning tendons. The foundations were supported on spread footings. Bridge 6. Led the superstructure design of the single cell post-tensioned concrete box that was cast-in-place on falsework. The superstructure spanned 206'-6" with a deck width of 37'-6". The bridge was constructed with a 4.2% cross-slope along a 7.7% profile and utilized external post-tensioning tendons. The foundations were supported on spread footings. Bridge 9/10. Led the Load Rating of two balanced cantilever erected segmental concrete box girder bridges (Bridge 9 and Bridge 10) constructed on a section of the parkway leading to the construction project. Load rating of the structure for design, various legal loading conditions, and various loading conditions was required.
06/19 - 01/20	Inspection of Bridges and Overhead Sign Structures, Statewide, CT. <i>Connecticut DOT.</i> QA/QC. Provided review of all calculations and documents prepared. The evaluations required inclusion of existing conditions which impacted rating calculations. The superstructure of each bridge was comprised of single cell, pre-cast, post-tensioned, box girders with spans of varying length. Segmental boxes are constant depth (11 feet, 8 inches) and constant width (74 feet, 8 inches for Bridge #06200A and 83 feet, 9 inches for Bridge #06200B). Each pre-cast segment is post-tensioned transversely and incorporates diagonal struts between the central top slab longitudinal stiffening rib and strut blocks at the bottom slab/web intersection. Under its sixth consecutive inspection contract, Michael Baker evaluated and prepared reports for bridges, including the Baldwin Twin Bridges, Tomlinson Bridge, Goldstar Northbound Bridge, and the Goldstar Southbound Bridge, and sign structures throughout the state of Connecticut. Michael Baker's services included compliance with state and federal highway safety standards and responding to emergency evaluation and repair needs. Since 1999, Michael Baker has inspected more than 3,500 Connecticut bridges, <i>more than 100 of which crossed active rail lines</i>. Michael Baker also inspected more than 1,700 overhead sign structures located on interstates and state highways.
11/17 - 11/21	10th & 11th Avenue South Booker Creek Bridge, Pinellas County, Florida. <i>Florida DOT, District 7.</i> QA/QC. Responsible for plan and calculation review. Michael Baker prepared a complete set of construction contract documents including plans, specifications, supporting engineering analysis, calculations, and other technical documents for improvements to the 10th & 11th Avenue South Booker Creek Bridge. The purpose was to design the most economical approach to repair the existing two-cell, cast-in-place concrete box culvert under 10th Avenue South from its northwest end at Booker Creek to the intersection with 5th Street South (approximately 382 feet), as well as southward approximately 150 feet under 5th Street South, and to repair the existing three-to-five-cell portion of the same culvert under 5th Street South and 11th Avenue South. Improvements incidental to the culvert replacement work included road and sidewalk reconstruction and Americans with Disabilities Act (ADA) curb ramp upgrades.
12/23 - 03/25	Dauphin Island Bridge Repair, Mobile County, AL. <i>Alabama DOT.</i> Technical Advisor. Responsible for senior engineering and quality control. Served as the quality control reviewer for load rating of the segmental concrete box constructed units of the 17,814-foot-long bridge crossing an intracoastal waterway to Dauphin Island, AL. Work effort consisted of load rating four units constructed using the span-by-span erection technique as well as a single unit constructed using the balanced cantilever erection technique that contains a central 400-foot span across the navigational channel. At the owner's request, ratings were developed in accordance with LRFR Part B with modifications to reflect evaluation of a segmentally erected concrete superstructure. Operating ratings were developed for HS20, Military Loading, as well as several ALDOT posting vehicles. Although the bridge was in good condition, further refinement of evaluations was required in specific areas at the owner's request.
05/10 - 09/10	Lee Roy Selmon/I-4 Crosstown Connector Independent Design Review, Tampa, FL. <i>Florida DOT.</i> Owner's Representative. Responsible for independent peer review of both the superstructure and substructure for the multi-level interchange as part of a General Engineering Contract. The independent calculation development focused on various bridges being constructed with the balanced cantilever erection method utilizing both ground-based cranes and specialized segment lifters. All units reviewed were curved with a minimum radius of 750 feet.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Kenny Collins, PE		Years of relevant experience with this employer	42
Title	Associate Vice President		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS / 1983 / Civil Engineering, Louisiana State University	
Active registration number / state / expiration date			PE No. 33109 / Louisiana / exp. 9/30/27; PE No. 10497/ Mississippi / 12/31/27	
Year registered	1989 (MS); 2007 (LA)	Discipline	Civil	
Contract role(s) / brief description of responsibilities			MPR 8; Roadway Design QA/QC	
Kenny is experienced in the design of steel plate girder bridges, development of roadway plans for highway and bridge projects, and the complexities of major bridge and roadway improvement projects in constrained urban environments. He oversees all elements of transportation structure improvement projects, from bridge and roadway plan preparation to preparation of NEPA documents, surveys, right-of-way, and complete construction management and inspection.			✓ Meets MPR 8: LA Civil PE with 40+ years of roadway design experience, including numerous urban projects ✓ Highly experienced in steel plate girder bridge design	
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
05/12 - 12/14	S.R. 471 from U.S. 80 to Grants Ferry Road, Rankin County, MS. MDOT. Project Manager. Provided project management services and oversight of design and plan development, and reviewed the plans and modified the vertical and horizontal alignments of S.R. 471 and the local roads to meet non-freeway rehabilitation design criteria Michael Baker provided engineering services for the widening of S.R. 471 from U.S. 80 in Brandon to Grant's Ferry Road from two lanes to five lanes. Michael Baker's services include the development of roadway and bridge construction plans for the roadway improvements.			
01/99 - 12/02	I-55/I-20/ US 49 Rehabilitation; Stack #3 Design Phase, Jackson, MS. MDOT. Project Manager. Responsible for contract administration and oversight of project; the re-design and updating of previously designed plans for the major interchange of one highway and two interstates in Jackson, Mississippi. Work included updating 15-year old plans to current standards and specifications, modification of alignments, recreating traffic control and all other aspects of this major interchange, including re-design of a curved plate girder "fly-over" bridge. Michael Baker provided engineering services (field surveys, preliminary through final design, and certain construction phase services including public relations assistance) for the rehabilitation of the interchanges of I-20 with both I-55 and U.S. Highway 49 in Jackson, MS. The total project was built through a series of four separate construction contracts all designed by Michael Baker, with this project being Stack #3. The project was awarded the 2010 Grand Conceptor Award for Engineering Excellence presented by ACEC-Mississippi.			
06/91 - 12/05	Shepherdstown Bridge, Jefferson County, WV, and Washington County, MD. West Virginia DOT. Structural Engineer. Responsible for assisting with design and development of preliminary and final bridge plans for the replacement of this historical bridge structure over the Potomac River in Shepherdstown, West Virginia. Michael Baker was selected by the WVDOT to provide all environmental and engineering services for the replacement of the James Rumsey Bridge. The bridge is a historic structure of Wichert Truss design originally constructed in 1937. It is listed on the National Register of Historic Places, and carries WV Route 480 and MD Route 34 over the Potomac River. The bridge has sidewalks on both sides that carry pedestrians and bicyclists. The bridge also crosses over the C&O Canal National Park and National Register listed C&O Canal on the Maryland side. The replacement of the bridge was necessitated by its rapidly deteriorating condition.			
11/16 - 07/18	Mayes Street Bridge Replacement, Jackson, MS. City of Jackson. Project Manager. Responsible for overall project management of all design disciplines, as well as all coordination with the client and other parties involved. Michael Baker developed final roadway and bridge construction plans to replace an existing bridge on Mayes Street that spans the ICRR railroad in Jackson, MS. This project replaced the existing 160-foot-long bridge with a 224-foot-long prestressed concrete bridge.			
08/18 - 05/19	Reunion Parkway Design Services Phase 3, Madison County, MS. Madison County Board of Supervisors. Technical Manager. Responsible for contract administration and QA/QC of plan development. Michael Baker provided design services for two bridge sites along Phase 3 of the Reunion Parkway in Madison County, Mississippi. The scope included developing Phase B Final Bridge Plans for an 880-foot-long bridge over Bear Creek and a 530-foot-long bridge over the Illinois Central Railroad.			

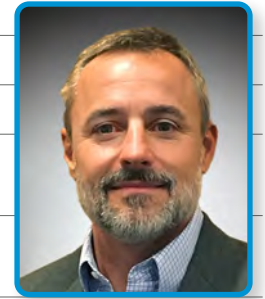


05/91 - 11/93	Nonconnah Parkway Urban Interchange Structures Design, Shelby County, Memphis, TN. Tennessee DOT. Engineer. Designed two prestressed box beam bridges and <i>two single-span steel girder bridges that involved complex geometrics</i> . Michael Baker provided preliminary and final bridge and structure design for the new Nonconnah Parkway in east Memphis, TN. A total of twelve interstate and parkway bridges (eight grade separations and four hydraulic crossings) of various types including both steel plate girder and prestressed concrete beam were designed.
08/22 - Ongoing	U.S. 82 Bypass CE&I Services, Leland, MS. MDOT. Engineering Manager. Responsible for Phase C reviews, when needed. Michael Baker acted as an extension of client staff to provide construction management for development of U.S. 81 from S.R. - 1 to Leland, MS. Phase C Design included utility coordination, scheduling review, material testing, erosion control, traditional surveying, UAS surveying, traffic control, and public relations.
07/17 - 11/19	Woodrow Wilson Avenue Resurfacing, Jackson, MS. City of Jackson. Project Manager. Responsible for overall project management and design services including all coordination with the City of Jackson. Michael Baker provided engineering services for resurfacing of Woodrow Wilson Avenue from Mill Street to I-55. The project encompassed approximately 1.3 miles of four-lane divided highway and consisted of <i>mill and overlay up to the end of the bridge over the CN railroad</i> , including the frontage road; concrete repair/replacement for pavement beneath the asphalt pavement (where necessary); upgrades to traffic signalization at the State Street intersection and the West Street intersection; and drainage and sidewalk improvements. Michael Baker provided survey services, including Mobile LiDAR; performed a geotechnical investigation; and developed final contract plans, specifications, and estimates (PS&E).
10/11 - 04/12	S.R. 4 Bridge Replacement over Burlington Northern Railroad, Holly Springs, MS. MDOT. Project Manager. Responsible for overall design and plan development. Michael Baker prepared preliminary bridge plans and final right-of-way plans for the replacement of the <i>S.R. 4 bridge over the Burlington Northern Railroad</i> . The existing bridge, which was constructed in 1950, is a <i>three span steel girder bridge with spans of 50 feet, 50 feet, and 43 feet</i> . The new bridge structure will be prestressed AASHTO girder spans with spans of 65 feet, 110 feet, and 65 feet, on drilled-shaft bents, which will span the railroad right-of-way. Michael Baker developed the final right-of-way plans, designating a detour route, as S.R. 4 was closed during construction.
10/17 - 07/22	U.S. 49 Florence to Scales Construction Engineering and Inspection, Rankin County, MS. Confidential Client. Technical Manager. Technical Manager. Responsible for the management of Phase C services. This includes review of all submittals from the contractor and answering all RFIs from the contractor. This also includes attending all meetings with the contractor. Michael Baker provided engineering services, including field surveys, preliminary through final design, construction phase services, and public relations support, for the construction of U.S. 49 from Florence to the Scales Area. Working as an extension of client staff, Michael Baker provided construction management, Phase C Design (RFI/submittals), utility coordination, scheduling review (Primavera P6), material testing, erosion control, surveying, traffic control, and public relations support, for the construction of U.S. 49 from Florence to the Scale Area.
04/97 - 12/02	Cowan-Lorraine Road Extension, Gulfport, Harrison County, MS. MDOT. Project Manager. Responsible for the design of a new 4-lane route extending from I-10 to SR 67 (8 miles). Work included complete field survey, roadway and bridge design including both prestressed concrete beam spans and <i>a 492-feet long 3-span continuous steel plate girder high rise bridge</i> . The roadway included a diamond interchange at S.R. 67. There were two hydraulic crossings, one of which was a major crossing of the Biloxi River where navigational clearances were required. Bridges were also required for the grade crossing of the diamond interchange. Michael Baker provided complete environmental services in connection with this 8-mile project; a new 4-lane divided highway all on new location. Michael Baker also provided complete engineering services for the design of 4-laning eight miles of Cowan-Lorraine Road Extension in Harrison County.
07/98 - 12/04	U.S. 84 Bypass, 4-Lane Project - Location and Environmental Study, EA/FONSI, Collins, Covington County, MS. MDOT. Project Manager. Responsible for the design of five miles of 4-lane roadway bypassing Collins with an interchange with US 49 and eight prestressed AASHTO bridges including a hydraulic crossing <i>and railroad crossing</i> . Michael Baker provided complete engineering services for the design and construction of a four-lane bypass (approximately 4 miles long) around the City of Collins, MS for US 84.
03/95 - 06/96	U.S. Highway 49W Improvements, Yazoo County Line to Silver City, Humphreys County, MS. MDOT. Project Manager. Managed the design of a new 4-lane route (U.S. 49W). Work included complete field surveys, mapping, centerline soil profile, and complete roadway and bridge design for four lane access control facility. Michael Baker provided complete engineering services for upgrading approximately 9 miles of four-lane U.S. Highway 49W in Humphreys County, Mississippi. Project included four bridge sites.
09/19 - 03/21	S.R. 9 Bridge Replacements, Calhoun County, MS. MDOT. Technical Manager. Responsible for contract administration and project oversight. Michael Baker provided engineering and design services for final bridge construction plans for four bridge replacements: Bridge No. 35.5 over Shutispear Creek, Bridge No. 40.7 over Yalobusha River Relief, Bridge No. 40.9 over Yalobusha River, and Bridge No. 41.2 over Yalobusha River Relief on S.R.9.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	J. Brooks Miller, Jr., PE, PTOE		Years of relevant experience with this employer	27
Title	Surface Transportation Manager		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		MS / 1998 / Civil Engineering, Mississippi State University; BS / 1998 / Civil Engineering, Mississippi State University		
Active registration number / state / expiration date		PE No. 34472 / Louisiana / exp. 09/30/27; PE No. 15573 / MS / exp. 12/31/26; PTOE No. 3774 / exp. 11/21/26; Traffic Engineering Process & Report Modules 1-3 / No Expiration Date		
Year registered	2002 (MS); 2009 (LA)	Discipline	Civil	
Contract role(s) / brief description of responsibilities		MPR 8; Roadway Design & Traffic Engineering Support		
Brooks brings more than 27 years of experience in designing and managing roadway and traffic design projects. He has gained valuable planning, roadway and traffic related experience over the last several years working on numerous DOT projects. He has served as project manager on numerous high-profile highway design and rehabilitation projects involving design coordination, plan development, signing and pavement marking details development, traffic signal design, community outreach, contractor coordination and issue resolution, and intricate MOT and construction phasing design.			✓ Meets MPR 8: LA Civil PE with 25+ years of roadway design experience, including numerous urban projects ✓ Combined roadway and traffic engineering expertise ✓ MOT & Roadway Manager for ALDOT's I-10 Mobile River Bridge and Bayway Project	
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
11/22 - Ongoing		Owner's Project Manager for I-10 Mobile River Bridge and Bayway Project. Alabama DOT. MOT and Roadway Manager. Michael Baker is serving as the owner's representative for the Mobile River Bridge and Bayway Project. This is to provide support services to ALDOT to ensure compliance of the Design-Builder's design, construction, contract documents, construction engineering and inspection, and testing.		
05/06 - 02/11		Reconstruction of I-55 from North of Old Agency Road to South of S.R. 463, Madison County, MS. MDOT. Civil Engineer. Responsibilities included roadway design, plan/profile sheets, form grades, asphalt pavement, pavement marking details, permanent signing details, and earthwork quantities. Michael Baker provided engineering services for the reconstruction of three miles of I-55 from Old Agency Road to S.R. 463. The reconstruction created a split-diamond interchange with frontage roads and several bridges and retaining walls. A new four-lane boulevard was constructed as the southern leg of the interchange, and an existing two-lane road was reconstructed into a four-lane boulevard as the northern leg. Additional bridges and retaining walls were also constructed along these roads. Michael Baker provided field surveys, digital orthophotography mapping, preliminary and final roadway, bridge, and retaining wall design; hydraulics and hydrology; maps and deeds; signalization, intelligent transportation system, and lighting design; construction phase services; and quality control/quality assurance.		
01/13 - 07/14		U.S. Highway 49 Improvements between Florence and the Scales Area, Rankin County, MS. MDOT. Technical Manager. Responsible for traffic signal design, ITS, and sign and pavement marking. Michael Baker is providing engineering services for roadway and bridge construction on U.S. 49 between Florence and the Scale Area just south of I-20. Michael Baker's services include the development of detailed design plans for bridges and roadway, including lighting, traffic control, signing, signalization, and intelligent transportation systems.		
05/19 - 09/19		SR-6 (US-82) Widening and Additional Lanes from SR-14 to US-31 in Prattville, AL. Alabama DOT. Project Manager. Responsible for roadway and drainage design for Final Construction Plans to the client for a 3-mile highway widening project on US-82. Project included the replacement of 2 bridges. A hydraulic bridge over Autauga Creek and a second bridge over a Norfolk Southern Railroad line. The project also included the design for asphalt paving with a concrete paving alternate.		
08/06 - 06/08		Jackson Mobility Study Needs Analysis, Hinds, Rankin and Madison Counties, MS. MDOT. Civil Engineer. Responsibilities included alignment studies, traffic studies, and environmental impact analysis of each concept key corridors in the Jackson Mobility Study. The project consisted of evaluating arterial through corridors (and other arterial streets) in the greater Jackson, MS area (Hinds, Rankin and Madison Counties). Predicted long range highway capacity problems were identified. A strategy and financial plan was developed to address many of the concepts.		



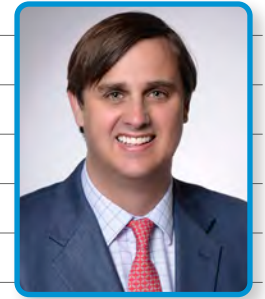


02/10 - 03/14	I-15 Corridor Expansion, Utah County, UT. Utah DOT. Civil Engineer. Served as the Maintenance of Traffic Manager from February 2011 to project completion. Responsibilities include providing maintenance of traffic (MOT) and construction phasing design. Coordinates and resolves traffic issues with owners, contractors and local agency stakeholders. Responsible for submitting Requests and Notices of Closures with UDOT, conducting Technical Workgroup meetings, and handling MOT design changes during construction. Served as the Maintenance of Traffic (MOT) Design Lead from project startup to February 2011. Provided the maintenance of traffic and construction phasing design for the four-mile segment of I-15, including three full interchanges. Michael Baker provided design services for a four-mile segment of the I-15 Corridor Expansion project, the largest road construction project in Utah history. Michael Baker's services included the design of three full interchanges, highway design, structural design, accelerated bridge construction design, design management, maintenance and protection of traffic management, drainage design, and construction phasing.
05/07 - 08/12	I-269 from East of I-55 to North of S.R. 305, DeSoto County, MS. MDOT. Project Manager. Responsible for the project management, budget setup, plan design and detail, quantity calculations, QC/QA, and preliminary and final submittal of roadway design and signal plans. Michael Baker provided engineering services for I-269 from east of I-55 to north of S.R. 305. Michael Baker's services included detailed mapping from aerial photography, field surveys, traffic analysis, the preparation of final right-of-way plans, and preparation of final construction plans.
09/13 - 08/16	SR 15 and Lamey Bridge Road Roundabout, Harrison County, MS. MDOT. Project Manager. Responsibilities include project management, budget setup, roadway plan design and detail, QC/QA, and preliminary and final submittal of Phase A Final Right-of-Way plans. Michael Baker provided engineering and environmental services for a proposed roundabout at the intersection of SR 15 and Lamey Bridge Road. Michael Baker's services included a Phase I archaeological survey, a categorical exclusion, a traffic analysis and impact study, and development of Phase A final right-of-way plans.
07/15 - 08/19	SR 304 and McIngvale Road Interchange Environmental Assessment and Phase A Right-of-Way Plans, DeSoto County, MS. MDOT. Project Manager. Responsible for project oversight. Michael Baker is performing an environmental assessment and preparing Phase A right-of-way plans for a proposed interchange at SR 304 and McIngvale Road. Michael Baker's services include data collection and analysis, traffic impact analyses, alternatives analysis, preparation of preliminary and final right-of-way plans, public involvement, and preparation of environmental assessment documentation.
12/12 - 12/13	U.S. 61 at Eagle Nest Intersection Improvements, Coahoma County, MS. MDOT. Civil Engineer. Responsible for roadway and drainage design and submitting final Right-of-Way plans to the client. Michael Baker developed Phase A: final right-of-way plans for improvements at the intersection of U.S. 61 with Eagle Nest Road in Coahoma County. Eagles Nest Road will be a channelized intersection and realigned to intersect at, or close to, a 90-degree angle to U.S. 61. Michael Baker provided all field survey requirements for the project, including a property map.
10/08 - 01/09	Contra-Flow Analysis for I-55 and I-59, Lincoln & Pearl River Counties, MS. MDOT. Project Manager. Responsible for the project management, budget setup, plan design and detail, quantity calculations, QC/QA, and submittal of a traffic study involving the different methods of Contra-Flow being used in Mississippi for hurricane evacuation. Michael Baker performed an analysis of the contra-flow lane alternatives for both Interstate 55 (I-55) and Interstate 59 (I-59). The analysis included brief research of appropriate analysis methodology/software, analysis using HCS+ software, along with the Highway Capacity Manual (HCM) methodologies, to determine capacity, queue length, and delay times. Synchro7 software was used for simulation purposes.
07/22 - Ongoing	SR 35 Widening and Additional Lanes from CR-62 to CR-124 through the Town of Section, Jackson County, AL. Alabama DOT. Project Manager. Michael Baker provided engineering services to widen and add lanes to SR 35 through the Town and Section. Michael Baker's services included the preparation of right-of-way plans, stormwater design, floodplain studies, erosion and sediment control plans, final design, cost estimates, and traffic control plans.
08/18 - Ongoing	I-65 Butler County NB/SB Rest Area Replacements, Greenville, AL. Alabama DOT. Transportation Engineer. Responsible for technical management. Michael Baker has been awarded professional design services contract to support the full replacement of the north and south bound Rest Areas at I-65 at Greenville/Butler County. The project will include design and documents for closure and demolition of existing sites and buildings. Roadwork and parking lots require expansion but will be evaluated for the most appropriate balance between full replacement and overlay of existing surfaces. Utilities will be demolished to an extent to best minimize maintenance-related concerns. Buildings developed under the client's prototype design phase will be located on the site to best accommodate traffic flow, pedestrians, and maintenance access.
08/18 - Ongoing	Bush Lane and Carol Plantation Road Resurfacing, Restoration, and Rehabilitation, Mobile, AL. Mobile County Engineering Department. Civil Engineer. Responsible for the QC and assisted in the design and development of roadway plans to reclaim the existing paved road (RRR) on Bush Lane and the paving of a portion of the shoulder and resurfacing the paved road on Carol Plantation Road.

16. Staff Experience:

Firm employed by		Vectura Consulting Services, LLC	
Name	Laurence Lambert, PE, PTOE, PTP		Years of relevant experience with this employer
Title	Principal		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		MBA / 2010 / Business Administration; MS / 2006 / Civil Engineering; BS / 1997 / Civil Engineering	
Active registration number / state / expiration date		PE No. 29901 / Louisiana / exp. 03/31/26; PTOE No. 1303 / exp. 02/03/28	
Year registered	2001	Discipline	Civil
Contract role(s) / brief description of responsibilities		MPR 9; Traffic Engineering Lead	
Laurence co-founded Vectura in 2015 and has performed traffic services ranging from transit facility location studies to corridor studies that focus on complete street improvements. He also performed intersection / corridor studies for some of the most complicated corridors in the state of Louisiana using HCM and microsimulation tools to tackle these projects. Laurence also developed transportation components of several city, parish and regional comprehensive master plans. He currently serves as the Chair on the East Baton Rouge Complete Street Citizen Advisory Committee and the Board of Directors for the Capital Area Transit System (CATS). In addition, Laurence has taught a transportation engineering course in the Civil Engineering department at the University of New Orleans as an adjunct instructor.			✓ Meets MPR 9: LA PE and PTOE with 20+ years of experience developing traffic forecasting, capacity analyses, and traffic simulations ✓ Extensive traffic engineering experience in Shreveport ✓ Familiar with preparing Level 2 Transportation Management Plans
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
01/23 – 02/24	H.011504 Alexandria ITS Phase 2. Project Manager. Responsible for overseeing preparation of a System Engineering Analysis Report, Engineering Opinion of Probably Construction Cost and Level 2 Transportation Management Plan .		
06/23 – Ongoing	H.011507.1 – Monroe Phase 3 SEA, Ouachita Parish. Senior Traffic Engineer. Performed the Constraints and Device Location Analysis.		
03/10 - 11/11	S.P. No. 700-09-0171 Stage 0 and 1 Study I-49 Inner City Connector, Shreveport, LA. Project Manager. This 3.5-mile route will connect existing I-49 / I-20 interchange to the proposed I-49 / I-220 interchange. After completing the Stage 0, Laurence was the project manager for the traffic analyses for the EA phase. The total traffic analyses effort included over 30 TransCAD Models, 20 interchanges and 70 intersections. Analyses included signalized and unsignalized intersections, basic freeway segments, freeway merge / diverge segments and freeway weaving segments at the studied intersections and interchanges. This project included performing both Interchange Modifications Reports (IMRs) and Interchange Justification Reports (IJRs).		
08/05 – 10/06	Shreveport/Bossier City ITS/Bert Kouns Industrial Loop, Shreveport, LA. Project Manager. In responsible charge of the design for ITS equipment on Louisiana 526 (Bert Kouns Industrial Loop) in Shreveport. The Project included approximately 10 closed circuit television cameras and 16 signalized intersection upgrades. Reviewed systems engineering analysis, plan for communications diagrams, fiber optic allocation diagrams, fiber optic termination diagrams, telecommunication facilities, power services, wireless transmitters and receivers, related conduit and end equipment, general notes, special details, technical specifications, and terrain analyses.		
06/09 – 02/10	SPN 737-94-0030 Shreveport ITS (Near Term 3A), Shreveport, LA. Project Manager. In responsible charge of the design of the ITS equipment on a 22-mile stretch of I-220 in Shreveport, including approximately 10 closed circuit television cameras, 4 dynamic message signs, 2 dynamic curve-warning signs and 40 radar vehicle detectors. Project included plan preparation of communications diagrams, fiber optic allocation diagrams, fiber optic termination diagrams, telecommunication facilities, power services, wireless transmitters and receivers, related conduit and end equipment, general notes, special details, technical specifications and terrain analyses. As PM, Laurence was involved in every aspect of this process.		
03/21 – 03/22	H.014513.1 Lafayette Regional ITS Architecture Update. Senior Traffic Engineer. Completed an ITS System Inventory, identified all existing and future agreements between stakeholder organizations participating in the ITS operations in the Lafayette region, and updated the strategy for maintaining the regional ITS architecture.		





09/16 - 04/17	H.004957.5 I-12 To Bush - LA 3241 (I-12 - LA 36) Corridor Study, St. Tammany Parish, LA. Lead Traffic Engineer. Led a DOTD traffic study for the new LA 3241 alignment with the purpose of obtaining both existing and projected future traffic variables in accordance with standard operating procedures typically performed in these types of analyses. Laurence worked closely with the NORPC and District 62 to develop design year volumes using data the TransCAD model. The traffic study examined concepts that improved the safety and efficiency of the roadway consistent with the latest DOTD policies related to access management. Laurence, along with Brin, collected 7-day, 24-hour counts w/ classification on mainlines, turning movement counts for morning and evening peak periods and speed data for mainlines. Laurence also developed a VISSIM traffic simulation model of the preferred alternative.
03/06 - 10/06	New Orleans Regional Transportation Management Center SEA. Project Manager. Led the ITS Design Team that handled the New Orleans Regional TMC project. Provided the Systems Engineering Analysis (SEA) for the operations of the new TMC, which included a conceptual layout of the RTMC data, audio / video, personal computers, and computer equipment including wiring.
04/18 - 12/21	H.010960.5 LA 30 Roundabouts at Tanger & I-10 Gonzales, Ascension, LA. Traffic QA/QC Engineer. Performed a Quality Control review of the temporary construction and sequence of construction plans. Vectura also provided Quality Control review of signing and striping plans at 30% and 60% plan sets to ensure the roundabouts conformed to the Pavement Markings Details Sheet PM-09 and the MUTCD details on roundabouts.
04/18 - 12/21	H.011909.5-4 Roundabout: US 171 at Boone St. Vernon Parish, LA. Traffic QA/QC Engineer. Provided a Quality Control review of the temporary construction and sequence of construction plans. Vectura also provided Quality Control review of signing and striping plans at 30% and 60% plan sets to ensure the roundabouts conformed to the Pavement Markings Details Sheet PM-09 and the Manual on Uniform Traffic Control Devices (MUTCD) details on roundabouts.
09/18 - 02/19	H.013261.1 I-110 ITS Deployment Systems Engineering Analysis. Project Manager. As a sub-consultant, Laurence was the task leader for the Constraints & Alternatives Analysis as well as the Projects & Procurement Strategy portion of the project. The goal of the project was to deploy Close Circuit Television (CCTV) cameras and one Dynamic Message Sign (DMS) along the I-110 corridor from US 190 to US 61. To communicate with the field devices from the Traffic Management Centers (TMCs), installing fiber optics along the I-110 corridor was recommended. The fiber optics also allow communication to the traffic signals at the interchange ramps along I-110 to the TMC.
03/18 - 06/18	Shreveport Immediate ITS Phase 2b. Lead Traffic Engineer. Served as task leader for Procurement and Alternative Analysis Configuration portions of the Systems Engineering Analysis (SEA) that complied with Code of Federal Regulations (CFR), Title 23, 940.11. The Alternatives Analysis Configuration consisted of analyzing three possible project configurations. The pros and cons of the needed equipment and communication options were documented. This task consisted of a field visit with DOTD staff to verify fiber optic lines, junction boxes and traffic signal controller types. The Procurement task consisted of investigating the methods of procurement for the deployment project where the procurement options for the pros and cons for each method were documented.
07/14 - 01/17	FHWA Intersection & Interchange Geometrics: Innovative Design Considerations for All Users, Multiple States. Traffic Engineer. FHWA funded workshops for state Departments of Transportation that were interested in learning more about innovative intersection & interchange design. Laurence presented either part or all the one-day or two-day workshops that included modules on the overall policy and goals of FHWA for these types of innovations, roundabouts, roundabout interchanges, DLTs, DDIs, J-turns / Superstreets, MUT, Thru-turns, quadrant, and the assessment tools (CAP-X) available to compare the measures of effectiveness of each innovation. Each module includes sections on design, traffic operations, safety and multi-modal accommodation Laurence has presented for the Alabama, Kentucky, Ohio, Oklahoma, Massachusetts, Tennessee, and Texas Departments of Transportation under this contract.

16. Staff Experience:

Firm employed by		Vectura Consulting Services, LLC	
Name	Brin Ferlito, PE, PTOE		Years of relevant experience with this employer
			10
Title	Principal		Years of relevant experience with other employer(s)
			27
Degree(s) / Years / Specialization		BS / 1988 / Civil Engineering	
Active registration number / state / expiration date		PE No. 25383 / Louisiana / exp. 09/30/27; PTOE No. 932 / exp. 09/09/27	
Year registered	1993	Discipline	Civil
Contract role(s) / brief description of responsibilities		MPR 9; Traffic Engineering QA/QC	



Brin co-founded Vectura in 2015 and has focused her career on traffic and transportation engineering. Her professional experience includes the development of regional planning studies, intersection and corridor improvement studies, traffic impact studies, traffic/pedestrian signal equipment design, ITS design and CE&I services for construction projects. She is familiar with Federal Highway Administration (FHWA) and DOTD traffic guidelines, policies and procedures. Her projects have been located in communities throughout Louisiana for both private companies and public agencies.

- ✓ **Meets MPR 9:** LA PE and PTOE with 30+ years of experience developing traffic forecasting, capacity analyses, and traffic simulations
- ✓ Extensive experience providing complex traffic engineering services to DOTD and numerous LPAs across Louisiana

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
07/21 - Ongoing	H.007160 - EBR Computerized Traffic Signal, Phase VB, Baton Rouge, LA. Senior Traffic Engineer. Serving as task leader for Vectura for the Construction Engineering and Inspection of 24 traffic signals. Brin oversaw the review of signal mast arm shop drawings to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Brin and Reece, with the DOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.
07/19 - Ongoing	MOVEBR New Capacity Projects Program Management, Baton Rouge, LA. Lead Traffic Engineer. Responsible for traffic engineering for the entire New Capacity Projects program management team. All traffic engineering scope of services, traffic / speed data collection, traffic design studies, safety studies, and traffic signal design plans are reviewed by Brin. She is in constant communication with the Traffic Engineering staff of DOTD and EBR Traffic Engineering Department. She understands the current requirements for all aspects of traffic engineering projects.
07/19 - Ongoing	H.004791 DOTD Belle Chasse Bridge & Tunnel Replacement PPP, Belle Chasse, LA. Project Manager. Overseeing temporary and permanent traffic signal plans for the intersections of LA 23 at Burmaster St and at Engineers Rd. She based her traffic signal plans on design year volumes that were developed using growth rates from the New Orleans Regional Planning Commission Travel Demand Model. This project is the first ever Public-Private-Partnership performed by Louisiana DOTD.
04/18 - 06/21	H.011909.5-4 Roundabout: US 171 at Boone St., Vernon Parish, LA. Senior Traffic Engineer. Reviewed 60 Percent Preliminary Signing and Striping Plans and developed documented comments based on DOTD Road Design Manual, DOTD Standard Details and MUTCD. She is also the project manager for the design of temporary traffic signal plans that will be implemented during the roundabout construction at the intersection of US 171 at Boone Street in Leesville, LA. She coordinated access management issues using aerials, aged traffic volumes and Synchro Software.
09/20 - 12/21	H.010960.5 LA 30 Roundabouts at Tanger I-10, Ascension Parish, LA. Project Manager. Oversaw the design of temporary traffic signal plans that will be implemented during the roundabout construction along LA 30 in Gonzales, LA. The project involves replacing three existing signalized intersections with multilane roundabouts along LA 30 at I-10 Interchange ramps and at the Tanger Boulevard. Vectura also developed signal timing plans for each phase of the construction to maintain progression along LA 30.
09/17 - 04/18	US 11 at US 190 Bus. (Fremaux Ave.) Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Equipment Design, Slidell, LA. Senior Traffic Engineer. Brin developed a formal traffic study for a proposed crosswalk with pedestrian traffic signal equipment and pedestrian clearance timings based on DOTD requirements. Brin assisted with vehicle and pedestrian data collection, spot speed study, analyzed 3-year intersection crash data and developed signal timing for pedestrians to cross the street. From the design study, a set of Traffic Signal Modification Plans were developed to implement the recommended alternative.

07/18 – 04/19	LA 1 Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Design, Addis, LA. Senior Traffic Engineer. Developed a Pedestrian Crosswalk Study and Traffic Signal Construction Plans for the intersection of LA 1 at LA 990 in Addis, LA. The study was based on DOTD Traffic Engineering Manual Crosswalk Guidelines followed by traffic signal design plans based on DOTD requirements. The study included traffic and pedestrian traffic data collection, a speed study, crash analyses, intersection analyses and progression analyses. The signal plans included pedestrian signal equipment, signal timing parameter calculations, crosswalk striping, signs, DOTD pay items, estimated quantities, and construction cost. Also assisted with the Parish with the DOTD Permit Request for Intersection Control Devices on a State Right of Way.
02/17 – 10/17	Stage 0 Judge Tanner Boulevard at N. Causeway Roundabout Study, St. Tammany Parish, LA. Senior Traffic Engineer. Developed the safety analyses for a Stage 0 Study for 4 intersections in the Mandeville area. The study was based on EDSMs VI.1.1.1 / VI.1.1.5 and DOTD Traffic Engineering Manual Section 20.2. Brin assisted collecting 7-day, 24-hour counts w/ Classification, turning movement counts for peak periods and speed data for mainlines. She developed signal timing in the PTV Vistro software. The signal timings were then used in Sidra to complete the HCM analyses. Brin provided a quality control review of the traffic report.
06/16 – 09/17	H.004490 Stage 0 Roundabout Studies, Lafayette Parish, LA. Senior Traffic Engineer. Developed sections of a Stage 0 Feasibility Study for roundabouts the conformed to DOTD EDSMs and Traffic Engineering Manual Section 20.2 at ten intersections in the Lafayette area. Brin, along with Laurence, collected 7-day, 24-hour counts w/ classification, turning movement counts for AM and PM peak periods and speed data for mainlines. Brin provided a QC review of the Sidra analyses and developed traffic signal timing for 3 intersections for Years 2019 and 2039, AM & PM peak hours and developed a crash analyses as defined in Section 20.2 of TEM. CMF factors were identified for the preferred alternative to predict the number of crashes that could be eliminated. Brin provided a QC review of the final draft.
04/14 – 12/14	H.002301 Signal Design for N. Sherwood Forest Dr. Widening Project, Baton Rouge, LA. Project Engineer. In responsible charge for data collection and design for three signalized intersections as part of a road widening project as per EBR DPW and DOTD requirements. Ms. Ferlito developed the traffic signal equipment, signal timing and communication construction plans, special provision specifications, quantities, and cost estimate. She also performed tasks to develop the striping plans and sequence of construction plans which included temporary signal equipment placement due to lane shifts during construction.
07/12 – 03/14	EBR 03-TS-CI-0026 CE&I for EBR Traffic Signal Systems Jefferson Highway Construction, Baton Rouge, LA. Project Resident Engineer. On behalf of EBR, performed CE&I services for the construction of 11 traffic signals. She maintained records of the contractor's daily operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted monthly progress meetings, recorded daily installed quantities, developed change orders and monthly contractor pay estimates. She also coordinated with DOTD ITS division for fiber splicing into interstate I-12 fiber backbone and ATM / EOC building. She processed all monthly tasks in EBR formats as well as all items on the EBR project closeout checklist.
07/08 – 09/09	SPN 013-05-0043 CE&I for EBR Traffic Signal Systems Phase IV Construction, Baton Rouge, LA. Project Resident Engineer. On behalf of DOTD and EBR, performed CE&I services for the construction of 21 traffic signals. She developed the project Sample Plan, maintained records of the contractor's daily operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted monthly progress meetings, recorded daily installed quantities, coordinated concrete sampling for DOTD Materials Lab, developed change orders and monthly contractor pay estimates. She also coordinated with DOTD ITS division for fiber splicing into Airline Highway fiber backbone and ATM / EOC building. She processed all monthly tasks electronically in DOTD Site Manager and in EBR required formats as well as all items on the DOTD Project Closeout Checklist including the 2059 Report.
09/13 – 04/14	S.P. 700-99-0477 Jefferson Hwy. Signal Design, Baton Rouge, LA. Traffic Engineer. Designed traffic signal plans for 11 intersections along Jefferson Highway between College Drive and the I-12 On Ramp in Baton Rouge. Design included traffic data collection, traffic signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout. Design also included traffic signal synchronization signal timing and pedestrian signal timing. She prepared estimated quantities, preliminary and final signal construction plans, and specifications.
03/05 – 11/05	Airline Hwy Widening SPN 700-99-0332, Baton Rouge, LA. Traffic Engineer. Designed 8 traffic signals as part of the Airline Hwy. widening project in Baton Rouge. Her design included traffic data collection, traffic signal equipment, signal synchronization timing, fiber communication, storage length calculations based on queues analyses, special provision specifications, quantities, and cost estimate. This project included fiber design to be the first Baton Rouge project to connect video surveillance images and traffic controller information to the ATM / EOC.
02/03 – 01/04	EBR Traffic Signal Systems Phases IV and V SPN 700-17-0172, Baton Rouge, LA. Project Engineer. Responsible for the design of 66 signalized intersections on eight arterials in Baton Rouge which included traffic data collection, traffic signal equipment, pedestrian crosswalk equipment, emergency vehicle and railroad preemption equipment, fiber interconnect equipment as well as traffic signal synchronization. Brin prepared traffic signal construction plans, estimated quantities, and specifications.

16. Staff Experience:

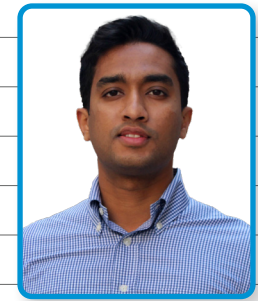
Firm employed by		Michael Baker International, Inc.		
Name	Carla Dietrich, PE, PTOE		Years of relevant experience with this employer	27
Title	Senior Transportation Engineer		Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization			BS / 1997 / Civil and Environmental Engineering, Carnegie Mellon University	
Active registration number / state / expiration date			PE No. 35480 / Louisiana / 09/30/2026; PTOE No. 2468 / 11/24/2026; Traffic Engineering Analysis Process & Report Modules 1-3	
Year registered	2010	Discipline	Civil	
Contract role(s) / brief description of responsibilities			MPR 9; Traffic Engineering Support	
Ms. Dietrich is experienced in traffic engineering and transportation planning studies. She has served as a traffic task manager on various projects including conceptual engineering studies, corridor studies, feasibility studies, interchange justification reports, traffic impact studies, Vehicle Miles Traveled (VMT) assessments, and traffic analysis in support of environmental documents. Ms. Dietrich is knowledgeable in the areas of traffic signalization, safety, complete streets, access management, VMT, bicycle and pedestrian design, and context sensitive solutions. Her technical expertise includes crash analysis, traffic simulation, capacity analysis including roundabouts and coordinated signal systems, queuing analysis, and trip generation analysis.			✓ Meets MPR 9: LA PE and PTOE with 20+ years of experience developing traffic forecasting, capacity analyses, and traffic simulations ✓ Trained in TEPR Modules 1-3 ✓ Experience providing traffic engineering services on multiple DOTD projects	
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
04/03 -04/10		I-69, Section of Independent Utility No. 15, U.S. 171 to I-20, Bossier, Caddo, and DeSoto Parishes, LA. DOTD. Traffic Engineer. Responsible for the Point of Access Studies for the proposed I-69 Interchanges with I-20 and I-49. Studies to address FHWA requirements. Michael Baker conducted a preliminary engineering and environmental study for I-69, Section of Independent Utility 15. Michael Baker's services included project management, environmental investigations, preliminary roadway engineering, geographic information system environmental mapping and analysis, global positioning system survey and digital orthophotography; conceptual bridge design, traffic demand modeling and traffic forecasting, preparation of a corridor preservation memorandum of agreement, preparation of draft and final environmental impact statements (EIS) and record of decision, and stakeholder outreach.		
08/03 - 04/05		U.S. 82 from U.S. 49N to MS 7N Planning/Traffic Study, Greenwood, Leflore County, MS. MDOT. Traffic Engineer. Responsible for traffic analysis of the U.S. 82 corridor from U.S. 82 Bypass to U.S. 49. Analysis included the evaluation of multiple alternatives to address projected deficiencies. Michael Baker provided professional and engineering services performing a traffic study of possible alternatives for the reconstruction of the existing U.S. Highway 82 Bypass in Greenwood from U.S. 49Nto MS 7N.		
10/17 - 09/19		New Orleans Rail Gateway Environmental Impact Statement, Jefferson and Orleans Parishes, LA. DOTD. Traffic Engineer. Provided traffic engineering support. Michael Baker is providing environmental and engineering services to develop an environmental impact statement for the New Orleans Rail Gateway, the fourth-largest freight and passenger rail gateway in the United States. Michael Baker's services include project management, review of previous studies, environmental resources investigations, geographic information system development, mapping, rail and roadway travel demand modeling, alternatives analyses, rail and roadway conceptual design, cost estimates, document preparation, stakeholder and agency coordination, and extensive public outreach.		
09/21 - Ongoing		New Orleans Rail Gateway - Avondale PEL Study, Jefferson Parish, LA. DOTD. Traffic Engineer. Provided traffic operations analysis oversight. Michael Baker is providing operations, engineering, and environmental studies and preparing a planning and environmental linkages (PEL) study to evaluate the consolidation, road-over-rail grade separation, or closure of four at-grade highway-rail crossings (Live Oak Boulevard, Willswood Lane, George Street, and Avondale-Garden Road). For the project, Michael Baker is performing project management, solicitation of views, secondary-source environmental resources inventory, geographic information system (GIS) mapping, freight rail operations forecasting and crossing occupancy time analyses, roadway traffic and crash analyses, purpose and need, roadway/bridge conceptual design, cost estimates, alternatives analyses, stakeholder and agency coordination, and public outreach.		



05/20 - Ongoing	New Orleans Rail Gateway - Jefferson Highway Rail Crossing Relocation EA, Jefferson Parish, LA. DOTD. Traffic Engineer. Provided traffic engineering QC support. Michael Baker is providing operations, engineering and environmental studies and preparing an environmental assessment (EA) for improvements to two at-grade highway-rail crossings along Jefferson Highway (US 90) in Jefferson Parish, between the Ochsner Health Foundation Hospital and Monticello Avenue. For the project, Michael Baker is performing solicitation of views (SOV) including Native American government-to-government coordination through FRA, environmental resources investigations, geographic information system (GIS) mapping, freight rail operations forecasting and crossing occupancy time analyses, roadway traffic and crash analyses, rail and roadway/bridge conceptual design, cost estimates, alternatives analyses, stakeholder and agency coordination, and public outreach.
07/02 - 12/02	North-South Expressway, Location and Environmental Study, EIS/ROD, Caddo Parish, LA. DOTD. Civil Associate. Responsible for preparing Point of Access Study for the proposed North-South Expressway Interchange with I-220 that included traffic analysis and development of conceptual signing plan. Study addressed FHWA requirements. Michael Baker conducted a preliminary engineering and environmental study of the North-South Expressway in Caddo Parish, Louisiana for the DOTD. The proposed highway will be an interstate facility on new location, approximately 56 kilometers (35 miles) in length, between I-220 in Shreveport, Louisiana, and the Arkansas state line.
05/08 - 05/10	East-West Corridor Environmental Assessment, Bossier Parish, LA. DOTD. Traffic Engineer. Responsible for the traffic analysis associated with the Environmental Assessment and Purpose and Need Statement. Coordinated traffic data collection program and oversaw traffic analysis of Existing, No-Build, and Build conditions for two alternative alignments. Prepared traffic technical report. Michael Baker provided preliminary engineering and National Environmental Policy Act and environmental documentation for a new eight-mile, two-lane urban collector with right-of-way clearance for possible expansion to a four-lane boulevard. The purpose of the new facility was to alleviate congestion and reduce travel delays along the other roadways that link the rapidly growing residential areas of Bossier Parish with the Shreveport and Bossier City employment centers.
09/13 - 09/13	FAY-435 Preliminary Engineering, Alternatives Evaluation, and Final Design, Fayette County, OH. Ohio DOT, Central Office. Traffic Engineer. Provided traffic engineering support and quality control. Michael Baker provided engineering and design services for the FAY-435 Corridor, which has an interchange with I-71 and serves as the linkage to FAY-35, a major east-west limited access roadway in central Ohio. The corridor experiences heavy congestion due to the high truck volumes and presence of multiple commercial driveways. Drainage issues exist, and the pavement is in poor condition due to the traffic. Michael Baker performed a preliminary engineering and alternatives evaluation that included traffic analysis, safety analysis, drainage analysis, and pavement studies. Michael Baker developed final plans for stormwater systems, pavement, signing, striping, intersections, bridge replacement, and maintenance of traffic.
05/10 - 02/12	Donora-Webster Bridge Replacement Alternatives Analysis, Borough of Donora, PA. Pennsylvania DOT, Central Office. Transportation Engineer. Task manager for the traffic engineering component of the Donora-Webster Study. Responsible for overseeing data collection program, highway capacity analysis, and safety analysis. Michael Baker provided environmental and preliminary engineering services to analyze alternatives for the replacement of the historic Donora-Webster Bridge. Services included project management; water resources, threatened and endangered species, and historic and archaeological resources investigations; a Level 2 categorical exclusion evaluation and a U.S. Coast Guard environmental assessment; traffic analyses; engineering alternatives development, impact analysis, and preferred alternative identification; and the planning and implementation of a proactive public involvement program.
07/15 - 03/16	S.R. 304 and McIngvale Road Interchange Environmental Assessment and Phase A Right-of-Way Plans, DeSoto County, Mississippi. MDOT. Traffic Engineer. Responsible for managing traffic analysis task including capacity analysis, queue analysis, and documentation of results. Michael Baker performed an environmental assessment and prepared Phase A right-of-way plans for a proposed interchange at S.R. 304 and McIngvale Road. Michael Baker's services included data collection and analysis, traffic impact analyses, alternatives analysis, preparation of preliminary and final right-of-way plans, public involvement, and preparation of environmental assessment documentation.
10/09 - 04/10	West Ohio Street Bridge Replacement, Pittsburgh, PA. City of Pittsburgh. Traffic Engineer. Responsible for management of traffic engineering task. Michael Baker provided engineering services for the replacement of the West Ohio Street Bridge. Michael Baker's services included site investigation, preliminary bridge and roadway design, alternatives analysis, preparation of environmental and Section 4(f) analysis and documents, Section 106 historic resource analysis and documents, traffic studies, utilities coordination, public involvement, and final design.

16. Staff Experience:

Firm employed by	CDM Smith Inc.		
Name	Sai Sirandas, PE		Years of relevant experience with this employer
			1
Title	Transportation Modeler and Planner		Years of relevant experience with other employer(s)
			13
Degree(s) / Years / Specialization	MS / 2012 / Transportation Engineering; BS / 2010 / Civil Engineering		
Active registration number / state / expiration date	PE No. 53244 / WA / exp. 02/07/2027		
Year registered	2015	Discipline	Civil
Contract role(s) / brief description of responsibilities	MPR 10; Mesoscopic Modeling Lead		



Sai has experience in transportation planning, travel behavior forecasting, data analysis, and traffic operations. He specializes in developing and applying multi-resolution modeling frameworks spanning macroscopic travel demand models, mesoscopic and dynamic traffic assignment (DTA) models, and microscopic simulation. Sai has developed mesoscopic models for the following projects:

Berryessa Multimodal Transportation Improvement Plan, San Jose, CA

City of San Jose: Wilson Tam | 408-975-3295 | wilson.tam@sanjoseca.gov

I-80 Design Alternatives Assessment

Bay Area Metropolitan Transportation Commission: Kevin Chen | 415-778-5338 | kchen@bayareametro.gov

Better Market Street Environmental Impact Report, San Francisco, CA

City of San Francisco: Wade Wietgreffe | Wade.Wietgreffe@sfmta.com

State Route 239 Project Approval and Environmental Documentation

Stephanie Hu — Director, Projects | stephanieh@ccta.ca.gov

South San Francisco General Plan, San Francisco, CA

City of South San Francisco: Billy Gross, 650-877-8535 | Billy.Gross@ssf.net

- ✓ **Meets MPR 10:** Professional Engineer who has developed 5 mesoscopic traffic models
- ✓ Mesoscopic & DTA modeling specialist with Bridge traffic & toll forecasting experience for DOTD
- ✓ Traffic Engineer applying multi-resolution modeling to refine project design

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage,” “designed girders,” “designed intersection,” etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
06/24 - 08/25	Mississippi River Bridge South GBR: LA 1 to LA 30 Connector Level 2 Toll Study, Baton Rouge, LA. DOTD. Transportation Modeling Lead. Sai served as Transportation Modeling Lead for a toll study evaluating a proposed new Mississippi River Bridge (MRB) connecting LA 1 to LA 30 in the Baton Rouge region, leading traffic forecasting and toll revenue analysis for three alignments. He refined and applied the project-specific MRB travel demand model and toll diversion model based on the Capital Region Planning Commission (CRPC) regional model to produce long-range transaction and revenue forecasts, and conducted sensitivity testing to support planning-level evaluation of tolling assumptions, and economic and transportation factors. Reference: Kara Swanson (Prime Consultant), Kara.Swanson@oneatlas.com
07/24 - 10/25	Regional Model Update, South Carolina. Appalachian Council of Governments (ACOG). Transportation Modeling Lead. Sai coordinated with SCDOT and MPO partners to update the ACOG four-step regional travel demand model, a key tool for long-range transportation planning and programming decisions in the region. He guided updates to model inputs and parameters, calibration and validation procedures, migration to a newer TransCAD version, and the development of a streamlined, user-friendly interface. The update also included an automated land-use importer to simplify land use updates and scenario testing for agency users. Reference: Siddiqui, Chowdhury K. A., SiddiquiCK@scdot.org

05/21 – 05/23	I-80 Design Alternatives Assessment (DAA), Bay Area, CA. <i>Bay Area Metropolitan Transportation Commission (MTC).</i> Transportation Modeling Lead. Sai led the transportation modeling and traffic analysis work, collaborating with a multidisciplinary team, to identify and evaluate design alternatives for the I-80 corridor in the San Francisco Bay Area. The alternatives spanned nine corridor-wide strategies aiming to reduce overall congestion in the corridor, improve transit and carpool operations, and serve more people in fewer vehicles. He led the development of a Dynamic Traffic Assignment (DTA) model to evaluate strategies such as HOV Lane Access Restrictions, Hours of Operation, and Express Lanes Conversions. Sai leveraged his experience with MTC's Activity-Based Model (Travel Model One) to develop travel demand and mode-shift information for the DAA strategies, and prepared traffic information for the revenue analysis. He also led the technical documentation and coordinated meetings with MTC, Alameda CTC, and CCTA. Following up on the DAA study, Sai successfully led the traffic components of a winning proposal to deliver engineering services for advancing the HOV Lane Access Restrictions alternative through the Caltrans project development and environmental study phases. Reference: Henry Hammel, hhammel@bayareametro.gov
10/21 – 12/23	State Route 239 Project Approval and Environmental Documentation (PA/ED), Multiple Counties, CA. <i>Contra Costa County.</i> Transportation Modeling Lead. Sai served as a technical lead on the Project Approval and Environmental Document for the State Route 239 Project in eastern Contra Costa County, eastern Alameda County, and western San Joaquin County. This project will provide a new four-lane highway from State Route 4 at Marsh Creek Road to Interstate 580/205 and will ultimately improve the area's transportation network by providing an alternate route for the heavy commute traffic that currently impacts the community of Byron and improving access to the local airport. Sai led the development and calibration of a large mesoscopic dynamic traffic assignment (DTA) model (using Visum software) that can capture the traffic re-routing effects of the proposed new SR 239 facility across a large subregional area. This model has helped the team develop project alternatives and refine the proposed geometry of the SR 239 project. Reference: Eddie Barrios, eddie@barriostc.com and Stephanie Hu, stephanieh@ccta.ca.gov
07/20 – 01/23	San Francisco Housing Element 2022 Update EIR, San Francisco, CA. <i>San Francisco Municipal Transportation.</i> Transportation Modeling Lead. Sai led the transportation modeling team on San Francisco's Housing Element 2022 Update EIR. This project included an evaluation of the potential effects of adding 150,000 to 220,000 new homes to the City's transportation system. The modeling analysis informed the evaluation of vehicle miles traveled, transit service, hazards, accessibility, and emergency vehicle access. Sai led the development of a mesoscopic scale Visum transportation model to evaluate the impacts of various project alternatives. The Visum model also served as a GIS-based data repository and visualization tool for the various land-use and transportation components of the study. Sai also developed an approach using the Visum model to enhance and supplement the transit results produced by SFCTA's SF-CHAMP travel demand model, specifically an approach to estimate realistic transit travel times and delays. This approach allowed the City to understand the potential impacts to seven representative transit corridors for five different land use alternatives across several horizon years, helping provide greater clarity about the relationship between land use growth and the ability for the City's transit system to serve these new residents. Reference: Wade Wietgreffe, Wade.Wietgreffe@sfmta.com

16. Staff Experience:

Firm employed by		HDR Engineering, Inc.	
Name	Aamani Parthasarthy, PE		Years of relevant experience with this employer
Title	Assistant Project Manager Traffic Engineer		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		MS / 2023 / Advanced Data Analytics; MS / 2019 / Transportation Engineering; BS /2015 / Civil Engineering	
Active registration number / state / expiration date		PE No. 146113 / TX / exp. 06/30/26; PTOE No. 5610 / TX	
Year registered	2022	Discipline	Civil
Contract role(s) / brief description of responsibilities		MPR 10; Mesoscopic Modeling Support	



Aamani has 8 years of experience in travel demand modeling, microsimulation modeling, mesoscopic modeling, traffic operations analysis, and traffic forecasting. She has served as an analyst on several traffic engineering and travel demand modeling studies that provide solutions to improve mobility and safety. Her experience in traffic operational analysis and mesoscopic model development for various corridor studies within Texas enables her to analyze project-specific issues and deliver innovative solutions within the specified schedule and budget. Aamani has developed mesoscopic models for the following projects:

Master Thoroughfare Plan (MTP) and Walsh Ranch Analysis, Fort Worth, TX

City of Fort Worth: Dana Burghdoff | 817-392-1234 | Dana.Burghdoff@fortworthtexas.gov

Tornillo Port of Entry (POE) Study, Tornillo, TX

El Paso Metropolitan Planning Organization (MPO): Salvador Gonzalez-Ayala, PhD | 915-212-0258 | sgonzalez@elpasompo.org

Border Highway Connector Phase 2 Traffic Impact and Improvements Feasibility Study, El Paso, TX

El Paso MPO: Salvador Gonzalez-Ayala, PhD | 915-212-0258 | sgonzalez@elpasompo.org

Northwest Highway (Loop 12) / Bachman Traffic Study, Dallas, TX

TxDOT Dallas District: Stephen Endres | 214-320-4469 | Stephen.Endres@txdot.gov

Reimagine I-10 Downtown, El Paso, TX

TxDOT El Paso District: Sheetal Patel, PE | 915 790-4436 | Sheetal.Patel@txdot.gov

- ✓ **Meets MPR 10:** Professional Engineer who has developed 5 mesoscopic traffic models
- ✓ 7 years of experience developing traffic models

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage,” “designed girders,” “designed intersection,” etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/20 – 11/20	Master Thoroughfare Plan (MTP) and Walsh Ranch Analysis, Fort Worth, TX. City of Fort Worth. Traffic Modeler. The purpose of the MTP update was to overhaul the City’s existing MTP (nearly 1,000 miles of arterial roadways) in support of a plan that “provides a complete and connected, context-sensitive transportation system for users that supports mobility, healthy living, and economic benefit,” with goals balancing mobility, safety, and opportunity. Aamani assisted in estimating trips generated using the ITE Trip Generation Manual and in applying trip distribution and trip assignment to categorized zones within the study area surrounding Walsh Ranch, roughly bounded by I-20 on the north, Chapin School Road on the east, FM 1187 on the west, and US-377 on the southeast. The socio-economic data modifications were reflected in the Vistro model – a mesoscopic model to identify future traffic projections and evaluate the adequacy of the MTP network to accommodate build-out traffic, based on daily capacities and V/C ratios. Aamani developed the mesoscopic model and assisted in identifying the impact of land-use growth, including residential and commercial development, and developed standard cross-sections for various street types in accordance with city guidelines. Reference: Dana Burghdoff, Dana.Burghdoff@fortworthtexas.gov, 817-392-1234

01/25 – Ongoing	Tornillo Port of Entry (POE) Study, Tornillo, TX. <i>Camino Real Regional Mobility Authority. Traffic Modeler.</i> Aamani reviewed the ITDM modeling files received from the MPO, which include the El Paso RMS and Mexico-Juarez models. Aamani, in coordination with the MPO, received training in model application and scenario development. For the study, the ITDM and Juarez models do not include future-year models, and she, in coordination with MPO, developed a methodology for using existing models and developing future base-scenario models. The future build scenarios include retaining/closing BOTA POE; assessing the impact at TG POE; identifying and coding improvements at TG POE; and assessing their impact on crossing choices between POEs. The improvements in TG POE translate into reduced delays in ITDM inputs. Aamani developed a mesoscopic traffic model to obtain this metric. Reference: Dr. Salvador Gonzalez-Ayala, PhD., SGONZALEZ@ELPASOMPO.ORG, 915-212-0258
09/25 - Ongoing	Border Highway Connector Phase 2 Traffic Impact and Improvements Feasibility Study, El Paso, TX. <i>El Paso Metropolitan Planning Organization (MPO). Traffic Support.</i> The scope of work is to assess and prioritize transportation improvements along the BHC2 corridor to support freight mobility, binational coordination, regional economic development, and safer travel conditions across the Texas-New Mexico-Chihuahua border region. The project involved integrating three travel demand models: the International travel demand model, RMS, and Juarez TDM, along with a detailed microsimulation. Using TransModeler, Aamani developed a mesoscopic model to evaluate corridor/intersection hot spots, border crossing delays, and multimodal operational issues. Aamani validated base model scenarios, modeled, and extracted key MOEs from micro-simulation models. Reference: Dr. Salvador Gonzalez-Ayala, PhD., SGONZALEZ@ELPASOMPO.ORG, 915-212-0258
02/23 – 08/24	Northwest Highway (Loop 12) / Bachman Traffic Study, Dallas, TX. <i>TxDOT Dallas. Traffic Support.</i> This project is a corridor feasibility study for Northwest Highway near Dallas Love Field Airport. Approximately three miles in length, this project evaluates multiple alternatives to increase capacity along this congested corridor between Inwood Road and Hillcrest Avenue. Aamani developed a mesoscopic model to determine traffic diversions using VISTRO and performed traffic analysis using Synchro and Vissim for various build conditions to address traffic congestion, parking, and infrastructure issues identified along the corridor. She analyzed various alternatives, such as diverging diamond interchanges (DDIs), dual leftturns, U-turns, and road diets, in Vissim and calculated network performance for each alternative. Reference: Stephen Endres, Stephen.Endres@txdot.gov, 214 320-4469
09/24 - Ongoing	Reimagine I-10 Downtown, El Paso, TX. <i>TxDOT El Paso. Traffic Engineer.</i> The scope of this project extends from Executive Center Blvd to SL 478/Copia St, including downtown El Paso. The proposed improvements for this project included the reconstruction of the mainlanes, retaining walls, bridges, ramps, and cross streets. The proposed improvements will enhance access, improve safety, reduce congestion, improve mobility, and meet the region's future needs. Aamani developed a mesoscopic model and performed traffic analysis efforts for this project. The effort for traffic analysis included existing condition operations analysis, traffic forecasting, historical and predictive crash analysis, Vissim and Synchro analyses for the opening year and design years under no-build and build conditions for the corridor. To model downtown routing, VISSIM analysis included Dynamic traffic assignment and VISTRO (a mesoscopic traffic software) to derive routing. The analysis provides support in the alternative selection and provides analysis for the Interstate Access Justification Report. Reference: Sheetal Patel, P.E, Sheetal.Patel@txdot.gov, 915 790-4436

16. Staff Experience:

Firm employed by		Terracon Consultants, Inc.	
Name	Lynne Roussel, PE		Years of relevant experience with this employer
Title	Principal Contract Manager		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		MS / 2005 / Geotechnical Engineering; BS / 2003 / Civil Engineering	
Active registration number / state / expiration date		PE No. 35152 / Louisiana / 03/31/2028	
Year registered	2009	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		MPR 6; Geotechnical Lead	
Ms. Roussel has managed geotechnical projects in Louisiana for 21 years. She has also managed several Geotechnical ID/IQ contracts for DOTD. She has performed engineering analyses using in-house computer resources and commercial software for settlement analysis, deep foundations analysis, pavement design, slope stability analysis, and lateral loading of deep foundations. She also performed analyses for the USACE for limiting pressure analyses for Horizontal Directional Drilling (HDD) projects, seepage analyses, and Method of Planes slope stability. Her software experience includes PCSTABL6, GEOSLOPE, LPILE, DRIVEN, SHAFT, Shoring Suite, and APILE.			
✓ Meets MPR 6: Over 20 years of experience in the geotechnical design involving Louisiana soils and bridge structures ✓ Contract Manager & Project Reviewer for multiple Geotechnical IDIQ contracts with DOTD			
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
12/20 – Ongoing	IDIQ Contracts for Professional Geotechnical Services Statewide Contract No. 4400019014, Statewide, LA. DOTD. Contract Manager and Project Reviewer. Managed the retainer contract for services to perform geotechnical exploration and engineering. The contract value is \$2.5 Million.		
07/16 – 07/21	Geotechnical Retainer Contract No. 4400006191, LA. DOTD. Contract Manager and Project Reviewer. Managed the retainer contract for services to perform geotechnical exploration and engineering. The contract value is \$4 Million.		
03/25-Ongoing	H.012059 - LA19 - Bridges near Zachary – Zachary, LA, DOTD. Project Reviewer. The project involves replacing existing bridge structures along LA Highway 19 near Zachary, Louisiana, with new slab span bridges and/or box culverts to improve the crossing. Terracon is providing geotechnical engineering services, including subsurface soil exploration, laboratory testing, engineering analysis, and preparation of geotechnical recommendations addressing soil conditions, groundwater, and seismic site classification. Lynne is performing quality review on engineering analyses and reporting.		
01/24-Ongoing	H.015447 – IJA Off-System Bridge Program – Simmesport, LA. DOTD. Project Reviewer and Contract Manager. Terracon is conducting the geotechnical investigation. The scope includes a 122-foot soil boring using flight auger and mud rotary drilling, with soil samples being collected at regular intervals. Laboratory tests will assess moisture content, Atterberg limits, dry unit weight, grain size, and undrained unconsolidated compression. The site was classified as Seismic Site Class D, with surface geology identified as Holocene and Pleistocene alluvial deposits. Terracon will provide recommendations for earthwork, foundations, floor slabs, and pavements based on the findings.		
10/22-02/25	H.003931.5-2 - I-10 - Calcasieu River Bridge Additional Borings – Lake Charles, LA. DOTD. Project Reviewer and Contract Manager. Terracon conducted subsurface exploration and laboratory testing to support the replacement of the I-10 Calcasieu River bridge in Lake Charles, LA. Their work included 37 deep bridge borings—some over water and within a navigable channel—and 39 shallow roadway borings. They later advanced 17 additional borings using marsh buggy and ATV-mounted drill rigs along various segments of the I-10 corridor. Soil samples were collected using standard methods, and groundwater levels were monitored during drilling. In the lab, Terracon performed tests for moisture content, plasticity, particle-size distribution, density, and triaxial compression strength, all in accordance with ASTM and DOTD standards.		
05/18-Ongoing	H.011235.5: I-49 South @ Verot School Road US 90, Lafayette, LA. DOTD. Project Manager. Overseeing the design of the substructure of two bridges and global stability and settlement for several MSE walls to be constructed as part of this design build project. Terracon developed nominal capacity and resistance factors for pile foundations for the bridge substructures and developed driving criteria using WEAP analysis for the proposed pile driving equipment.		





09/08 – 11/08	Interstate 12 Widening, East Baton Rouge and Livingston Parishes, LA. Project Manager. Managed the interstate highway improvement. Terracon performed drilling and laboratory activities for the project. The project consisted of the widening of Interstate 12 to six lanes from O'Neal Lane eastward in both East Baton Rouge and Livingston Parishes. The project needed to be performed under a compressed time schedule of 30 days for DOTD to release a Design-Build procurement package. She worked with the Terracon team to make sure the schedule was met by using multiple drill rigs to complete the field work. The work completed by Terracon has received high marks from the design-build team.
05/18 – 11/20	H.005967: Nelson Road Extension and Bridge, Lake Charles, LA. DOTD. Project Manager. Managed the subsurface evaluation and geotechnical engineering design for the Nelson Road Extension and Bridge Project. Terracon completed the subsurface exploration including water borings in Contraband Bayou and provided 90% design of the substructure for the bridge over Contraband Bayou. Terracon performed settlement analysis for the planned embankment approaches. The scope also included design support for impact dolphins to be constructed in front of the bridge in the Bayou to protect the bridge superstructure from impact of possible runaway ocean-going ships from the nearby Port of Lake Charles facility.
07/23-Ongoing	H.012048 - Castor Creek and Relief Bridges – Tullos, LA. DOTD. Project Reviewer and Contract Manager. Terracon is providing geotechnical services focusing on subsurface soil and groundwater conditions and seismic site classification per IBC standards. The scope included 16 soil borings to depths of 60–110 feet using rotary drilling, with samples collected via Shelby tubes and SPT methods. Groundwater levels were monitored during drilling. Laboratory testing assessed moisture content, plasticity, particle-size distribution, density, and shear strength, following ASTM standards and USCS classification. Results were documented in detailed boring logs and graphs.
09/22-10/25	H.002868 I-49 Frontage Road Bridges PDA Testing – Lafayette, LA. DOTD. Project Reviewer and Contract Manager. Terracon provided geotechnical design of the substructure of two bridges and global stability and settlement analysis for several MSE walls to be constructed as part of this design build project. Terracon developed nominal capacity and resistance factors for pile foundations for the bridge substructures and developed driving criteria using WEAP analysis for the proposed pile driving equipment. Dynamic Pile Testing was performed during construction to verify pile capacities.
06/19 – 3/20	H.004100 I-10 Widening, Baton Rouge, LA, DOTD. Senior Engineer. Supervised the subsurface evaluation and lab testing. All testing was performed in accordance with DOTD sampling and guidelines. The team worked safely around traffic and lane closures on the interstate near College Drive.
10/16 – 01/18	H.002238 Robinson Canal Bridge, Terrebonne Parish, LA, DOTD. Project Manager. Provided geotechnical engineering services for the project that included field exploration, laboratory testing and geotechnical engineering for the bridge. Pile capacities were developed for the bridge bents.
01/12 – 01/13	H.0091875 – 23rd Street Bridge over Canal No. 17, Jefferson Parish, LA. DOTD. Project Engineer. Provided geotechnical engineering for the subsurface evaluation and engineering design of this DOTD Off System Bridge project. The bridge at 23rd Street over Canal No. 17 was replaced. DOTD boring logs and LRFD Pile Calculations were provided to the design engineer.
01/10 – 03/12	H.0051.21 - LA-1 to I-10 Connector, Port Allen, LA. DOTD. Project Manager. Managed the design of a new connector between LA 1 and I-10 near the Intracoastal Canal in West Baton Rouge Parish, Louisiana. The project consisted of a bridge over the Intracoastal Canal, a flyover connector to LA 1 and associated roadway. Soil borings and Cone Penetrometer Test (CPT) probes associated with the bridges and roadway were completed. All calculations were consistent with DOTD pavement design standards. Settlement analysis was performed for the approach embankments. Pile capacities were also provided for the elevated structure.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.	
Name	Don Green, PE	Years of relevant experience with this employer	19
Title	Geotechnical Specialist	Years of relevant experience with other employer(s)	28
Degree(s) / Years / Specialization		MS / 2004 / Civil Engineering, University of Pittsburgh; BS / 1978 / Civil Engineering / University of Pittsburgh	
Active registration number / state / expiration date		Professional Engineer No. PE034330E / Pennsylvania / 09/30/27	
Year registered	1985	Discipline	Civil
Contract role(s) / brief description of responsibilities		Geotechnical QA/QC	



Don has more than four decades of experience in geotechnical engineering, foundation and retaining wall design, planning, laboratory and field investigations, preparation of plans and specifications, and project supervision and management. He has spent the majority of his career performing foundation engineering for structures both on land and water, and he is an NHI certified instructor for FHWA teaching LRFD substructure design. Don has provided expert testimony for various geotechnical matters, and serves as a geotechnical and structural reviewer for FEMA for CLOMR and LOMR submissions.

- ✓ 47+ years of comprehensive geotechnical analysis and engineering experience, ranging from materials testing to complex foundation design
- ✓ Experienced with a wide range of bridge foundations, including micropiles, for similar rail crossing projects

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
06/07 - 07/10	S.R. 28 East Ohio Street Improvement Project, Pittsburgh, PA. Pennsylvania DOT, District 11-0. Technical Manager. Responsible for geotechnical-related tasks, mechanistic pavement design using DarWin, and technical guidance/review for final design of more than \$60 million of retaining wall. Prepared foundation recommendations for multiple anchored retaining walls including 2-tiered systems, conventional cantilevered walls that were enhanced with passive rock anchors, an anchored bridge abutment, bridge piers supported on a combination of drilled shafts and micropile , conventional cantilevered walls and multi-column bent founded on driven piling, multiple reinforced soil slopes to replace retaining walls, and geogrid-reinforced sub-ballast for railroad relocation . Michael Baker provided comprehensive engineering and environmental services to upgrade a 2-mile, four-lane section of S.R. 28 between the Chestnut Street Ramps and the Millvale Interchange to a limited-access expressway. The project included the addition of median barrier on S.R. 28, a grade-separated interchange at 31st Street, and new southbound on and off ramps at 40th Street to allow continuous mainline flow. Project challenges included minimizing hillside impacts, maintaining railroad capacity, constructing within a tight corridor, and accommodating historic structures , while enhancing safety, improving traffic flow, and coordinating with multiple stakeholders with diverse needs . Michael Baker's services included environmental compliance, utility coordination and relocation design, complex construction sequencing and traffic control plans; ITS design; and construction consultation.
07/01 - 08/02	S.R. 0019, Section A21 West End Improvement Project - Advanced Contract Norfolk Southern Railroad Bridge Design, Pittsburgh, PA. Pennsylvania DOT, District 11-0. Geotechnical Engineer. Responsible for geotechnical engineering to support final design and consultation, including multiple retaining walls and bridge structures . Also responsible for geotechnical construction consultation. Michael Baker prepared environmental documentation and performed design and construction phase services for a new overpass railroad bridge that provides for the direct linkage of S.R. 0019-S.R. 0051 in Pittsburgh's West End with the West End Bridge and expedites vehicular travel to and from the city's downtown section . The bridge is the keystone of the West End Improvement Project and integral to achieving the goals of relieving traffic congestion, accommodating forecasted travel demand, and enhancing safety in the corridor.
11/09 - 06/15	Lakefront West - West 73rd Street Railroad Grade Separation and Roadway Extension Design, Cleveland, Ohio. Ohio DOT, District 12. Technical Specialist. Responsible for design of multiple internally braced excavations, which were more than 20 feet deep, to relocate an 84-inch diameter interceptor sewer adjacent to an existing Class 1 railroad. Also responsible to develop details to mitigate internal piping erosion at a tiered retaining wall system. Michael Baker developed plans for construction of a new grade separation with Norfolk Southern Railway (NS) and an extension of West 73rd Street associated with another project, including a new railroad structure, associated track work, temporary track runaround (shoofly), roadway extension design, and safety and operational improvements. Our firm also performed third-party utility coordination for four fiber optic runs; relocation designs for water, power, and 84-inch interceptor sewer; and construction services.

12/10 - 09/11	Fallston- Construction Services, Beaver County. Geotechnical Engineer. Responsible for providing geotechnical support and review with regard to instrumentation, settlement monitoring and wick drain installation. Also responsible for geotechnical/structural review of a complex anchored sheetpile shoring system to maintain railroad traffic during a multi-phase bridge replacement/widening.
03/10 - Ongoing	Regional Intermodal Facility Engineering, Design, and Permitting Services, Pennsylvania. Norfolk Southern Corporation. Geotechnical Engineer. Responsible for design of permanent shoring using deadmen to <i>install a box culvert under a set of active railroad tracks with minimal cover</i> . Michael Baker provided engineering and design services, permitting, and coordination with another environmental consultant to prepare the environmental clearance document, for a new intermodal freight facility to serve the mid-Atlantic region, as part of an initiative to establish a high-speed intermodal freight rail route between the Gulf of Mexico and the Northeast. Michael Baker's responsibilities included site investigation, geotechnical and civil engineering, design of five facilities and an overpass, drainage design, erosion and sediment control, and utility coordination.
01/16 - 11/17	S.H. 360 Design-Build, Grand Prairie, TX. TxDOT. Technical Specialist. Responsible for completing an Independent Discipline Review for several retaining wall designs. Also responsible for design of two anchored retaining walls to support <i>widening an existing roadway under an active railroad bridge structure</i> . Michael Baker provided roadway, drainage, and bridge design services as a subconsultant to the lead engineer for this design-build project. The project includes a 9.7-mile, four-lane controlled access facility, comprised of a base scope and option work that includes the construction of two tolled main lanes in each direction from two miles south of I-20 near Sublett Road/Camp Wisdom Road to U.S. 287, grade-separate 9 cross streets, grade separate the U.S. 287 main lanes with the SH 360 frontage roads, construction of the northbound frontage road from Heritage Parkway to U.S. 287 including continuous northbound and southbound frontage road at Union Pacific Railroad and the repair and resurfacing of existing frontage roads. Michael Baker's scope of services was roadway, structural and drainage design for Work Area 3 comprising 2.7 miles of the project from Heritage Parkway to U.S. 287, with 7 bridge structures and associated retaining walls. Frontage road design included widening under the UPRR railroad with rock anchor walls and <i>required railroad coordination for design approvals and exhibits</i> . Michael Baker also managed the structural design for the entire corridor.
12/15 - 02/16	I-35 Planning and Environmental Linkages Study, Austin, TX. TxDOT. Technical Specialist. Responsible for completing an independent quality assurance technical review for several retaining wall designs. Also responsible for designing two retaining walls <i>to permit roadway widening below an active railroad grade separation structure</i> . Michael Baker provided preliminary engineering, traffic analysis, modal analysis, and public and stakeholder outreach for the I-35 Future Transportation Corridor (FTC) Planning and Environmental Linkages (PEL) Study undertaken by TxDOT's Austin District and Transportation Planning and Programming Division. The study offered an opportunity to define the purpose of and need for the FTC, determine what specific mode(s) would use the FTC, and identify segments of independent utility that would be the focus on subsequent NEPA studies. Michael Baker performed traffic demand modeling to evaluate FTC mode choice, evaluated the engineering feasibility of multiple alternatives, and developed environmental constraints mapping and resource technical reports. Michael Baker also developed a public involvement and agency coordination plan, coordinated with multiple stakeholders, and held nine public meetings over a seven month period.
08/12 - 06/14	Route 280/21 Interchange Improvements, Newark, NJ. New Jersey DOT. Technical Specialist. Responsible for providing geotechnical-related support for the overall project, and for final design of an anchored bulkhead. Michael Baker provided final design services for a complex urban interchange reconstruction. The project includes intricate ramp design and flyovers in a confined urban area; five new bridges, including one curved girder structure; and 10 soldier pile retaining walls in an area that is currently experiencing settlement issues. Design included managing the geotechnical exploration program in conjunction with hazardous material sampling; extensive utility relocations; pavement design; design exceptions; right-of-way; lighting; intelligent transportation system; four traffic signals; and environmental permitting.
01/08 - 02/08	Stearns Road Bridge over the Fox River, Kane County, IL. Kane County Division of Transportation. Geotechnical Engineer. Responsible for performing a VE TS&L review for a six-span bridge to identify feasible foundation alternatives for two river piers, including drilled shafts, caissons, and raft foundations. Evaluated subsurface data to assess additional subsurface investigations required for design of about a 260-foot long pedestrian bridge and a 16-foot high MSE grade separation structure. Michael Baker provided preliminary and final design for the 980-foot-long Stearns Road Bridge over the Fox River and a local trolley museum railroad that included two miles of approach roadway. This new five-span, steel-plate girder bridge features numerous aesthetic enhancements, including a unique pier shape, special concrete form liners, atypical paint colors, aesthetic lighting, and a separate pedestrian truss bridge. The bridge's aesthetic arched piers utilized formliners to offer a unique appearance. The river piers used cofferdams, drilled shaft foundations, and a causeway to facilitate construction. 1/4/2008 - 2/1/2008

16. Staff Experience:

Firm employed by		Terracon Consultants, Inc.	
Name	Stephen Greaber, PE		Years of relevant experience with this employer
Title	Principal Quality Control		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		BS / 1989 / Civil Engineering	
Active registration number / state / expiration date		PE No. 26107 / Louisiana / 09/30/27	
Year registered	1995	Discipline	Civil
Contract role(s) / brief description of responsibilities		MPR 6; Geotechnical Support	
Mr. Greaber has 36 years of experience working on a wide range of geotechnical projects. He has worked extensively on City-Parish projects as well as for commercial, industrial, transportation, and institutional clients. He is well-versed in all aspects of geotechnical engineering and materials quality aspects of construction, including earthwork, concrete, masonry, asphalt, and structural steel. Mr. Greaber has extensive experience in deep foundation analysis, implementation/interpretation of load testing, site modification, and improvement techniques, including but not limited to dynamic compaction, geotextile reinforced slopes, and wick drains for the improvement of consolidation.			✓ Meets MPR 6: Over 35 years of experience in the geotechnical design involving Louisiana soils and bridge structures ✓ Professional civil engineer, registered in the State of Louisiana, PE No. 0026107.
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).	
07/23-Ongoing	H.012048 - Castor Creek and Relief Bridges - Tullos, LA. DOTD. Project Reviewer and Contract Manager. Terracon is providing geotechnical services focusing on subsurface soil and groundwater conditions and seismic site classification per IBC standards. The scope included 16 soil borings to depths of 60-110 feet using rotary drilling, with samples collected via Shelby tubes and SPT methods. Groundwater levels were monitored during drilling. Laboratory testing assessed moisture content, plasticity, particle-size distribution, density, and shear strength, following ASTM standards and USCS classification. Results were documented in detailed boring logs and graphs.		
10/22-02/25	H.003931.5-2 - I-10 - Calcasieu River Bridge Additional Borings - Lake Charles, LA. DOTD. Senior Geotechnical Engineer. Terracon conducted subsurface exploration and laboratory testing to support the replacement of the I-10 Calcasieu River bridge in Lake Charles, LA. Their work included 37 deep bridge borings—some over water and within a navigable channel—and 39 shallow roadway borings. They later advanced 17 additional borings using marsh buggy and ATV-mounted drill rigs along various segments of the I-10 corridor. Soil samples were collected using standard methods, and groundwater levels were monitored during drilling. In the lab, Terracon performed tests for moisture content, plasticity, particle-size distribution, density, and triaxial compression strength, all in accordance with ASTM and LDOTD standards.		
07/18 – 10/21	H.011235.5 - I-49 South @ Verot School Road US 90 - Lafayette, LA. DOTD. Lead Design Engineer for the subsurface evaluation and geotechnical engineering design for the US 90 (I-49 South) Design Build Project. Terracon provided the design of the substructure of two bridges and global stability and settlement for several MSE walls to be constructed as part of this design build project. Terracon developed nominal capacity and resistance factors for pile foundations for the bridge substructures and developed driving criteria using WEAP analysis for the proposed pile driving equipment. Dynamic Pile Testing was performed during construction to verify pile capacities. Terracon reviewed the CAPWAP results and provided recommendations for adjustment of the resistance factors to accommodate slight variations in nominal capacity obtained at each bent.		
05/18 – 01/21	H.005967: Nelson Road Extension and Bridge - Lake Charles, LA. DOTD. Senior Geotechnical Engineer. Reviewed the subsurface evaluation and geotechnical engineering design for the Nelson Road Extension and Bridge Project. Terracon completed the subsurface exploration that included water borings in Contraband Bayou and has provided 90% design of the substructure for the bridge over Contraband Bayou and performed settlement analysis for the planned embankment approaches. The scope also included design support for impact dolphins to be constructed in front of the bridge in the Bayou to protect the bridge superstructure from impact of possible runaway ocean-going ships from the nearby Port of Lake Charles facility.		





02/14 – 02/17	H.010620: US 90 (I-49 South) Design Build - Lafayette Parish, LA. <i>C.H. Fenstermaker. Senior Geotechnical Engineer.</i> Provided senior review for the subsurface evaluation and geotechnical engineering design for the US 90 (I-49 South) Design Build Project. Terracon provided the design of the substructure of two bridges and global stability and settlement for several MSE walls to be constructed as part of this design build project. Terracon developed nominal capacity and resistance factors for pile foundations for the bridge substructures and developed driving criteria using WEAP analysis for the proposed pile driving equipment. Dynamic Pile Testing was performed during construction to verify pile capacities. Terracon reviewed the CAPWAP results and provided recommendations for adjustment of the resistance factors to accommodate slight variations in nominal capacity obtained at each bent.
12/07 – 07/12	Off-System Bridge Program - Statewide in LA. <i>DOTD. Engineering Support.</i> Provided engineering support for multiple off-system bridge projects. Terracon provided geotechnical drilling, laboratory testing, and engineering support for several bridges designated for replacement under the DOTD Off-System Bridge Program. For each bridge, Terracon served as a sub-consultant for a civil engineering firm selected by Louisiana DOTD to design the new bridge. In each case, the project civil engineer provided all additional engineering and land surveying required to perform topographic surveys and hydraulic studies and prepared the preliminary and final roadway and bridge plans. Terracon completed geotechnical investigations for bridges throughout Louisiana and in a variety of geologic settings.
06/17 – 10/18	H.010006: Bayou Petit Caillou Bridge Improvements - Chauvin, LA. <i>DOTD. Senior Geotechnical Engineer.</i> Provided senior review the subsurface evaluation and substructure design for upgrades to the existing bridge. The services were performed for Huval and Associates through their Bridge Preservation Contract and included providing pile recommendations for support of a new bridge lift operators building and supports for traffic barriers and fender replacements.
09/08 – 11/08	Interstate 12 Widening. <i>East Baton Rouge and Livingston Parishes, LA. Senior Engineer.</i> Provided senior oversight for this major Interstate highway improvement. Terracon performed drilling and laboratory activities for the project. The project consisted of the widening of Interstate 12 to six lanes from O'Neal Lane eastward in both East Baton Rouge and Livingston Parishes. The project needed to be performed under a compressed time schedule of 30 days for DOTD to release a Design-Build procurement package. He worked with Terracon team to make sure the schedule was met by using multiple drill rigs to complete the field work. The work completed by Terracon has received high marks from the design-build team.
01/15 – 02/16	H.010719: US 90 Ramp Improvement, Orleans Parish, LA. <i>DOTD. Senior Geotechnical Engineer.</i> Provided senior review of the subsurface evaluation and substructure design of this new bridge and ramp improvement project at US 90 and South Claiborne Ave. The entrance ramp to US 90 was elevated to improve traffic flow. DOTD boring logs and LRFD Pile Resistance Calculations were provided to the design engineer.
2010 - 2013	SP No. 450-10-0159 - Interstate 10 Widening, Siegen to Highland - Baton Rouge, LA. <i>DOTD. Project Manager.</i> Managed the widening of I-10 from two lanes in each direction to three lanes in each direction. Dual existing bridges over Wards Creek Diversion will be widened, and the existing 850-foot-long dual bridges over the Kansas City Railroad and La Crete Drive were completely replaced with new three-lane bridges with 12-foot shoulders and increased clearances to allow the railroad to add a parallel track in the future.
11/10 – 08/12	LA-1 to I-10 Connector 30% Design - Port Allen, LA. <i>Volkert/DOTD. Supervising Geotechnical Engineer.</i> Supervised 30% design plans for a proposed new connector between I-10 and LA-1 in West Baton Rouge Parish. The extension included two bridges and two miles of new roadway. Bridges over an existing railroad and the Intracoastal Canal were included. An evaluation of a possible retained earth embankment was included.

16. Staff Experience:

Firm employed by		Terracon Consultants, Inc.	
Name	Matthew Minton	Years of relevant experience with this employer	24
Title	Supervisor – Other (Laboratory Manager)	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS / 2001 / Industrial Technology	
Active registration number / state / expiration date		N/A	
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities		MPR 7; Materials Testing Laboratory Manager	



Matt has 24 years of experience in laboratory testing and construction QA/QC testing for geotechnical projects, civil construction, and landfill construction. He currently serves as the Laboratory Technical Manager of Terracon's Baton Rouge and Shreveport full-service geotechnical and construction materials laboratories. He has worked diligently to implement a complete QA process for all the laboratory tests conducted in our laboratories. Under his supervision, the Baton Rouge laboratory has maintained its LDEQ LELAP, USACE, and AASHTO (AMRL and CCRL) certifications.

- ✓ **Meets MPR 7:** 24 years of geotechnical laboratory testing experience
- ✓ Highly experienced in visual classification of Louisiana soils
- ✓ Knowledgeable DOTD's soil sample preservation protocols

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
03/25-Ongoing	H.012059 - LA19 - Bridges near Zachary - Zachary, LA, DOTD. Lab Manager.
11/24-Ongoing	H.014988 - Carey Road over Blackwater Bayou - Baker, LA, DOTD. Lab Manager.
07/24-Ongoing	H.014984 - Libuse Cutoff Road over Flagon Bayou - Pineville, LA, DOTD. Lab Manager.
07/23-Ongoing	H.015338 - Off-System Bridge Replacement - Cameron, LA, DOTD. Lab Manager.
07/23-Ongoing	H.012537 - LA154, LA157 - Red Chute BYU & Flat RVR BRS - Elm Grove, LA, DOTD. Lab Manager.
07/23-Ongoing	H.012048 - Castor Creek and Relief Bridges - Tullos, LA, DOTD. Lab Manager.
01/24-Ongoing	H.015447 - IJA Off-System Bridge Program - Simmesport, LA, DOTD. Lab Manager.
10/22-02/25	H.003931.5-2 - I-10 - Calcasieu River Bridge Additional Borings - Lake Charles, LA, DOTD. Lab Manager.
07/21-04/22	H.003931 - I-10 Lake Charles - Lake Charles, LA, DOTD. Lab Manager.
12/21-11/23	H.012033 - Cross Bayou and Caney Bayou - Ouachita Parish, LA, DOTD. Lab Manager.
09/20-04/24	H.000385.5 - US 190- LA 415 & RR OVERPASS REPL - Port Allen, LA, DOTD. Lab Manager.
05/20-03/24	H.005121 - LA-1 and LA-415 Connector - Port Allen, LA, DOTD. Lab Manager.

16. Staff Experience:

Firm employed by		NTB Associates, Inc.	
Name	Bryan Bunch, PLS		Years of relevant experience with this employer
Title	Executive Vice President		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		BS / 1988 / Survey and Land Information Systems, University of Arkansas	
Active registration number / state / expiration date		PLS No. 5014 / Louisiana / exp. 03/31/2026	
Year registered	2009	Discipline	Professional Land Surveyor
Contract role(s) / brief description of responsibilities		MPR 5; Survey Lead	



Bryan will serve as NTB's Survey Manager assisting Daniel and Shalin in staff management, processing, and preparation of deliverables for surveying and mapping services. He also satisfies MPR No. 5 with more than a decade of DOTD and LPA survey project experience.

- ✓ **Meets MPR 5:** LA PLS with 10+ years of surveying, right-of-way, and utility coordination experience
- ✓ Extensive experience providing similar services to DOTD

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
08/25 - 03/26	H.016413.5 I-20: Sam R. Fert Dr. to Red River Bridge, Caddo Parish, LA. DOTD. 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	H.015724 Kings Hwy: Healthcare & Development Corridor, Caddo Parish, LA. DOTD. 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	Jimmie Davis Bridge (LA 511) Design-Build, Bossier & Caddo Parishes, LA. DOTD. 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 Jimmie Davis Bridge across the Red River.
09/20 - 03/26	Rural Bridge Replacement Initiative Phase II, Districts 05, 08, & 58, LA. DOTD. 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 subconsultant.
09/20 - 03/26	Rural Bridge Replacement Initiative Phase II, Districts 02, 03, 07, 61, & 62, LA. DOTD. 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 subconsultant.
08/22 - 03/26	Surveying & SUE Services, Various Parishes, LA. Delta Utilities / Centerpoint Energy. Quality Control Surveyor. 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.
07/23 - 03/26	IJA Off-System Bridge Program, District 62, LA. DOTD. Quality Control Surveyor. 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	Contract for Topographic Surveys, Box Culvert Replacements, Tasks Orders 1-4, Evangeline, St. Landry, & Bienville Parishes. DOTD. Assistant Project Manager. 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 culvert initiative projects.
12/17 – 11/24	I-10: LA 415 to Essen Lane on I-10 and I-12, West & East Baton Rouge Parishes, LA. DOTD. Survey Project Manager. 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	I-20 Monkhouse to I-49, Caddo Parish, LA. DOTD. Survey Project Manager. 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	LA 47 IWGO Bridge Rehabilitation, Historic Bridge Improvement (HBI), Orleans Parish, LA. DOTD. Assistant Project Manager. 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	LA 6: Youngs Bayou Bridge Rehab, Natchitoches Parish, LA. DOTD. Assistant Project Manager. 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	Walter O. Bigby Carriageway (N. Pkwy Ext.) Bossier Parish, LA. City of Bossier. Quality Control Surveyor. 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	LA 675 & LA 87 Improvements in New Iberia, Iberia Parish, LA. DOTD. Project Manager. Directed field crews, file processing, drafting, and submittals for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection as a subconsultant.
07/16 – 03/17	Bayou Fountain, Route LA 327 Spur (Gardere Lane) East Baton Rouge Parish, LA. DOTD. Survey Project Manager. 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.
10/15 – 07/16	MacArthur Interchange Completion (Phase II) Route US 90-Z, Jefferson Parish, LA. DOTD. Subconsultant Project Manager. Directed field crews, file processing, drafting, and submittals for topographic surveying services as a subconsultant.
04/15 – 02/16	I-20 (Airline Drive to I-220) Route I-20, Bossier Parish, LA. DOTD. Assistant Project Manager. Supervised south LA crew members and technicians for topographic surveying services.
04/15 – 09/15	LA 3094: Hearne Ave. Bridge Rehab, Route LA 3094, Caddo Parish, LA. DOTD. Quality Control Surveyor. 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.
02/14 – 03/15	Earhart Expressway Extension to US 61, Route LA 3139, Jefferson Parish, LA. DOTD. Subconsultant Project Manager. Directed survey crews, file processing, drafting, and submittals 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 subconsultant.
07/12 – 01/14	I-10 Loyola Ave. to Williams Blvd., Jefferson Parish, LA. DOTD. Subconsultant Project Manager. Directed survey crews, file processing, drafting, and submittals for topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection for interstate rehabilitation as a subconsultant.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Thomas Jackson "TJ" Holliday, PWS		Years of relevant experience with this employer	15
Title	Environmental Planning Manager		Years of relevant experience with other employer(s)	11
Degree(s) / Years / Specialization		BS / 1998 / Biology		
Active registration number / state / expiration date		Professional Wetland Scientist No. 2447 / exp. 04/07/26		
Year registered	2014	Discipline	Professional Wetland Scientist	
Contract role(s) / brief description of responsibilities		Environmental Lead		
TJ is an environmental specialist with experience involving various levels of environmental assessments (EAs) and other issues related to the National Environmental Policy Act (NEPA). His responsibilities have included studies for wetlands, floodplains, water quality, coastal resources, threatened and endangered species, cultural resources, hazardous materials, noise and air quality, and community impacts. His primary project duties have included project management, data collection and analyses, mapping and aerial photo interpretation, document preparation, public outreach, agency coordination, and regulatory permitting and compliance.				✓ Biologist with 25+ years performing environmental assessments, wetland delineations and threatened/ endangered species surveys, and NEPA compliance ✓ Performed a wide range of environmental services for major bridge projects, such as the Rio Hondo Lift Bridge
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., "designed drainage"; "designed girders"; "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
01/10 - Ongoing		Natural Environment Master for Wetland and Other Waters Assessments and T/E Species Surveys for Roadway and Bridge Improvements, Statewide, MS. MDOT. Environmental Lead. Responsible for environmental studies and reporting. Under three consecutive three-year contracts, Michael Baker has conducted listed species surveys and assessments of potential impacts to wetlands and other waters related to the replacement of bridges and construction of other improvements along various roadways throughout the state. Services include data collection and analysis, site investigations, wetland delineations, and report preparation.		
02/13 - 10/13		New Orleans Rail Gateway Environmental Impact Statement, Jefferson and Orleans Parishes, LA. DOTD. Environmental Specialist. Conducted field studies and documented findings for wetlands and hazardous materials. Assisted with preliminary engineering and NEPA/environmental studies for at-grade highway-rail crossing consolidation and grade separation studies of Jefferson Highway (U.S. 90) and the NOPB and KCS rail lines. Michael Baker is providing operations, engineering and environmental studies and preparing an EA for improvements to two at-grade highway-rail crossings along Jefferson Highway (US 90).		
04/22 - Ongoing		LA 30: EBR PL - I-10, East Baton Rouge, Iberville, and Ascension Parishes, LA. DOTD Headquarters. Environmental Specialist. Responsible for the Environmental Assessment (EA) of the widening of LA 30 from a 2-lane roadway to 4-lane roadway. Project limits is roughly 14 miles from the East Baton Rouge/Iberville Parish line to the terminus at I-10 interchange. Project is currently in Part 1 of the EA which main focus on traffic count/study/analysis along with some early environmental field screening, initial geometric improvements at existing 5 intersections, SUE services, and development of existing hydraulic flows for existing 6 bridge/culvert structures. Additional responsibilities include oversight of existing alignments along with existing right-of-way lines. Additional coordination required is with DOTD new Mississippi River Bridge Environmental on-going project. Addition 7 miles of project has recently been added to the project to include LA 30 from Brightside/ Lee Drive Intersection to the East Baton Rouge/Iberville Parish line. Project challenges are the number of industrial pipelines that parallel LA 30 on both sides of the roadway along with railroad on the west side of LA 30 from Brightside Intersection to just south of East Iberville High School.		
10/22 - Ongoing		Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program - District 07, LA. DOTD. Environmental Lead. Oversaw the research by the environmental team for environmental constraints that could serve as a roadblock for the replacement of a bridge structure. The information gathered allowed the engineers to make decisions on which bridges structures should move forward in design based off these environmental constraints. The constraints included but not limited to the following: Archaeological Sites, NRHP, Pre-1971 La HBI, 71-85 NRHP, Tribal Lands, Wetlands, Scenic Stream, Levee Permit, Coastal Zone, T&E Species, Section 4(f) and 6(f) lands, Navigable Waterway, UST or Contaminated Sites, Potential Mitigation Cost, and Additional Environmental Permits. Currently, Michael Baker has submitted stamped final plans for two projects (4 bridges/culverts) while other six projects are at various final submittal stages. There are a total of 12 bridges and culverts among the eight projects under this contract.		



08/22 - Ongoing	Barksdale AFB Entrance Roads, Bossier Parish, LA. NAVFAC. Environmental Lead. Responsible for the development of construction plans for new entrance roads for Barksdale AFB. The project includes a new roundabout at the Air Force Base gates along with new 4-lane divided highway to tie into the new LA 1267 highway constructed by DOTD under the I-20/I-220 Design Build interchange improvements. Additional responsibilities include coordination with the DOTD I-20/I-220 Project Manager and Design Build Owner Verification Managers along with overseeing new roadway design that meets DOTD Design requirements. The new roundabout is designed to be a multi-lane roundabout that accommodates the new LA 1267 spur of the I-20/220 interchange. Project includes the addition of street lighting in accordance with DOTD lighting guidelines. Additional responsibility is the coordination with DOTD for a project permit with District 04.
01/14 - 03/15	Rio Hondo Lift Bridge Environmental Services, Cameron County, Texas. Texas DOT. Environmental Specialist. Responsible for the completion of a Categorical Exclusion (CE) Document. Completed field studies and coordinated a USCG navigation permit, as well as a Section 404 permit. Michael Baker is providing environmental services for the rehabilitation of the FM 106 lift bridge over the Arroyo Colorado River. The firm's services include completion of the environmental scoping checklist, project coordination checklists, biological and water resources field surveys, environmental documentation, and public involvement including a Public Hearing. Our team assisted TxDOT with agency coordination, specifically the U.S. Coast Guard, U.S. Fish and Wildlife Service, Texas Historic Commission and the Texas Parks and Wildlife Department, regarding specific bridge rehabilitation and design elements. Built in the early 1950s, the historic bridge is one of four movable bridges in the State of Texas. It spans the Arroyo Colorado, a navigable waterway that provides a route for ships and barge traffic coming inland from the Gulf.
01/10 - 04/13	S.R. 16 from S.R. 15 to S.R. 19 Bridge Design, Neshoba County, Mississippi. MDOT. Environmental Specialist. Responsible for field surveys to identify wetlands and other waters of the U.S. and preparation of a jurisdictional findings report for 404 permitting process. Michael Baker provided engineering services for improvements to 10 miles of S.R. 16 from S.R. 15 to S.R. 19. Michael Baker's services included the Phase A preliminary bridge plans for eight bridges, including hydraulic design for three bridges and a railroad crossing bridge, and stream and wetland delineation.
04/15 - 07/15	Neches River Railroad Crossing Environmental Assessment/Geometric Schematic, Jefferson and Orange Counties, TX. Texas DOT. Environmental Specialist. Assisted with environmental field studies, document preparation, and provided QA/QC of the environmental document. Michael Baker prepared a geometric design schematic (30% plans, specifications, and estimate [PS&E]) and an Environmental Assessment (EA) for a new rail crossing of the Neches River in Beaumont. Michael Baker identified a purpose and need for the proposed project; developed four alternative alignments and four bridge options for the proposed crossing; and analyzed potential environmental issues, including extensive wetlands, historic and Section 4(f) resources, low income and minority neighborhoods, and a Superfund site, among others. The team also facilitated several stakeholder meetings; developed preliminary designs, cost estimates, and right-of-way requirements for each alignment; and recommended a "preferred alignment" and bridge type.
05/18 - 11/18	I-30 Crossing Design-Build, North Little Rock, and Little Rock, Arkansas. Arkansas DOT. Environmental Manager. Michael Baker provided engineering services for the 7.3-mile interstate widening and reconstruction project to improve I-30 from I-530 to I-40 and I-40 from Highway 365 to Highway 67/167. The project area included the Arkansas River Bridge and the confluences of multiple interstates in Little Rock and North Little Rock. Michael Baker's design efforts included reconstruction of mainlines, ramps, frontage roads, and cross streets to add capacity and correct inadequate design elements; pavement design; retaining walls; major drainage structures; large guide signs; relocation of existing utilities; and aesthetics.
05/10 - 02/13	S.R. 607 Improvements from Texas Flat Road to I-59, Hancock and Pearl River Counties, Mississippi. MDOT. Environmental Specialist. Responsible for wetland and other waters of the U.S. delineation and reporting. Michael Baker provided engineering services for the widening of S.R. 607 to four lanes from Texas Flat Road to I-59, including the reconstruction of a bridge over Alligator Branch and the replacement of two bridges over Second Alligator Branch and Indian Camp Creek.
03/18 - 07/18	Jackson County Bridges, Mississippi. Jackson County Road Department. Environmental Lead. Michael Baker assisted the Jackson County Road Department with Section 404 permit coordination for multiple bridge replacement and roadway improvement projects within the County. The project included four sites located along Old Fort Bayou Road, Juniper Drive, and Solomon Road. Michael Baker's services included data collection and analysis for wetlands and other waters of the U.S. and threatened and endangered species. The projects required coordination with the Mobile District US Army Corps of Engineers (USACE), US Fish and Wildlife Service (USFWS), MS Department of Marine Resources (MDMR), MS Department of Environmental Quality (MDEQ), and the MS Department of Archives and History (MDAH).
02/11 - 06/11	Wetlands Delineation for S.R. 7 and S.R. 8 Bridge Replacements, Marshall, Benton, and Calhoun Counties, Mississippi. MDOT. Environmental Specialist. Conducted wetland and other waters assessments for a bridge replacement and road improvements along S.R. 7 in Marshall and Benton Counties and S.R. 8 in Calhoun County. Prepared jurisdictional findings report for submittal to USACE for 404 permit evaluations. Michael Baker performed wetland assessments and delineations for the replacement of the bridges on S.R. 7 in Marshall and Benton counties and S.R. 8 in Calhoun County. Michael Baker's services included data collection and analysis, field investigations, wetland delineations and assessments, and report preparation.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.			
Name	Christopher Gesing, PE			Years of relevant experience with this employer	46
Title	Environmental Project Manager			Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		Master's Certificate / 2007 / Project Management; MS / 1984 / Civil Engineering; BE / 1980 / Civil Engineering			
Active registration number / state / expiration date		Professional Engineer No. 26996 / Louisiana / 03/31/2027			
Year registered	1996	Discipline	Civil Engineering		
Contract role(s) / brief description of responsibilities		Environmental QA/QC			





For 28 years, Chris has served DOTD as the Project Manager and Environmental Lead for the North-South Expressway, LA 1 Improvements and I-69 SIU 15 EISs and is leading the NEPA/Environmental studies for DOTD's New Orleans Rail Gateway (NORG) Program. He brings more than 45 years of bridge, traffic, roadway, and planning (Stage 1 studies) expertise. Chris authored DOTD's first Stage 1 (Planning/Environmental) Manual of Standard Practice and has instructed NEPA classes for both LTRC and ASCE. He is a former member of the TRB Committee on Analysis in Transportation (NEPA Committee) where he served as the Steering Subcommittee Chair. He has authored numerous NEPA documents (EISs, EAs and CEs) for both DOTD and transportation agencies nationwide. In addition, **he has authored multiple Environmental Impact Statements for the Federal Highway Administration (FHWA) for which Records of Decision were issued.**

- ✓ 28+ years authoring EIS documents for the FHWA on DOTD projects, some of which resulted in Records of Decision
- ✓ Managed the I-69 SIU Environmental Study and the award-winning LA 1 Improvements Alternatives Analysis & EIS, both of which feature major bridges, unique environmental challenges, and historic resources
- ✓ Manages NEPA studies for \$1B+ value construction projects

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
07/11 – 09/19	New Orleans Rail Gateway - Environmental Impact Statement, Orleans and Jefferson Parishes, LA. DOTD. Project Manager and Environmental Lead. Responsible for leading \$638 million in improvements to the New Orleans Rail Gateway, the fourth-largest freight rail gateway in the U.S. Michael Baker's services include environmental and engineering services, GIS development, mapping, rail and roadway travel demand modeling, alternatives analyses, rail and roadway conceptual design, cost estimates, document preparation, stakeholder and agency coordination including FRA, FHWA, DOTD, NORPC, six Class 1 railroads, Amtrak, NOPB, City of New Orleans, Jefferson Parish, the Port of New Orleans and federal/state resource agencies, and extensive public and minority community outreach. The study built upon a "Program of Projects" and two feasible alternatives identified in a 2007 Infrastructure Feasibility Assessment that identified 52 individual projects along two rail corridors to improve the entire 35-mile Gateway. The FRA rescinded the EIS NOI during alternatives development due to strong public opposition, lack of local elected officials support, and insufficient funding to conduct comprehensive studies necessary to re-evaluate projected passenger train service and re-evaluate possible alternatives that could garner community support.			
09/19 – Ongoing	New Orleans Rail Gateway - Jefferson Highway Rail Crossing Relocation EA, Jefferson Parish, LA. DOTD. Project Manager and Environmental Lead. Responsible for management of the operations, engineering and environmental studies and preparing an Environmental Assessment (EA) to combine and grade separate a Canadian National Railway (CN)/ New Orleans Public Belt Railroad (CN/NOPB) and a Canadian Pacific Kansas City (CPKC) at-grade crossing of Jefferson Highway (US 90) between the Ochsner Health Foundation Hospital and Monticello Avenue. The project is a continuation of the New Orleans Rail Gateway (NORG) Program, a public-private partnership between the DOTD, the FRA, and the six Class 1 railroads operating in the Region			
04/22 – Ongoing	LA 30: EBR PL - I-10, Ascension, Iberville, and East Baton Rouge Parishes, LA. DOTD. Deputy Project Manager & Environmental Lead. Leading the NEPA study for the widening of LA 30. Project is currently in the Part 1 phase of the study to determine the required widening requirements of LA 30 from the East Baton Rouge Parish Line to I-10. Project covers nearly 14 miles of improvements along LA 30 through Iberville and Ascension Parish. The study will determine how many additional lanes necessary for LA 30 along this stretch with intersection improvements at Bayou Paul Lane, LA 74, LA 3115, LA 73, and LA 3251. Additional responsibilities for Mr. Gesing includes managing the environmental field services to collect the necessary field data along with developing the FHWA Project Management Plan.			

04/01 – 11/14	I-69, Section of Independent Utility No. 15 EIS/ROD, U.S. 171 to I-20, Bossier, Caddo, and DeSoto Parishes, LA. DOTD. Project Manager & Environmental Lead. Managed this location and environmental study in northwestern Louisiana. Responsible for client satisfaction, budget, scope and schedule compliance and direction of all work activities. Michael Baker conducted a preliminary engineering and environmental study for I-69, Section of Independent Utility 15. Services included project management, environmental investigations, preliminary roadway engineering, GIS environmental mapping and analysis, global positioning system survey and digital orthophotography; conceptual bridge design; traffic demand modeling and traffic forecasting; preparation of a corridor preservation memorandum of agreement, and stakeholder outreach. <i>This project featured preparation of draft and final EIS for which a Record of Decision was issued.</i>
09/99 – 09/04	Louisiana 1 Improvements EIS/ROD, Golden Meadow to Port Fouchon, Lafourche Parish, LA. DOTD. Project Manager & Environmental Lead. Responsible for managing this location and environmental study in northwestern Louisiana. Responsible for client satisfaction, budget, scope and schedule compliance and direction of all work activities. Michael Baker conducted a route location, conceptual engineering, and environmental evaluation for a 17-mile four-lane fully controlled access elevated highway on new location with bridges spanning navigable waterways. Because the project area encompassed some of the most ecologically unique and sensitive areas in Louisiana, and perhaps the Nation, traversing the area with a highway on new location presented major environmental challenges. In the spirit of environmental stewardship and streamlining, a context-sensitive project approach was employed to develop a transportation facility that fit the physical setting and preserved scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. <i>The project was the recipient of the 2004 AASHTO President's Transportation Award for Environment. This project also featured an EIS for which a Record of Decision was issued.</i>
08/97 – 09/05	North-South Expressway (I-49 North), EIS/ROD, I-220 to the Arkansas State Line, Caddo Parish, LA. DOTD. Project Manager. Led this \$670 million, 35-mile four-lane fully controlled highway on new location between I-220 in Shreveport, Louisiana, and the Arkansas state line (now referred to I-49 North). The project included logical termini evaluation, interchange justification studies (IJS), Phase I Cultural Resources Assessment, wetland delineation and surface waters evaluations, Phase I Environmental Site Assessment (ESA), highway traffic noise studies, and air quality impact assessment. <i>This project featured an EIS for which a Record of Decision was issued.</i>
06/21 - Ongoing	New Orleans Rail Gateway - Avondale Planning and Environmental Linkages (PEL) Study, Jefferson Parish, LA. DOTD. Project Manager. Responsible for managing the operations analyses, engineering, and environmental inventory and preparing a planning and environmental linkages study. Michael Baker is providing operations, engineering, and environmental studies and preparing a planning and environmental linkages (PEL) study to evaluate the consolidation, road-over-rail grade separation, or closure of four at-grade highway-rail crossings. For the project, Michael Baker is performing project management, solicitation of views, secondary-source environmental resources inventory, geographic information system (GIS) mapping, freight rail operations forecasting and crossing occupancy time analyses, roadway traffic and crash analyses, purpose and need, roadway/bridge conceptual design, cost estimates, alternatives analyses, stakeholder and agency coordination, and public outreach. The project is a continuation of the New Orleans Rail Gateway (NORG) Program, a public-private partnership between the DOTD, the FRA, and the six Class 1 railroads operating in the Region. Michael Baker is the Prime Consultant for the NORG Program. <i>DOTD approved the PEL report in April 2025.</i>
05/08 – 05/11	East-West Corridor Environmental Assessment, EA/FONSI, Bossier Parish, LA. Northwest Louisiana Council of Governments (NLCOG). Project Manager & Environmental Lead. Led the development of the environmental assessment for a new location eight-mile, two-lane urban collector with right-of-way clearance for future widening to a five-lane facility when traffic conditions warrant. The purpose of the new \$56 million facility was to alleviate congestion and reduce travel delays along the other roadways that link the rapidly growing residential areas of Bossier Parish with the Shreveport and Bossier City employment centers. Michael Baker's services included traffic analyses including conducting traffic counts and forecasting traffic using NLCOG's TransCAD regional travel demand model (TDM); Phase I Cultural Resources Assessment including probability modeling for archaeological resources and geoarchaeological study; wetland delineation and surface waters evaluations; Phase I Environmental Site Assessment (ESA); and highway traffic noise studies
08/02 – 12/06	Stage 1 – Planning/Environmental Manual of Standard Practice, Statewide, LA. DOTD. Project Manager, Author and Course Instructor. Developed DOTD's initial Manual of Standard Practice and training program and conducted several half-day training sessions. The Stage 1 Planning/Environmental Manual of Standard Practice provides transportation project managers guidance in advancing transportation improvements projects through Stage 1 of DOTD's Project Development Process. A half-day training course was developed, and Michael Baker provided half-day training sessions to DOTD and FHWA Louisiana Division staff. DOTD updated the Manual in 2018 and 2022.
1982 - 1989	Veterans Memorial Cable-Stayed Bridge, Weirton, WV. West Virginia DOT, Division of Highways. Engineer. Instrumental in the design of the bridge, a 1,950-foot cable-stayed, four-lane bridge over the Ohio River, the sixth cable-stayed bridge in the United States at completion. Performed the finite element analysis to determine member forces throughout the system for a variety of dead, live, wind and thermal loadings. Assisted in the fascia girder and stringer design including developing mathematical models and software to predict pre-tensioning forces required in the cables to achieve the desired dead load moment and reactions for optimum design.

SUPPORT STAFF

**ADDITIONAL PERSONNEL PROVIDING DEPTH
ACROSS ALL DISCIPLINES**

16. Staff Experience:

<i>Firm employed by</i>	HDR Engineering, Inc.		
<i>Name</i>	Greg Kochersperger, PE	<i>Years of relevant experience with this employer</i>	21
<i>Title</i>	Central Region Principal Bridge Engineer	<i>Years of relevant experience with other employer(s)</i>	4
<i>Degree(s) / Years / Specialization</i>	BS / 2000/ Architectural Engineering		
<i>Active registration number / state / expiration date</i>	PE No. 94869 / TX / 09/30/26		
<i>Year registered</i>	2004	<i>Discipline</i>	Structural
<i>Contract role(s) / brief description of responsibilities</i>	Bridge Rehabilitation Support		



Gregory's bridge design experience includes numerous over- and underpass bridges, railroad bridges, light rail transit structures, stream and river crossings, and major interchanges. He has performed bridge designs comprising steel and concrete and is fluent in the design of precast and post-tensioned concrete structures, long-span steel bridges, including truss bridges, as well as curved steel I-girders and box girders. His recent experience has been focused on the rehabilitation and preservation of existing concrete and steel structures.

- ✓ Extensive experience with condition assessments and rehabilitation/repair of in-service bridges
- ✓ Experience with numerous structure types and ages of bridges
- ✓ Access to HDR's broad network of SMEs for bridge rehabilitation

<i>Experience dates (mm/yy-mm/yy)</i>	<i>Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).</i>
05/20 – 04/21	JFK Causeway over Gulf Coast Intracoastal Waterway Rehabilitation, Corpus Christi, TX. TxDOT Bridge Division. Project Manager. Greg coordinated the logistics for two field teams for three weeks, including working with the USCG. He led the development of an extensive condition assessment report that included recommendations for concrete repairs and the installation of a cathodic protection system. He then led the development of the PS&E, which included bridge repair details, traffic control plans, cathodic protection details, and environmental commitments.
10/24 – 08/25	IH 30/IH 35E Condition Assessments, Dallas, TX. TxDOT Dallas. Project Manager. Greg led the condition assessments of IH 30 eastbound and westbound over White Rock Creek and IH 35E over Turtle Creek. The bridges were each over 1,000 feet long, crossing multiple roadways in addition to the namesake creek. Greg coordinated lane closures with the city and TxDOT to gain access for the inspections. He utilized a combination of conventional methods, infrared deck scans, and an under-deck unmanned aerial vehicle to gather data on the two very congested urban interstate bridges. He led the development of comprehensive reports documenting deficiencies and providing repair recommendations with cost estimates. The field notes and photo documentation were organized, compiled, and provided to the District to complete the repair plans. They were very pleased with the thorough level of documentation.
04/23 – 06/25	District-Wide Bridge Maintenance, Various Counties, TX. TxDOT Abilene. Project Manager and Bridge Rehabilitation Task Lead. Greg developed a comprehensive plan to help the Abilene District eliminate as many outstanding follow-up action items (FUAs) as possible over a multi-year funding cycle. Greg took the District's complete list of FUAs. He used his experience to develop gut-level, order-of-magnitude estimates for the repair work based solely on the descriptions and limited inspection reports. He used these estimates to identify the "low-hanging fruit" and prioritize repairs that could be completed on the district's fixed annual budget. He then performed condition assessments of over 50 priority bridges to confirm the repair locations and quantities, and finalized his recommendations. He then developed individual bridge packages, grouped by Area Office within the district, over the course of four fiscal years. In addition to the bridge repairs, Greg developed traffic control plans, railroad exhibits, and SWP3 for each package. The first two packages bid successfully within 5% of Greg's estimate and within the District's budget. Through his programmatic approach, Greg helped the district eliminate more than 60 FUAs.

10/21 – 09/23	IH 345 Rehabilitation, Dallas, TX. <i>TxDOT Dallas.</i> Project Manager and Bridge Rehabilitation Task Lead. Greg led the condition assessment and rehabilitation of 18 structures comprising the IH 345 corridor and the IH 30 Interchange in downtown Dallas. He coordinated with the city, TxDOT, and Dallas Area Rapid Transit to gain access to critical areas of the bridge for inspection, using a combination of under-bridge inspection vehicles and manlifts. Greg and his team developed thorough field notes that served as the basis for the repair plans. Greg led the development of repair plans for deck-level and substructure repairs. He also incorporated steel girder repairs developed by another consultant into his plan set and combined the specifications and estimates to provide a unified bid set for contractors. The extensive rehabilitation scope included rail replacements, joint repairs and replacements, polyester polymer overlays, concrete substructure repairs, drainage system repairs, and a deck replacement. Greg was responsible for each aspect of the final design plans, including the extensive traffic control plans.
06/16 – 03/18	US87 Overpass at UPRR Rehabilitation, Big Spring, TX. <i>TxDOT Abilene.</i> Project Manager and Bridge Rehabilitation Task Lead. Greg led the coordination and execution of the extension condition assessment of the existing haunched steel plate girder bridge over a busy rail yard. Based on the assessment findings, he developed a repair recommendation report that included full replacement of the existing bridge deck. TxDOT agreed with the recommendation, and Greg developed the full design plans (PS&E) for the rehabilitation, including bridge details, traffic control plans, illumination details, and railroad exhibits.
06/18 – 03/21	Bastrop, Travis, and Williamson County Bridge Rehabilitations, Various Locations, TX. <i>TxDOT Bridge Division.</i> Project Manager. Over the course of two separate work authorizations, Greg led the condition assessment of 19 bridges, followed by the rehabilitation of 14 bridges based on his recommendations. He coordinated logistics for the condition assessments, including varied access techniques and traffic control based on location. He developed four separate PS&E packages, including bridge details, traffic control plans, roadway safety improvements, SW3P, and Environmental sheets.
01/13 – 06/15	Houston Street Viaduct Rehabilitation, Dallas, TX. <i>City of Dallas/Dallas Area Rapid Transportation.</i> Bridge Task Lead. Greg led the condition assessment and rehabilitation of this 100-year-old concrete spandrel arch bridge across the Trinity River. Rehabilitation included retrofit for a proposed streetcar line. Greg led the structural analysis work and load rating to demonstrate that the existing bridge could support the proposed load. He developed the details for the extensive rehabilitation of the historic bridge.
06/13 – 07/18	Trinity Rail Express Double Track, Fort Worth, TX. <i>Trinity Metro.</i> Bridge Task Lead. Greg led the bridge design for five separate railroad structures and the rehabilitation of a 153-foot triple-lattice steel truss carrying a commuter rail line over the Trinity River. Greg developed the rehabilitation scoping report and performed load ratings of the existing truss. He developed the rehabilitation details for the truss, including gusset plate repairs, steel member straightening, and complete painting plans.

16. Staff Experience:

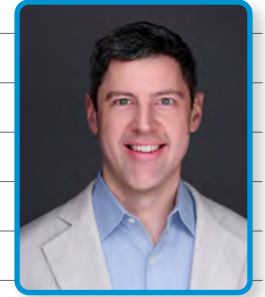
Firm employed by		HDR Engineering, Inc.	
Name	Daniel Marsalone, PE		Years of relevant experience with this employer
Title	Bridge Engineering Leader		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		BS / 1994 / Civil Engineering	
Active registration number / state / expiration date		PE No. 28554 / LA / 09/30/27	
Year registered	1999	Discipline	Civil
Contract role(s) / brief description of responsibilities		Bridge Rehabilitation Support	
Daniel is an accomplished civil and structural engineer with over 31 years of experience delivering complex infrastructure projects across the United States. Previously serving as lead civil engineer for USACE New Orleans, Daniel provides technical leadership for the Morganza to the Gulf Project, a \$12 billion hurricane and storm damage risk reduction initiative featuring 98 miles of levees and multiple flood protection structures.			✓ 30 years of bridge design experience ✓ Complex and historic bridge experience ✓ Experience with DOTD structures
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
10/25 - Ongoing	Movable Bridge Inspections, Statewide, LA. DOTD. Lead Bridge Engineer. The project consisted of the inspection and load rating of six moveable bridges in southern Louisiana. Daniel provided quality control for the in-depth bridge inspection reports, provided guidance and quality control for the load ratings and reports, and developed a prioritized set of repairs for each bridge based on the inspection and load rating findings.		
01/26 - 2/26	Old Pearl River Bridge Emergency Repairs, Pearl River, LA. Norfolk Southern Corporation. Lead Bridge Engineer. Daniel led the bridge design team to provide emergency repairs for the two fixed trusses and moveable truss following the bridge's inspection in which there were critical findings: severe corrosion with significant loss of section for several fracture critical members, fatigue issues with floorbeams, and severe deterioration of floorbeam connections. He designed the bottom chord repairs for the trusses, design of floorbeam modifications, and the design of floorbeam connection repairs.		
10/22 - 10/25	Morganza to the Gulf Project, Terrebonne and Lafourche Parishes, LA. USACE New Orleans. Lead Civil Engineer. Daniel provided technical leadership, guided design decisions such as levee alignment, and oversaw quality control for the MTG hurricane and storm damage risk reduction project. The \$12 billion project included 98 miles of earthen levees, multiple floodgates, environmental water control structures, road/railroad gates, and fronting protection for pump stations. Daniel was responsible for coordinating with non-federal sponsors, which included the local levee districts and the Louisiana Coastal and Restoration Authority, to deliver a cost-effective, resilient flood protection system.		
08/21 - 10/22	Causeway and Earhart Boulevard Interchange, Jefferson Parish, LA. DOTD. Lead Bridge Engineer/Project Manager. Daniel led the design of two elevated ramp superstructures within a major traffic interchange. The ramps also crossed the Kansas City Southern Railway (KCS). The superstructures included AASHTO prestressed concrete girder spans and curved steel girder spans. Additionally, Daniel supervised substructure and foundation design, coordinated with KCS to confirm that rail service would not be hindered and that pier and foundation locations met KCS approval, and performed LRFR bridge rating calculations. He provided oversight to confirm the project was compliant with state and federal standards.		
05/20 - 10/21	Jack Warner Extension to MLK Kansas City Southern Railroad Bridges, Tuscaloosa, AL. City of Tuscaloosa. Lead Bridge Engineer/Project Manager. Daniel designed the substructure for two railroad bridges on active lines, requiring innovative solutions to maintain service during construction. The design featured reinforced concrete piers and abutments on drilled shaft foundations. Daniel's work provided structural integrity while meeting strict operational constraints for the KCS Warrior Mainline and Goodrich Spur.		



04/15 - 04/16	Wisner Boulevard Bridge over I-610/Norfolk Southern Replacement, Baton Rouge, LA. DOTD. Project Manager. Daniel performed the design and LRFR load rating for the replacement bridge's superstructure, substructure, and foundations. Additionally, he provided construction engineering services, including RFI responses, which included additional bridge design calculations due to a constructed pier being mislocated, steel girder shop drawing reviews, and material submittal evaluations. Daniel also coordinated with Norfolk Southern (NS) during the design and construction phases to confirm that rail operations were maintained, and pier and foundation location and protection met NS approval. His involvement verified compliance and smooth execution during construction.
07/14 - 03/15	Lower Zachary Road Bridge Replacement, Zachary, LA. Baton Rouge Department of Public Works. Lead Bridge Engineer/Project Manager. Daniel designed the replacement of four slab-span bridges performing structural design and hydraulic/scour analysis for the bridges. Daniel verified compliance with safety standards and optimized performance for long-term durability.
05/14 - 11/14	Bridge Inspection and Load Rating Report for Causeway Boulevard/Airline Drive Interchange, Metairie, LA. Jefferson Parish Department of Public Works. Lead Bridge Engineer/Project Manager. Daniel led the bridge inspection team, conducted field assessments, and prepared the bridge inspection reports, bridge load ratings, and the load rating reports for the multiple structures within the interchange. He provided recommendations for prioritized structural repairs and drainage improvements. In addition, Daniel produced the traffic control plans used for inspections.
07/04 - 04/05	Florida Avenue Bridge Design, New Orleans, LA. DOTD. Lead Bridge Engineer/Project Manager. Daniel led the design of one mile of elevated bridge approaches using AASHTO Type III, Type IV, and bulb-tee prestressed concrete girders. The bridge deck, girders, and piers were designed to meet AASHTO LRFD specifications. Daniel provided structural analysis and coordination to verify safe and efficient construction.

16. Staff Experience:

<i>Firm employed by</i>	HDR Engineering, Inc.		
<i>Name</i>	Nick Burdette, PE	<i>Years of relevant experience with this employer</i>	20
<i>Title</i>	Northeast Region Bridge Lead	<i>Years of relevant experience with other employer(s)</i>	3
<i>Degree(s) / Years / Specialization</i>	MS / 2005 / Civil Engineering BS / 2004 / Civil Engineering		
<i>Active registration number / state / expiration date</i>	PE No. 0050162 / Louisiana / exp 09/30/27		
<i>Year registered</i>	2025	<i>Discipline</i>	Civil
<i>Contract role(s) / brief description of responsibilities</i>	Bridge Preservation Support		



Nick has over 20 years of experience in bridge rehabilitation design and analysis. He has led several large historic bridge rehabilitation projects listed below, including Swindell Bridge, Jerome Street Bridge, and Liberty Bridge. Four of the projects listed below included significant railroad coordination, as noted. Nick is familiar with the unique challenges for upgrading and preserving these structures, including phasing to maintain traffic, addressing fatigue issues, and addressing movement and joints. He has developed practical solutions for these issues on past projects, including innovative replacement deck options to help eliminate joints, reduce dead load, and minimize disruption to traffic with precast elements.

- ✓ RR Overpass rehabilitation and replacement experience
- ✓ Historic Bridge Preservation

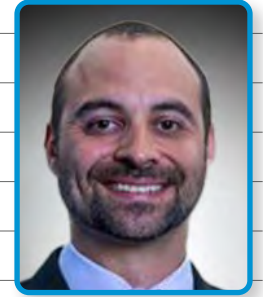
<i>Experience dates (mm/yy-mm/yy)</i>	<i>Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).</i>
08/13-06/18	Liberty Bridge Rehabilitation, Pittsburgh, PA. Pennsylvania Department of Transportation (PennDOT) District 11-0. Lead Structural Engineer. This project included the full replacement of the Liberty Bridge grid deck and stringers with innovative precast Exodermic grid deck panels, while maintaining railroad traffic under the bridge. These precast elements enabled full-width deck replacement in sections, utilizing weekend closures to avoid impacts to commuter traffic. The project also included extensive super and substructure steel repairs, deck joint replacement and elimination, lighting and bridge barrier replacement, blasting and painting of all structural steel and sign structures, and extensive MPT phasing coordination requiring accelerated bridge construction (ABC) construction. Nick checked the rating calculations for repairs of numerous steel members, and checked LRFD strength and fatigue capacities for an innovative Precast Exodermic Steel Bridge Deck. He developed deck details and traffic phasing to allow accelerated deck replacement while minimizing impacts to weekday commuters..
07/24 - 03/26	Columbia-Wrightsville Bridge, Lancaster and York Counties, PA. PennDOT District 8-0. (Subconsultant) Bridge Lead. This structure, listed on the National Register of Historic Places, will be rehabilitated by replacing the spandrel columns, floor systems, and deck. Only the existing piers and arch ribs will remain. New elements will be precast concrete to provide high durability and speed reconstruction. These elements will be delivered utilizing an upgraded railroad crossing, requiring close coordination with the railroad. Several historic features of the existing structure, including the unique concrete railing, will be reproduced for the new concrete superstructure. As part of the design, HDR created a staged, 3D finite element model to determine loading demands on the current bridge, as well as those due to anticipated construction loads and traffic on the new superstructure. Model element stiffness was calibrated using non-linear reinforced concrete models. Nick developed precast architectural details to meet historic bridge requirements and the need for simple, constructable details. He also checked conceptual construction access and schedules to verify achievable construction schemes. Oversaw precast concrete connection designs to provide required strength while minimizing rebar congestion.
07/23 - 03/26	Swindell Bridge Rehabilitation, Pittsburgh, PA. City of Pittsburgh/PennDOT District 11-0. HDR Project Manager. This project included the rehabilitation of this historic 1090-foot four-span deck truss, which spans more than 200 feet above Interstate 279, north of Pittsburgh. Major rehabilitation items for the bridge include replacing the deck, barriers, and sidewalks; replacing deck joints; repairing steel; painting; and replacing or rehabilitating bearings. Deterioration of tension anchorages at two supports requires replacement of the anchorages, including phased temporary hold-downs. A robust, community-driven process was used to determine the preferred phasing for deck replacement on this important transportation link. Character-defining features for this historic structure will be maintained through this rehabilitation. This project is currently in final design. Nick developed the design for tension anchorages at two supports that require anchorage replacement including phased temporary hold downs. He also performed crane capacity calculations to develop conceptual construction sequencing and feasible construction schedule options.

04/18-11/23	Jerome Street Bridge Rehabilitation, McKeesport, PA. <i>PennDOT District 11-0.</i> Project Manager. Nick oversaw the rehabilitation of this 450-foot steel crescent arch structure and approaches, while maintaining railroad traffic under the bridge. Major rehabilitation items for the bridge include replacement of the 3½" filled grid deck in spans 3 through 6, deck joint replacements, steel repairs, painting, and bearing replacement/rehabilitation. The bridge has four lanes of traffic and carries 18,000 vehicles daily across the Youghiogheny River, requiring phased reconstruction, including staged arch analysis and jacking to replace all bearings. Nick developed steel repairs to strengthen substructure bents and achieve desired live load ratings after jacking. He also checked the deck replacement survey geometry to verify adequate thickness for use of a new lightweight concrete deck..
04/23-Ongoing	Delaware River Bridge Replacement, Bristol, PA, and Florence, NJ. <i>Pennsylvania and New Jersey Turnpike Authorities.</i> Approach Spans Lead. Nick is leading the preliminary design of the Pennsylvania approaches for this 6,571' structure crossing the Delaware River. This project involves alternatives analysis and preliminary engineering for the complete replacement of the existing structure, which has a main span of 682 feet over the navigable river channel. The alternatives analysis phase of this project includes consideration of eight alignments, three approach structure types, and three main span options. Options considered include cable-stayed, extradosed, tied-arch (main-span bridge), and segmental concrete, steel-girder, and spliced prestressed concrete beams (approach structures). Nick is leading coordination with Amtrak, which owns the Northeast Corridor under the PA approach structures. Minimizing construction impacts to this critical piece of East Coast infrastructure required complex construction phasing and utility relocation, which Nick developed..
04/18-03/26	Commercial Street Bridge Replacement, Pittsburgh, PA. <i>PennDOT District 11-0.</i> Engineer of Record. This project included replacing the dual structures carrying I-376 over Nine Mile Run, Frick Park, and Commercial Street. The existing structure is comprises adjacent dual arch structures 859' in length. Assessment of this historic structure required a full Historic Bridge Rehabilitation Analysis (HBRA) report. Alternative analyses for the bridge replacement included evaluations of multiple structural types and span configurations, including arched steel delta frame, haunched steel plate multi-girder, and tied arch structures. The alternative analysis resulted in replacing the bridge on alignment with a single arched steel delta frame structure that will be constructed adjacent to the existing bridges and slid into place using ABC techniques following explosive demolition of the existing bridge. As part of the rehabilitation assessment of these structures, Nick developed a menu of rehabilitation alternatives, including concrete encasement and cathodic protection. He performed a life-cycle costs assessment to help the client select a preferred rehabilitation or replacement option..

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Stephen Fowler, PE		Years of relevant experience with this employer	3
Title	Regional Technical Manager - Bridge		Years of relevant experience with other employer(s)	15
Degree(s) / Years / Specialization			BS / 2008 / Civil Engineering, University of Florida	
Active registration number / state / expiration date			Professional Engineer No. 48230 / Louisiana / exp. 03/31/26; PE No. 75431 / Florida / exp. 02/28/27	
Year registered	2013 (FL); 2023 (LA)	Discipline	Civil	
Contract role(s) / brief description of responsibilities			Bridge Replacement Support	
Stephen is responsible for the capture, delivery, and management of complex and non-typical bridge projects, and the preparation of design calculations, plans, and contract documents. He has over 15 years of experience in the design and analysis of bridges, retaining walls, and miscellaneous transportation and infrastructure related structures. He has worked on projects throughout Florida, Georgia, Illinois, North Carolina, Tennessee, and Texas.			✓ Extensive structural design experience across the Southern U.S. ✓ Led design for numerous bridge over rail projects	
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
07/24 - 07/25	U.S. 30 Over Union Pacific Railroad Bridge, Clinton County, IA. Iowa DOT. Technical Advisor. Responsible for providing technical direction on the design of temporary support towers and superstructure jacking and for providing quality control review of the repair plans and design calculations. Michael Baker designed repairs for the columns on the U.S. 30 Bridge is a four span steel girder bridge, built in 1955, that carries two lanes of traffic over two Union Pacific Railroad (UPRR) lines in Clinton County, Iowa. Design included a temporary shoring tower to support the straddle beam during repairs, the preliminary jacking plans for transferring load to the shoring towers, and the monitoring limits used during construction.			
09/23 - Ongoing	2022-11 Statewide Bridge Delivery, Statewide, KY. Kentucky Transportation Cabinet. Senior Engineer. Responsible for performing QA/QC on bridge design calculations and plans. Michael Baker is serving as a major subconsultant for one of the bridge delivery contracts under the Kentucky Transportation Cabinet (KYTC) Statewide Bridge Delivery project. The projects are full-service including project management, surveying, structures design, hydraulics and drainage analysis, roadway design, plan development, geotechnical services, environmental, right-of-way (ROW) acquisition, and utility coordination and relocation. 9/14/2023			
04/13 - 09/18	S.R. 9 (I-95) Overland Bridge Replacement Design-Build, Jacksonville, FL. Archer Western Contractors, LLC. Engineer-of-Record. This project was Northeast Florida's most significant and largest design-build project at the time - the replacement of Overland Bridge and reconstruction of I-95 in downtown Jacksonville. The project added capacity, increased mobility, and improved safety along 2.56 miles of the city's most heavily traveled section of I-95, which also serves as a main hurricane evacuation route. After the project was awarded, the team continued to collaborate with FDOT and other stakeholders on additional innovations that saved FDOT approximately \$30 million in right-of-way costs and \$1 million in utility reimbursement expenses. Responsible for the design of multiple bridge components and miscellaneous structures, including the project's namesake Overland Bridge, a continuous, curved steel plate girder superstructure, high-level hammerhead piers, barrier-mounted non-standard overhead sign and DMS structures, and permanent and temporary retaining walls.			
12/21 - Ongoing	SR 60 Westbound from North of Spruce Street/ Tampa International Airport Interchange to North of Memorial Highway Design-Build. Florida DOT. QA and Peer Reviews. Michael Baker is providing design-build roadway improvements to the S.R. 60 Westbound roadway facilities including mainlines, collector-distributor (CD) roads, and ramps. Key responsibilities include structural quality control of the new Ramp B bridge over Ramp A5. The single span bridge has a significant skew of nearly 60 degrees and is supported by prestressed concrete beams. In addition to typical vehicular vertical clearances, the bridge also provides vertical clearance to the aviation transitional surface from Tampa International Airport.			
08/17 - 04/23	Shands Bridge and St. Johns County Design-Build Support, Various Locations, FL. FDOT - District Two. Lead Structural Engineer. Responsible for leading the structures design and plans production effort; coordinating with the geotechnical, survey, and hydraulics subconsultants; obtaining the USCG bridge permit; developing the design-build RFP package; and assisting with project management duties.			

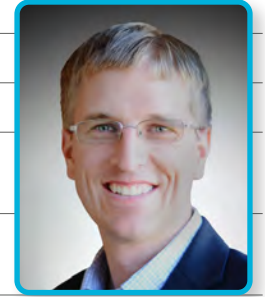




16. Staff Experience:

Firm employed by		Michael Baker International, Inc.			
Name	Jason Stith, PhD, PE, SE			Years of relevant experience with this employer	14
Title	Structural Engineer			Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization		PhD / 2010 / Civil Engineering / Structural Engineering; MBA / 2005 / University of Kentucky / Business Administration; MSCE / 2005 / Civil Engineering; BSCE / 2004 / Civil Engineering			
Active registration number / state / expiration date		PE No. 50186 / Louisiana / 09/30/2025; PE No. 28365/ Kentucky / 06/2026; SE No. 31863 / Oklahoma / 02/28/2027			
Year registered	2011 (KY); 2025 (LA)	Discipline	Civil, Structural		
Contract role(s) / brief description of responsibilities		Bridge Replacement - Design Support			





Dr. Stith has experience in many phases of bridge design and inspection. This experience includes preliminary and final design of prestressed concrete, steel plate, and steel box girders, as well as advance finite element analysis of the behavior of various bridge types. His expertise is in the behavior of horizontally curved I-girder bridges during construction. He is proficient in the use of MDX, CONSPAN, ANSYS, Abaqus, MIDASCivil, MicroStation, Visual Studio, Intel Fortran, as well as word processing, and spreadsheet software. Jason has made significant contributions to numerous major bridge projects touching every stage of a bridge's life cycle (design, construction, inspection, and maintenance). In addition, he has applied his Steel Bridge technical expertise as the AASHTO/NBSA Committee Chair for Steel Bridge Constructability and Erection.

- ✓ Design and analysis of 20+ bridges in some of the highest seismic regions of the county including US 51 Cairo Bridge
- ✓ Highly experienced designing and inspecting a wide range of bridge types

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
05/19 - 12/25 (est.)	U.S. 51 Cairo Bridge Replacement. Kentucky Transportation Cabinet. Lead Structural Engineer. Coordinating efforts to design over 1 mile of bridge including a new 900' tied arch span. The bridge is located in deep soft soils in a high seismic region. Facilitated decision making between owners and the federal highway administration and lead the preliminary sizing.
01/13 - 03/15	U.S. 51 Bridge over the Ohio River, Wickliffe, Kentucky and Cairo, Kentucky. Kentucky Transportation Cabinet. Civil Engineer. Performed preliminary vessel impact load calculations and performed preliminary seismic demand analysis. Michael Baker provided preliminary engineering and environmental services and evaluated bridge alternatives for a replacement bridge over the Ohio River between Wickliffe, Kentucky, and Cairo, Illinois, on U.S. 51. Services included preliminary bridge design, U.S. Coast Guard coordination , cost estimating and evaluation of alternatives.
04/07 - 06/20	Kentucky Lake and Lake Barkley Replacement Bridges. Kentucky Transportation Cabinet. Civil Associate. Coordinated with a team to lead the development of the advance situation folder for the Kentucky Lake bridge which is a 4002-foot multi-unit bridge that includes a 55-foot basket-handle tied arch main span. Additionally, developed the quantities and cost estimate for the main span 550-foot basket-handle tied arch for the advance situation folder of the Lake Barkley Bridge. Also responsible for performing vessel allision studies/navigational analyses.
01/11 - 06/11	Milton-Madison Bridge Replacement, Milton, Kentucky to Madison, IN. Indiana DOT. Civil Engineer. Assisted with the design review of this design-build 4 span 2,426-foot long truss bridge with a maximum span of 727-foot. Areas of review include the temporary bridge pier and sliding girder utilized in the bridge replacement completed with an innovative "truss sliding" methodology. Also responsible for performing vessel allision studies/navigational analyses. Michael Baker provided project management, design review, shop drawing review, construction management and inspection, public involvement, and environmental oversight, for the design-build reconstruction of the Milton-Madison Bridge, which carries U.S. 421 over the Ohio River. The bridge superstructure was replaced on the existing piers, using accelerated bridge construction techniques for lateral bridge sliding, allowing the bridge to remain open to traffic for all but 41 days during construction.

04/22 - Ongoing	Seawolf Parkway Reconstruction at Pelican Island Channel over Gulf Intracoastal Waterway, Pelican Island Channel, Gulf Intracoastal Waterway, Galveston County, Texas. Texas DOT. Civil Engineer. Responsible for Vessel Allision Study, Vessel Impact Study, Barge Impact Study, and Navigation Impact Study in coordination with the U.S. Coast Guard. Michael Baker is providing engineering services for the preparation of bridge layout alternatives and refinements for development for the Seawolf Parkway reconstruction project at the Pelican Island Channel. The scope of work includes vessel allision studies, coastal hydrodynamic analysis, drainage analysis and design for approach roadway sections, drainage studies, and roadway alignment.
02/14 - 03/14	Historic Winona Bridge over the Mississippi River, Winona, MN. Minnesota DOT. Civil Engineer. Provided design review of vessel impact load report on the existing Winona Bridge and compared the final results to independent calculations. Also responsible for performing vessel allision studies/navigational analyses. Michael Baker was the prime design consultant for rehabilitation and reconstruction of the historic Winona Bridge to carry Trunk Highway 43 over the Mississippi River. Constructed in 1941, the original bridge is a two-lane, 2,291-foot-long truss structure with a main span of 450 feet. The three-span cantilever through truss structure is being retrofit with numerous members being strengthened in order to remove the existing load posting, provide internal redundancy to the existing fracture critical members, and extend the bridge's life by 50 years. Additionally, the existing timber pile river pier foundations were investigated to verify structural and geotechnical capacity as well as the effects of scour of barge impacts. The bridge is eligible for the National Register of Historic Places, extensive coordination occurred with the Project Historian in order to ensure compliance with Section 106 of the National Historic Preservation Act of 1966, the client's Cultural Resources unit, and the State Historic Preservation Office.
11/20 - 02/21	Brent Spence Bridge Repairs, Covington, Kentucky to Cincinnati, Ohio. Kentucky Transportation Cabinet. Civil Engineer. Responsible for performing vessel allision studies/navigational analyses. Michael Baker responded to a truck accident and subsequent fire on the Ohio-bound lower deck of the fracture-critical Brent Spence Bridge, which carries approximately 160,000 vehicles per day on I-71 and I-75 over the Ohio River between Covington, Kentucky, and Cincinnati, Ohio. An immediate inspection to determine the extent of the structural damage caused by the 1500-degree Fahrenheit fire was followed by the design of the upper deck floor system steel, drainage, concrete, and electrical components and let as a repair contract within six days. Michael Baker continued to provide public information assistance and design review during construction until the bridge was re-opened to traffic a mere 41 days after it was closed.
03/20 - 10/23	S.H. 100/U.S. 64 Over Arkansas River, Contract No. 2143, Gore, OK. White Engineering Associates, Inc. Project Manager. Performed independent design validation for a seven-span plate girder bridge over the Arkansas River.
01/05 - 12/13	Downtown Louisville I-65 Bridge over the Ohio River Bridge Type Selection and Final Design, Louisville, KY and Jeffersonville, IN. Kentucky Transportation Cabinet. Engineer. Responsible for design review and compliance with design specifications and contract documents as the owner's representative. Michael Baker performed a bridge type study and prepared the conceptual design for cost estimates and engineering design for a new bridge over the Ohio River.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Alison Gonzalez, PE		Years of relevant experience with this employer	5
Title	Project Manager		Years of relevant experience with other employer(s)	12
Degree(s) / Years / Specialization		BS / 2007 / Civil Engineering		
Active registration number / state / expiration date		PE No. 47215 / LA / exp. 03/31/2027		
Year registered	2022	Discipline	Civil	
Contract role(s) / brief description of responsibilities		Roadway Engineering (Louisiana)		
Alison is a transportation engineer specializing in highway location and design and bicycle/pedestrian facility design projects. In these roles, she is responsible for the development of conceptual layouts and construction plan designs for highway design and location projects in Georgia. Her detailed responsibilities include roadway geometric design; drainage analysis and design; construction staging design; erosion, sedimentation & pollution control and monitoring plan preparation; signing & marking design; quantities and cost estimates; and construction and right of way plan preparation.			✓ 17+ years of relevant design experience ✓ Extensive experience in roadway design, including drainage design, construction staging, and erosion control	
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/23 - Ongoing		US 371: KCS RR Overpasses HBI, Webster Parish, LA. DOTD. Roadway Engineer. Responsible for the design and development of construction plans for the replacement of 3 bridges at two locations along US 371. First location is the replacement of a 3 span bridge over KCS Railroad in Sibley, LA. Project includes the replacement of the twin bridges for the site at Minden with a single wider structure. The new bridge will be prestressed concrete girder-type and uses LG 63 and LG 36 girders and fulfills KCS/CPKC crash-wall requirements. Michael Baker is currently evaluating phase construction and rehabilitation alternatives for the existing bridge at Sibley.		
05/23 - Ongoing		LA 30: EBR PL – I-10, East Baton Rouge, Iberville, and Ascension Parishes, LA. DOTD. Roadway Engineer. Responsible for the oversight of the Environmental Assessment (EA) of the widening of LA 30 from a 2-lane roadway to 4-lane roadway. Project is currently in Part 1 of the EA which main focus on traffic count/study/analysis along with some early environmental field screening, initial geometric improvements at existing 5 intersections, SUE services, and development of existing hydraulic flows for existing 6 bridge/culvert structures. Additional responsibilities include oversight of existing alignments along with existing right-of-way lines.		
08/24 - Ongoing		St. Augustine Road over Railroad Grade Separation. Georgia DOT. Project Manager. Responsible for overseeing and coordinating design team, coordinating with the railroad, and providing quality reviews for preliminary and final design for bridge plans to replace a railroad at-grade crossing with a grade separated bridge. The three span, 360-foot long bridge consisted of PSC beam superstructure supported by concrete intermediate bents on H-pile footings. The new bridge used staged construction to facilitate maintenance of traffic, accommodate pedestrian access, and provided MSE wall abutments to limit the required right of way. Services also include survey, traffic analysis, environmental studies, NEPA documentation, utility coordination, and drainage design.		
12/21 – Ongoing		SR 25 @ Savannah & Middle River. Scott Bridge Company, Inc. Lead Roadway Engineer. Responsible for preparing all roadway submittals as required by the Design Build Agreement (DBA), including preliminary plans, final plans, release for construction (RFC) plans, and NPDES permitting plans. Michael Baker provided the Design-Build Services to replace two bridges along SR 25, one over the Savannah River (James P. Houlihan Bridge) and one over Middle River. Traffic will be maintained on the existing bridges while the proposed bridges are constructed parallel to the existing bridges. A Section 4(f) evaluation is required for impacts to historic resources and public recreational land, along with consultations with USFWS and NOAA fisheries due to the presence of federally protected aquatic species.		
04/20 - Ongoing		Sea Island Road at Dunbar Creek. Georgia DOT. Lead Roadway Engineer. Responsible for concept design and report development, preliminary plans, right-of-way plans, and final plans for the replacement of an existing bridge located on CR 583/Sea Island Road over Dunbar Creek on St. Simons Island. The proposed bridge will be raised one foot to meet the 100-year flood elevation. An onsite detour will be utilized by constructing a temporary bridge to the north of the existing bridge where traffic will be routed during construction. The roadway approaches were reconstructed to provide two 12-foot lanes with 8-foot rural shoulders.		

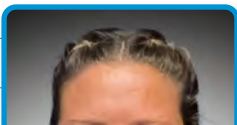


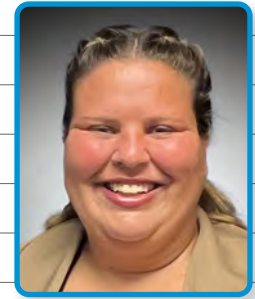


01/18 – Ongoing	I-16/I-95 General Engineering Consultant Services, Savannah, GA. <i>Georgia DOT. Subject Matter Expert.</i> Responsible for reviewing roadway plans and design calculations to ensure that the design is in compliance with the Design-Build Agreement (DBA). Michael Baker is providing owner's representative post-let general engineering consultant services on the I-16 at I-95 interchange improvements and I-16 widening, as part of GDOT's MMIP program. Services include final design review, submittal review, and owner's verification of design-builder-provided construction engineering and inspection services.
09/17 – 04/23	Bridge Bundle - SR 10 Loop EB & WB at Middle Oconee River (PI#0013715), SR 82 at Middle Oconee River (PI#0013819), Clarke and Barrow Counties, GA. <i>Georgia DOT. Assistant Project Manager.</i> Responsible for this 0.10-mile long bridge replacement project on the northwest side of the heavily traveled SR 10 loop. This bridge replacement project is a 4-lane divided rural freeway around the city of Athens, GA to replace the existing 288-foot long, twin steel beam bridges, with a 3-span 350-foot long PSC beam bridge over the river. Staged construction will be utilized by first building a portion of the new bridge in the median area while traffic is maintained on the existing bridges. SR 82 is a 0.30-mile long 2-lane rural bridge replacement project that will replace the existing 4-span 250-foot long steel beam bridge with a 270-foot long, 3-span PSC beam bridge on a curved roadway alignment over the river. ABC techniques and an off-site detour will be utilized by closing the roadway to minimize the construction schedule and disruption to the public. M&N is responsible for overall project management, concept design, public involvement, environmental, preliminary plans, right-of-way plans, final construction plans including full bridge design and bridge hydraulic studies on this bundle.
06/16 – Ongoing	Quacco Road Widening, Chatham County, GA. <i>Chatham County. Design Engineer.</i> Developed designs for the proposed Quacco Road Improvements project. The project includes roadway widening and operational improvements to intersections, drainage features, and pedestrian facilities along a 2.6-mile-long segment of this corridor beginning just east of the existing bridge over I-95 and terminating at the existing signalized intersection with US 17. In addition, ADA compliant sidewalks and a 10' shared use path will contribute to the connectivity for the existing commuter bus route of Chatham Area Transit (CAT). The project deliverables will include completion of concept design, preliminary plans, stormwater management, right-of-way plans and final plans.
05/14 – 04/19	Operational, Safety and Pedestrian Improvements along Maxham Road, Douglas County, GA. <i>Douglas County. Lead Engineer.</i> Developed designs for the construction of operational, safety and pedestrian improvements along Maxham Road from SR 6/Thornton Road to Tree Terrace Parkway. This project includes 0.5 miles of roadway improvement, stormwater management facilities, and sidewalks. The project deliverables include concept, preliminary and final construction plans, right of way plans and NPDES permitting.
11/01 – 10/15	SR 25 CO/Bay Street Widening, Chatham County, GA. <i>Chatham County. Design Engineer.</i> Responsible for the widening of 1.3 miles of an existing sub-standard four-lane facility to a four-lane section with raised median and urban shoulders. A high volume of pedestrian traffic and potentially historic properties along the project corridor complicates the project. One of the major purposes of this project was to improve pedestrian safety by providing accessible pedestrian facilities with connections to adjacent businesses, neighborhoods, parks, and bus facilities. The completed project will provide a safe and aesthetically pleasing gateway to Savannah from the west. The project deliverables include concept development and approval, preliminary and final construction plans, right of way plans and NPDES permitting.
03/19 - 08/20	Savannah River International Trade Park Traffic Improvements, Chatham County, GA. <i>Georgia Ports Authority (GPA). Project Manager and Engineer of Record.</i> Responsible for the design and development of preliminary construction plans, final construction plans, and NPDES permitting for the improvements at the Savannah River International Trade Park (SRITP) facility. The development and sale of approximately 5.3 million square feet of warehouse space within five separate land parcels at the SRITP will result in increased traffic volumes at the site. This project consists of a signal upgrade at the intersection of SR 21 and International Trade Parkway (ITP) and the construction of a roundabout at the ITP intersection with Little Hearst Parkway.
02/14 - 04/16	Sun Valley Drive Extension and Roundabout, Roswell, GA. <i>City of Roswell. Lead Roadway Engineer.</i> Responsible for conceptual design, preliminary and final construction plans, right of way plans, and NPDES permitting for the construction of the Sun Valley Drive Extension to connect with Warsaw Road. This project includes 0.6 miles of roadway improvement, along with a roundabout, regional stormwater management facilities, a shared use path, sidewalks, streetscaping and lighting.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.			
Name	Alexis Harrouch, EI			Years of relevant experience with this employer	3
Title	Highway Designer			Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization			BS / 2020 / Civil Engineering, Louisiana State University		
Active registration number / state / expiration date			Engineer Intern 34742 / LA		
Year registered	2020	Discipline	N/A		
Contract role(s) / brief description of responsibilities			Roadway Design Support		





Ms. Harrouch will serve as a transportation/roadway designer responsible for the development of horizontal and vertical alignments, roadway hydraulics, development of 3D design models, and development of construction plans.

- ✓ Experience working side-by-side with Daniel and Shalin on similar, relevant projects
- ✓ Familiar with bridge over rail projects from her work on the US 371 KCS Railroad Overpasses project and the New Orleans Rail Gateway program

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
10/22 - Ongoing	US 371: KCS Railroad Overpasses HBI, Webster Parish, LA. DOTD. Transportation/Roadway Designer. Responsible for the horizontal layout of US 371 for the replacement of the existing bridge at Sibley, LA. Additional responsibilities include the develop of construction plans that meet DOTD and KCS RR requirements. Performed quantity take-offs and developed quantity box sheets for Final Plans. Project includes the replacement of the twin bridges for the site at Minden with a single wider structure. The new bridge will be prestressed concrete girder-type and uses LG 63 and LG 36 girders and fulfills KCS/CPKC crash-wall requirements. Michael Baker is currently evaluating phase construction and rehabilitation alternatives for the existing bridge at Sibley
10/22 - Ongoing	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program - District 07, LA. DOTD. Roadway Designer. Supported the development of construction plans for 12 Off-System Bridge replacement locations for the five parishes in District 07. This project program requires Michael Baker to deliver 12 bridge replacements within the \$30.3 million dollars with allocated for District 07. Currently, Michael Baker has submitted stamped final plans for two projects (4 bridges/ culverts) while other six projects are at various final submittal stages. There are a total of 12 bridges and culverts among the eight projects under this contract.
10/22 - Ongoing	LA 30: EBR P/L - I-10, Iberville and Ascension Parishes, LA. DOTD. Roadway Designer. Responsible for the layout of the existing alignment along with determining the apparent row along the corridor based off as-builts and provided GIS parcel information from both Ascension and Iberville Parishes. Project limits have been extended an additional 5 miles to include the environmental study along the corridor in East Baton Rouge Parish. Additional responsibilities include the delineation of drainage area for several cross structures (bridge/box culverts/culverts) along the corridor along with determining the existing flows for those structures.
11/22 - Ongoing	New Orleans Rail Gateway Environmental Impact Statement, Jefferson and Orleans Parishes, LA. DOTD. Civil Associate. Responsible for finding information related to railroad work and the standards needed to design and build a railroad. Michael Baker is providing environmental and engineering services to develop an environmental impact statement for NORG, the fourth-largest freight and passenger rail gateway in the U.S. Services include project management, review of previous studies, environmental resources investigations, geographic information system development, mapping, rail and roadway travel demand modeling, alternatives analyses, rail and roadway conceptual design, cost estimates, document preparation, stakeholder and agency coordination, and extensive public outreach.
10/22 - 05/23	Barksdale AFB Entrance Road and Gate Complex, Design-Build, Bossier Parish, LA. NAVFAC. Transportation/Roadway Designer. Responsible for the quantity takeoff and development of construction plans for contractor on a design-build project for new entrance roads for Barksdale AFB. The project consists of the design and construction of an extension of an existing state-owned highway, LA 1267, along with a new multi-lane roundabout. The new roadway will be a 4-lane divided highway entrance into the Barksdale AFB.

11/22 - Ongoing	New Orleans Rail Gateway - Avondale PEL Study, Jefferson Parish, LA. DOTD. Civil Associate. Responsible for developing preliminary quantities and creating a preliminary cost estimate. Michael Baker is providing operations, engineering, and environmental studies and preparing a PEL study to evaluate the consolidation, road-over-rail grade separation, or closure of four at-grade highway-rail crossings (Live Oak Boulevard, Willswood Lane, George Street, and Avondale-Garden Road). For the project, Michael Baker is performing project management, solicitation of views, secondary-source environmental resources inventory, geographic information system (GIS) mapping, freight rail operations forecasting and crossing occupancy time analyses, roadway traffic and crash analyses, purpose and need, roadway/bridge conceptual design, cost estimates, alternatives analyses, stakeholder and agency coordination, and public outreach.
09/24 - Ongoing	I-10 Mobile River Bridge and Bayway Project Management, Mobile, AL. Alabama DOT. Civil Associate. Providing roadway design support. Michael Baker is providing project management with oversight responsibilities for all aspects of the Mobile River Bridge and Bayway Project. The project involves reconstruction of I-10 through downtown Mobile, Alabama, and across the Mobile Bay, with a total length of approximately 10 miles. The project includes a new two-tower cable stayed bridge over the Mobile River, and replacement of the seven-mile-long I-10 Bayway Bridge.
06/23 - Ongoing	Bridge Replacement on Sea Island Road over Dunbar Creek, St. Simons Island, GA. Georgia DOT. Civil Associate. Responsible for updating linework and developing boundary lines while looking at the standard plans for GDOT. This 0.2-mile-long project is replacing the Sea Island Road Bridge over Dunbar Creek in St. Simons Island. An on-site temporary detour bridge will be used to close the existing bridge and construct a new 360-foot-long, nine-span prestressed concrete beam bridge in the current location. The roadway approaches will be reconstructed to tie into the existing road on both sides of the proposed bridge with two 12-foot lanes and rural shoulders. Right-of-way and easement will be acquired from multiple parcels. Services include survey, concept development, preliminary and final design, bridge design, traffic analysis, environmental studies, NEPA documentation, public involvement, utility coordination, and hydraulics and drainage design.
01/21 - 09/22	I-49 Connector, Lafayette, LA. Lafayette Parish. Engineer Intern. Responsible for the development of preliminary typical sections, cross sections and roadway models using Microstation and Inroads Select Series 2. Developed vehicle turning move layouts with the use of Transoft AutoTurn along with participating in the development of geometry design for the project. Additional responsibilities included roundabout design in the core area along with the required tapers per DOTD Standards.
07/23 - Ongoing	Mickens Road for MOVEBR, East Baton Rouge Parish, LA. City/Parish of Baton Rouge. Engineer Intern. Responsible for the development of the preliminary surface, drainage, and hydraulics report. The drainage was designed to the latest DOTD Hydraulics Manual and City/Parish of Baton Rouge standards and criteria. A preliminary surface was created using LIDAR downloaded from LSU Atlas and The National Map Downloader from USGS. The preliminary drainage was developed using DOTD Hydrowin and Excel.
01/23 - Ongoing	Ardenwood-Lobdell Connector for MOVEBR, East Baton Rouge Parish, LA. City/Parish of Baton Rouge. Engineer Intern. Responsible for performing independent technical review of roadway plans at each milestone submittal for the new Ardenwood-Lobdell Connector. The connector is a 2-lane roadway with curb & gutter along with intersection improvements at Lobdell Ave. and Ardenwood Rd. Project includes accommodations for complete streets with pedestrian sidewalks and bikepaths.
01/24 - 06/24	SR 25 - Grants Ferry to SR 471, Flowood, Mississippi. MDOT. Roadway Designer & Engineer Intern. Michael Baker will develop final Right of Way Plans for the widening of SR-25 from Grants Ferry Road to SR 471 from 4 lanes to 6 lanes, approximately 3 miles. Our team is designing this project to the latest standards and criteria of MDOT and use the latest version of OpenRoads Designer. All unsignalized crossovers will be converted to directional crossovers. Responsible for developing vehicle turning movement layouts with the use of Transoft AutoTurn. Additional responsibilities include creating preliminary baselines, profiles, cross sections, and 3D roadway models through the use of OpenRoads Designer.
07/23 - 09/23	SR 35 - Additional Lanes from CR-62 to CR-124 through the Town of Section, Jackson County, Alabama. Alabama DOT. Design Engineer & Engineer Intern. Michael Baker provided engineering services to widen and add lanes to State Route 35 through the town of Section, Alabama. Michael Baker's services included the preparation of Right of Way plans, drainage and stormwater design, floodplain studies, erosion and sediment control plans, traffic control plans, construction cost estimates, and final design. Responsible for the development of final baselines, profiles, drainage profiles, and drainage cross sections through the use of Microstation and InRoads Select Series 2. The drainage profiles and drainage cross sections were designed to the latest ALDOT standards and criteria.
10/22 - Ongoing	Airline Highway (US 61) - North for MOVEBR, East Baton Rouge Parish, Louisiana. City/Parish of Baton Rouge. Engineer Intern. Responsible for the delineation of drainage areas along with using the DOTD Hydraulics Manual and HYDRWIN software to develop the flows for both Jones Creek and Hurricane Creek that cross along the project limits. Additional responsibilities include checking the required hydraulics for the addition of an additional through lane in each direction and the impacts on existing parallel drainage along the corridor. The project is currently in the NEPA phase and once environmentally clear, required drainage structures will be designed for the future improvements.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.	
Name	Jacob Rish, EI	Years of relevant experience with this employer	2
Title	Engineer Intern	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS / 2024 / Civil Engineering, Louisiana State University	
Active registration number / state / expiration date		EI No. 35857 / Louisiana / 03/31/27	
Year registered	2024	Discipline	N/A
Contract role(s) / brief description of responsibilities		Roadway Design Support	



Mr. Rish will serve as a transportation/roadway designer responsible for the development of horizontal and vertical alignments, roadway hydraulics, development of 3D design models, and development of construction plans.

✓ Familiar with bridge over rail projects from his work on the US 371 KCS Railroad Overpasses project

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/24 - Ongoing	US 371: KCS Railroad Overpasses HBI, Webster Parish, LA. DOTD. Transportation/Roadway Designer. Responsible for the development of construction plans that meet DOTD and KCS RR requirements. Performed quantity takeoffs and worked on summary of quantity box sheets along with revising typical sections to show superelevation rate tables and profiles. Project includes the replacement of the twin bridges for the site at Minden with a single wider structure. The new bridge will be prestressed concrete girder-type and uses LG 63 and LG 36 girders and fulfills KCS/CPKC crash-wall requirements. Michael Baker is currently evaluating phase construction and rehabilitation alternatives for the existing bridge at Sibley.
01/24 - Ongoing	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program - District 07, LA. DOTD. Transportation/Roadway Designer. Participated in the development of construction plans for 12 Off-System Bridge replacement locations for the five parishes in District 07. Performed quantity takeoffs for the development of summary of quantity sheets. Assisted with creating typical section sheets along with helping create the embankment widening plans for guardrail. This project program requires Michael Baker to deliver 12 bridge replacements within the \$30.3 million dollars with allocated for District 07. Currently, Michael Baker has submitted stamped final plans for two projects (4 bridges/culverts) while other six projects are at various final submittal stages. There are a total of 12 bridges and culverts among the eight projects under this contract.
11/24 - Ongoing	CR 32: Additional Lanes on Three Notch-Kroner Road, Mobile County, AL. Alabama DOT. Transportation/Roadway Designer. Laid out drainage structures and created drainage profiles and drainage cross-sections. Michael Baker provided engineering services to widen and add lanes CR 32 in Mobile County, Alabama. Responsible for the development of construction plans that meet ALDOT standards.
11/24 - Ongoing	SR 35 - Additional Lanes from CR-62 to CR-124 through the Town of Section, Jackson County, AL. Alabama DOT. Engineer Intern/Roadway Designer. Michael Baker provided engineering services to widen and add lanes to State Route 35 through the town of Section, Alabama. Michael Baker's services included the preparation of Right of Way plans, drainage and stormwater design, floodplain studies, erosion and sediment control plans, traffic control plans, construction, cost estimates, and final design. Responsible for the development of final baselines, profiles, drainage profiles, and drainage cross sections through the use of Microstation and InRoads Select Series 2. The drainage profiles and drainage cross sections were designed to the latest ALDOT standards and criteria

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Haley Stevens, EI		Years of relevant experience with this employer	1
Title	Civil Associate - Construction Services		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS / 2025 / Civil Engineering, Louisiana State University		
Active registration number / state / expiration date		Engineer Intern No. 36075 / Louisiana / 09/30/27		
Year registered	2025	Discipline	N/A	
Contract role(s) / brief description of responsibilities		Roadway Design Support		
Haley is a recent college graduate specializing in roadway design and construction engineering services, having supported our team on numerous DOTD IDIQ task orders and standalone projects.			✓ Familiar with bridge over rail projects from her work on the US 371 KCS Railroad Overpasses project	
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
06/25 - Ongoing	US 371: KCS Railroad Overpasses HBI, Webster Parish, LA. DOTD. Civil Associate. Responsible for the development of construction plans that meet DOTD and KCS RR requirements. Project includes the replacement of the twin bridges for the site at Minden with a single wider structure. The new bridge will be prestressed concrete girder-type and uses LG 63 and LG 36 girders and fulfils KCS/CPKC crash-wall requirements. Michael Baker is currently evaluating phase construction and rehabilitation alternatives for the existing bridge at Sibley.			
08/25 - Ongoing	I-10 Mobile River Bridge and Bayway Project Management, Mobile, AL. Alabama DOT. Civil Associate. Responsible for the development of construction plans that meet ALDOT requirements. Michael Baker is providing project management with oversight responsibilities for all aspects of the Mobile River Bridge and Bayway Project. The project involves reconstruction of I-10 through downtown Mobile, Alabama, and across the Mobile Bay, with a total length of approximately 10 miles. The project includes a new two-tower cable stayed bridge over the Mobile River, and replacement of the seven-mile-long I-10 Bayway Bridge.			
08/25 - Ongoing	Three Notch Road Corridor Improvements, Mobile, AL. Mobile County Engineering Department. Civil Associate. Michael Baker is providing design and engineering services for corridor improvements to Three Notch Road in Mobile County. It is performing preliminary investigations and public involvement, preparing environmental documents, right-of-way maps, coordinating utility relocations, and developing plans for additional lanes for approximately 1.22 miles along Three Notch Road. Michael Baker is also providing agency coordination to manage geotechnical work and providing traffic signal design plans.			
06/25 - Ongoing	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program – District 07, LA. DOTD. Civil Associate. Participated in the development of construction plans for 12 Off-System Bridge replacement locations for the five parishes in District 07. This project program requires Michael Baker to deliver 12 bridge replacements within the \$30.3 million dollars with allocated for District 07. Currently, Michael Baker has submitted stamped final plans for two projects (4 bridges/ culverts) while other six projects are at various final submittal stages. There are a total of 12 bridges and culverts among the eight projects under this contract.			
06/25 - Ongoing	IDIQ Contract for CE&I Services in District 61. DOTD. Civil Associate. Supporting the Project Manager/Project Engineer in the delivery of comprehensive CE&I and staff augmentation services.			
06/25 - Ongoing	IDIQ Contract for CE&I Services Statewide with Majority of Work in District 03. DOTD. Civil Associate. Supporting the Project Manager/Project Engineer in the delivery of comprehensive CE&I and staff augmentation services.			





16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Marcela Trochez		Years of relevant experience with this employer	3
Title	Civil Associate		Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization			BS / 2022 /Civil Engineering, University of Louisiana at Lafayette	
Active registration number / state / expiration date			N/A	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Roadway Design Support	
Ms. Trochez will support roadway designs by assisting with the development of horizontal and vertical alignments, roadway hydraulics, development of 3D design models, and development of construction plans. In addition to her proficiency in roadway and drainage design, she also offers specialized skills in hydraulic and hydrological (H&H) modeling software such as HEC-HMS, HEC-RAS, and QGIS.			✓ Familiar with bridge over rail projects from her work on the US 371 KCS Railroad Overpasses project	
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
10/22 - Ongoing		US 371: KCS RR Overpasses HBI, Webster Parish, LA. DOTD. Transportation/Civil Associate. Responsible for the development of roadway construction preliminary and final plans that meet DOTD and KCS RR requirements for the design and replacement of three bridges crossing over KCS railroad tracks. Responsible for development of typical sections, horizontal alignments and vertical alignments for both locations and their incorporation into roadway construction sheets, such as plan and profile sheets, geometric layout sheets, and sequence of construction sheets. Additional responsibilities included the development of existing and proposed drainage maps, as well as the design of a new sub-surface drainage system. Moreover, a cost estimate was performed for both sites, in which quantities were periodically updated in excel if anything in the design had changed. Software programs used for the roadway design sheets were Microstation V8I and InRoads V8.11. The software program used for the drainage design was the DOTD hydraulics computer software HYDR WIN 2009.		
10/22 - 05/23		Barksdale AFB Entrance Road and Gate Complex, Design-Build, Bossier Parish, LA. NAVFAC Southeast. Transportation/ Civil Associate. Responsible for the development of roadway construction plans for contractor on a design-build project for new entrance roads for Barksdale Air Force Base (AFB), which included drawing typical sections, creating horizontal and vertical alignment, and generating pavement quantities. Additional tasks involved the detailing of each construction sheet such as plan and profile, geometric layout, existing and proposed drainage maps, suggested sequence of construction, and signing and striping sheets. The project consists of the design and construction of an extension of an existing state-owned highway, LA 1267, along with a new multi-lane roundabout. The new roadway will be a 4-lane divided highway entrance into the Barksdale Air Force Base (AFB).		
10/22 - Ongoing		Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program – District 07, LA. DOTD. Transportation/ Civil Associate. Responsible for supporting the development of preliminary and final construction plans for 12 Off-System Bridge replacement locations for the five parishes in District 07. The tasks performed for this project involved site visits, generating typical sections, horizontal and vertical alignment, roadway modeling, roadway quantities, and hydraulic support. The type of roadway construction sheets created for each of the bridge sites included the title, typical section, summary of quantities, plan and profile, reference points and benchmark elevations, embankment widening and guardrail, geometric layout, temporary erosion control, suggested sequence of construction, detour and cross-section sheets. MicroStation V8I and Inroads V8.11 were the software used to generate all roadway design for each bridge site. Additional tasks involved meeting with the client at plan in hand meetings to discuss the proposed plans and address any concerns and comments they had. This project program requires Michael Baker to deliver 12 bridge replacements within the 30.3 million dollars allocated for District 07. Currently, Michael Baker has submitted stamped final plans for two projects (4 bridges/culverts) while other six projects are at various final submittal stages. There are a total of 12 bridges and culverts among the eight projects under this contract.		





09/23 - Ongoing	Mickens Road (Hooper Road - Joor Road) - MOVEBR, East Baton Rouge Parish, LA. <i>City/Parish of Baton Rouge. Transportation/ Civil Associate.</i> The project involves improvements to Mickens Road, which is a two-lane roadway with not shoulder or pedestrian facilities. The potential improvements involve the widening of the first half of the road from a two-lane to a three-lane road with pedestrian facility and a closed drainage system. The second half of the road will potentially be a two-lane road with paved shoulders and an open drainage design. Michael Baker in charge of providing a preliminary drainage study. Civil Associate responsible for performing the existing drainage analysis and contributing to the proposed drainage design, each by following the guidelines of the DOTD Hydraulic Manual and the city/parish of Baton Rouge Standards and Criteria. ArcGIS Pro, LSU Atlas, and The National Map downloaders from USGS were resources used to obtain preliminary LIDAR data and Surface data to begin the preliminary existing and proposed drainage analysis. Additional responsibilities included writing a hydrology and Hydraulic report detailing the data analysis process and stating the results of both the existing drainage conditions and the proposed drainage design recommendations.
12/23 - Ongoing	SR 15 Pontotoc Feasibility Study. <i>MDOT. Transportation/ Civil Associate.</i> Michael Baker is providing traffic analysis, safety analysis, and access management evaluation to identify solutions that will determine the needs for widening of SR 15 from US 278/MS 6 to SR 41/Main Street in Pontotoc, Mississippi to a four-lane boulevard section. The corridor is currently a mix of two-lane, three-lane (with center turn lane), and five-lane (with a center turn lane) sections. The Feasibility study includes desktop and field data collection, traffic analysis, safety analysis, environmental and planning analysis, conceptual traffic engineering, development and high-level design including two build concepts for 26 intersections along the road. Civil Associate responsible for supporting the development of two conceptual alternative designs to improve the access management along the corridor and each of the 26 intersections to enhance the Level of Service (LOS) at location of interest. Followed the MDOT Roadway Design Manual and Design Standards in the design of each intersection and median openings to meet geometric requirements as well as access management. Each intersection and median opening were furthered analyzed using TRANSOFT Auto Turn software to perform auto-turn movements of design vehicles such as a WB-67 to determine if further changes were necessary to clear the auto-turn movements. Open Roads Design Software was used for the design.
07/22 - Ongoing	New Orleans Rail Gateway - Avondale PEL Study, Jefferson Parish, LA. <i>DOTD. Transportation/ Civil Associate.</i> Michael Baker is providing operations, engineering, and environmental studies and preparing a planning and environmental linkages (PEL) study to evaluate the consolidation, roadover-rail grade separation, or closure of four at-grade highway-rail crossings (Live Oak Boulevard, Willswood Lane, George Street, and Avondale-Garden Road). For the project, Michael Baker is performing project management, solicitation of views, secondary-source environmental resources inventory, geographic information system (GIS) mapping, freight rail operations forecasting and crossing occupancy time analyses, roadway traffic and crash analyses, purpose and need, roadway/bridge conceptual design, cost estimates, alternatives analyses, stakeholder and agency coordination, and public outreach. Civil Associate was responsible for the development of the conceptual roadway and bridge alternative analysis considering the DOTD Roadway Design Guidelines and Complete Streets Policy, which involved the generation of multiple alternative horizontal and vertical alignments, and typical sections. The alternatives of choice were further conceptualized and analyzed by meeting sight distance requirements and using TRANSOFT Auto Turn software to analyze auto-turn movements of design vehicles such as a WB-67 to determine whether curve widening was necessary at certain locations. Curve Widening was set in place at multiple locations in the conceptualized design following the AASHTO Green Book guidelines. Final exhibits were put together for client review
07/23 - 09/23	SR-35 Widening and Additional Lanes from CR-62 (Williams St.) To North of CR-124 (Scenic Dr.) through Jackson County, AL. <i>Alabama DOT. Civil Associate.</i> Michael Baker provided engineering services to widen and add lanes to State Route 35 through the town of Section, AL. Michael Baker's services included the preparations of right-of-way plans, drainage and stormwater design, floodplain studies, erosion and sediment control plans, traffic control plans, construction cost estimates, and final design. Civil Associate Responsible for supporting development of construction plans. Responsibilities included the development of typical sections, horizontal and vertical alignment, drainage and roadway cross-sections by using MicroStation V8i and Inroads software.
10/24 - Ongoing	New Orleans Rail Gateway - Jefferson Highway Rail Crossing Relocation EA, Jefferson Parish, LA. <i>DOTD. Civil Associate.</i> Michael Baker is providing operations, engineering and environmental studies and preparing an environmental assessment (EA) for improvements to two at-grade highway-rail crossings along Jefferson Highway (US 90) in Jefferson Parish, between the Ochsner Health Foundation Hospital and Monticello Avenue. For the project, Michael Baker is performing solicitation of views (SOV) including Native American government-to-government coordination through FRA, environmental resources investigations, geographic information system (GIS) mapping, freight rail operations forecasting and crossing occupancy time analyses, roadway traffic and crash analyses, rail and roadway/bridge conceptual design, cost estimates, alternatives analyses, stakeholder and agency coordination, and public outreach.
09/25 - Ongoing	Three Notch Road Corridor Improvements, Mobile, AL. <i>Mobile County Engineering Department. Civil Associate.</i> Michael Baker is providing design and engineering services for corridor improvements to Three Notch Road in Mobile County. It is performing preliminary investigations and public involvement, preparing environmental documents, right-of-way maps, coordinating utility relocations, and developing plans for additional lanes for approximately 1.22 miles along Three Notch Road. Michael Baker is also providing agency coordination to manage geotechnical work and providing traffic signal design plans.

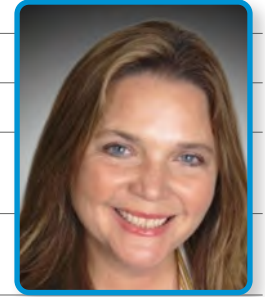
16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Darrel Williamson		Years of relevant experience with this employer	< 1
Title	Designer I		Years of relevant experience with other employer(s)	21
Degree(s) / Years / Specialization			ITI Baton Rouge, LA Drafting / 2003-2004 / Civil & Architectural Drafting	
Active registration number / state / expiration date			N/A	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Roadway Design Support	
Darrel has more than 20 years experience in the design and drafting of many different transportation / civil engineering projects. Darrel is proficient in CIVIL 3D, as well as MicroStation Inroads & Open Roads. Mr. Williamson will take a lead role in construction plan preparation with an emphasis on CADD conformity to DOTD standards while supporting design engineers in constructing corridor models, roadway layout geometry and drainage design.			✓ 20+ years CADD drafting experience ✓ Proficient in MicroStation Open Roads ✓ Experienced in DOTD and local government sponsored projects	
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/25 – 02/26		LA 182 @ Duchamp Rd. Intersection Improvements, Lafayette, LA. DOTD. Lead CADD Technician. This project consisted of intersection improvements to an rural intersection near an at grade railroad crossing. Mr. Williamson assisted project engineer in designing intersection geometry including turning templates, produced final construction documents including typical sections, plan & profile sheets, drainage maps, geometric details, sequence of construction and cross sections. Construction documents were produced in MicroStation in accordance with DOTD CADD conform requirements.		
07/25 – 02/26		Mickens Road from Hooper Road to Joor Road., Baton Rouge, LA. MOVEBR. Lead CADD Technician. This project consisted of roadway capacity improvements for a 3 mile section of an existing road which is half urban and half rural. Prepared open house exhibits using LiDAR and available digital aerial photography, set up CADD seed files, converted raw topographic survey data into georeferenced base drawings, modeled design roadway templates, produced full set of preliminary construction drawings produced in MicroStation in accordance with DOTD CADD conform requirements.		
07/20 – 06/22		South Choctaw Drive from North Flannery to Central Thruway., Baton Rouge, LA. MOVEBR. Lead CADD Technician. This project consisted of roadway capacity improvements for a 1.3 mile section of urban roadway. Generated existing and proposed grade profiles, assisted project engineer with drainage design and geometry for proposed roadway and sidewalks, designed utility conflicts mitigations for storm drainage and sidewalks, generated final construction documents including typical sections, plan & profile sheets, drainage maps, geometric details, striping and signage plan and details, sequence of construction and cross section drawings produced in ACAD Civil 3D in accordance with MOVEBR CADD requirements.		
02/16 – 08/20		Mall of Louisiana Blvd., Baton Rouge, LA. MOVEBR. Lead CADD Technician. This project consisted of roadway and bridge improvements for a new 1 mile urban roadway corridor which also included a railroad underpass. Assisted the project engineer with drainage and geometric design, assisted with production of final construction documents plan & profile sheets, bridge plan section and details, geometric details, joint layout and graphical grade sheets. Construction documents were produced in MicroStation in accordance with MOVEBR CADD requirements.		

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.			
Name	Celina Sumrall, PE, PTOE			Years of relevant experience with this employer	5
Title	Transportation Project Manager			Years of relevant experience with other employer(s)	25
Degree(s) / Years / Specialization		MSCE / 2003 / Civil & Environmental Engineering, University of Mississippi; BSCE / 1995 / Civil Engineering, University of Mississippi			
Active registration number / state / expiration date		PE No. 48429 / LA / exp. 03/31/26; PE No. 14930 / MS / exp. 12/31/27; PTOE No. 5124 / exp. 08/03/27; Traffic Engineering Process & Report Modules 1-3 / No Expiration Date			
Year registered	2001 (MS); 2023 (LA)	Discipline	Civil		
Contract role(s) / brief description of responsibilities		Traffic Engineering Support			





Celina joined Michael Baker after an extensive career with MDOT. She has experience in the transportation field and project management at multiple levels having served as a materials field engineer, assistant state maintenance engineer, state maintenance engineer, area traffic engineer, and Intelligent Transportation Systems engineer. Prior to her time at the MDOT, she worked for the Mississippi Department of Environmental Quality as an environmental EIT and environmental engineer specializing in air permitting and compliance.

- ✓ Trained in TEPR Modules 1-3
- ✓ 30+ years of roadway, traffic, and environmental engineering experience for state agencies

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
05/23 - Ongoing	US 371: KCS RR Overpasses HBI, Webster Parish, LA. DOTD. Roadway Engineer. Responsible for the design and development of construction plans for the replacement of 3 bridges at two locations along US 371. First location is the replacement of a 3 span bridge over KCS Railroad in Sibley, LA. Project includes the replacement of the twin bridges for the site at Minden with a single wider structure. The new bridge will be prestressed concrete girder-type and uses LG 63 and LG 36 girders and fulfills KCS/CPKC crash-wall requirements. Michael Baker is currently evaluating phase construction and rehabilitation alternatives for the existing bridge at Sibley.
09/25 - Ongoing	Washington Avenue State Highway 609 Gateway Project, Jackson County, MS. Jackson County Board of Supervisors. Traffic Engineer. Provided assistance on the traffic signing and traffic stripe. Michael Baker is providing comprehensive engineering and consulting services for the Washington Avenue State Highway 609 Gateway Project in Jackson County, Mississippi. The team is delivering improvements along a 2.75-mile corridor from US Highway 90 to Interstate 10, focusing on enhancing safety, mobility, and aesthetics for motorists and pedestrians.
04/24 - 07/24	SR 25 - Grants Ferry to SR 471. MDOT. Roadway & Traffic Engineer. Served as traffic engineer responsible for evaluating traffic signs, signals, and ITS components along SR 25. Supported design efforts related to highway widening from four to six lanes, including modifications to four existing signals and design of one new signal. Contributed to interchange redesign incorporating roundabouts at SR 471 exit ramps. Also worked on the signal, intelligent transportation services (ITS), and signing portions of the project.
10/24 - Ongoing	MDOT Railroad Diagnostic Reviews. MDOT. Project Manager. Served as project manager and traffic engineer for statewide railroad diagnostic surveys. Responsible for coordinating and executing field assessments of approximately 140 at-grade intersection crossings for MDOT. Oversaw data collection, safety evaluations, and reporting.
10/24 - Ongoing	SR 589 at Purvis Oloh Road. MDOT. Project Manager. Served as project manager overseeing feasibility study and preliminary conceptual design for an intersection improvement project. Responsible for managing scope, schedule, and coordination of technical deliverables.
11/21 - 06/22	Turning-Movement, Roundabout, and Road-Volume Counts, Statewide, MS. MDOT. Assistant Project Manager. Responsible for coordination of scheduling, data collection, preparation and data processing, QC/QA, report preparation, budget management, client coordination, and road volume traffic counts. Michael Baker performed turning movement, roundabout, and road volume traffic counts throughout the state. Michael Baker's services also included intersection delay studies for specific intersections and report preparation.

07/21 - 03/22	I-59 and US-11 Interchange Feasibility Study, Forrest County, MS. MDOT. Traffic Engineer. Assisted the Project Manager and traffic modeling team with traffic counts, traffic queue analysis, field observations. and any other traffic field operations as needed during the course of the project. Michael Baker prepared a feasibility study for the I-59 and US-11 Interchange, located in Forrest County, Mississippi, near the southwest boundary of Hattiesburg. The feasibility study included desktop and field data collection, traffic analysis, safety analysis, environmental and planning analysis, conceptual engineering design, and planning level cost estimates, as well as agency coordination and stakeholder outreach as required to successfully deliver 3 interchange concepts.
05/23 - 02/24	U.S. 90 Ocean Springs Intersection Feasibility Study, Ocean Springs, MS. City of Ocean Springs. Transportation Engineer. Performed the safety analysis and report for the project. Collaborated with the other traffic and planning engineers to develop the recommendations for the study. Michael Baker completed an intersection feasibility study for the U.S. Highway 90 (U.S. 90) intersections with Washington Avenue and Martin Luther King/Vermont Avenue for the City of Ocean Springs, Mississippi. The goal of the study was to deliver multi-modal intersection improvement concepts for each study location. The need for the study was due to the number of pedestrians, cyclists, and golf cart users traveling to the popular tourist area of downtown Ocean Springs.
10/22 - 10/22	U.S. 51 - Lake Harbor Intersection Improvements, Ridgeland, MS. City of Ridgeland. Traffic Engineer. Prepared the traffic signal adjustments related to the addition of a turn lane at the intersection of US 51 and Lake Harbour Drive. Michael Baker provided comprehensive services for an environmental study and intersection improvements at the U.S. 51 and Lake Harbor Drive intersection to enhance safety, traffic flow, and overall functionality. The team conducted a thorough topographic survey and gathered precise data on existing conditions to inform design decisions. Environmental considerations included conducting high-level field reconnaissance to assess potential hazardous material sites as well as a threatened and endangered species survey and coordinated clearance with the U.S. Fish and Wildlife Service.
09/23 - 04/24	S.R. 15/S.R. 485 Feasibility Study, Jackson, MS. MDOT. Project Manager. Serving at the project manager and the traffic engineer for the project to develop conceptual roundabout plans and a feasibility report to support the installation of a roundabout at this location. Michael Baker prepared a transportation feasibility study for the intersection of State Highway 15 and State Highway 485 to determine the constructability of a roundabout at the intersection in Neshoba County, Mississippi. The key components of the project included preliminary design, field survey, and the feasibility study with a conceptual roundabout design. Tasks also included topographic study, traffic analysis, cost-benefit analysis, environmental studies, and roadway plan development.

16. Staff Experience:

Firm employed by		Vectura Consulting Services, LLC	
Name	Kristen Farrington, PE, PTOE		Years of relevant experience with this employer
Title	Project Traffic Engineer		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		B.S. / 2013 / Civil Engineering	
Active registration number / state / expiration date		PE No. 0042785 / Louisiana / exp 03/2027	
Year registered	2018	Discipline	Civil
Contract role(s) / brief description of responsibilities		Project Engineer for Traffic Study	
Kristen has performed numerous Stage 0 and other traffic design studies for DOTD. She fully understands the National Environmental Policy Act (NEPA) process as it relates to transportation engineering studies and can deliver traffic studies for federal and state approval. Kristen is also an expert at MicroStation as well other traffic analysis software. She took formal GIS training and can utilize the GIS software to present crash data and other environmental information.			
			✓ Supported Laurence and the Vectura Team on numerous traffic engineering projects for DOTD and various LPAs
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/23 - 07/23	Morgan City Sidewalks & Shared Use Path. City of Morgan City, LA. Lead Engineer. Kristen was the lead engineer as part of a DOTD Safety IDIQ contract to document if an approach at a signalized intersection met the warrants listed in the Traffic Engineering Manual Sections 3B.2.4 and 3B.2.8 for a pedestrian marked crosswalk. The study also included an evaluation of a mid-block crossing based on the criteria set in Section 3B.2.7 of the Traffic Engineering Manual. The study consisted of vehicular and pedestrian counts, spot speed study, safety analysis and field observations.		
04/21 - current	Bus Rapid Transit (BRT) Improvement Project. City of Baton Rouge, LA. Project Engineer. Kristen a project engineer for a traffic design study and traffic signal design of 19 signals along three corridors: Plank Road, 22nd Street and US 190 (Florida Street). Kristen assisted the prime consultant with the safety analysis as well..		
08/21 - 04/22	Downtown to Scotlandville Parkway Trail Safety Enhancement Study. City of Baton Rouge, LA. Project Engineer. Kristen was a project engineer for a design study to evaluate the recommended street crossing treatments of the trail at eight locations. The project consisted of collecting vehicular speed and volume data at the proposed trail crossings. Geometric field checks were also performed to determine if any hazards to pedestrians or cyclists existed. Once the field data was collected and analyzed, appropriate crossing treatments utilizing the FHWA STEP Guide for Improving Pedestrian Safety at Unsignalized Locations were developed that included Rectangular Rapid-Flashing Beacons (RRFB) and Pedestrian Hybrid Beacons (PHB's). Currently, Vectura is developing plans for the PHB's at four locations which will be the first implementation of PHB's in the Baton Rouge area on a state route.		
02/20 - 09/21	MOVEBR College Drive Enhancement Project. City of Baton Rouge, LA. Traffic Data Collection Specialist. Kristen assisted with the data collection task of the College Drive project limits. Tasks included in data collection were 7-day tube counts, intersection turning movement counts, approach tube counts, unmet demand observations, driveway counts, travel time runs, pedestrian / bicycle counts, and weaving counts.		
6/19 - 2/21	US 167 Improvements Stage 0 Elsie Street to Gilbert Street. City of St. Landry Parish, LA. Project Manager. Kristen served as project manager for a Stage 0 study to evaluate the addition of a third lane to US 167 from Elsie Street south to a point past Gilbert Drive. Environmental impacts and cost estimates were prepared, as well as a benefit-cost analysis of all improvements considered. Civil Engineer responsible for safety analysis including crash rate number method, over-representation, CATScan quality assurance, HSM existing safety analysis, and No-Build Analysis. Designed high-level concept exhibits and comparison matrix to determine best preliminary alternatives moving forward to meet the purpose and need of the project. Compiled meeting agenda materials and minutes.		
11/16 - 07/17	Cane River Bridge Church Street Route LA 1-X Environmental Assessment. Project Engineer. Kristen was the project engineer responsible for assisting with the site visits, data organization, analysis of permanent alternatives and traffic control alternatives, and traffic report to aid in the delivery of an environmental assessment for the Cane River Bridge Replacement.		

6/19 - 2/21	US 167 Improvements Stage 0 Enola Street to Ross Road. <i>City of Evangeline Parish, LA.</i> Project Manager. Kristen served as project manager for a Stage 0 study of a two-lane road to remove a curvilinear section of US 167 from Enola Street near LA 748, southeast for approximately 1.2 miles. The study compared connecting existing property owners to a new roadway with driveways or intersection of old roadway. Environmental impacts and cost estimates were prepared. Civil Engineer responsible for safety analysis including crash rate number method, over-representation, CATScan quality assurance, HSM existing safety analysis, and No-Build Analysis, as well as a benefit-cost analysis. Designed high-level concept exhibits and a comparison matrix to determine best preliminary alternatives moving forward to meet the purpose and need of the project. Compiled meeting agenda materials and minutes.
04/19 - 6/21	LA 117 Improvements Stage 0. <i>Vernon and Natchitoches Parishes, LA.</i> Project Engineer. Kristen served as project engineer responsible for a Stage 0 study for 18 miles of two-lane LA 117 from LA 8 to LA 118. The study evaluated the impacts of correcting deficient vertical and horizontal geometry along the corridor, widening for the addition of shoulders, and adding passing lanes and turn lanes at strategic locations along the corridor. Kristen was responsible for performing the safety analysis including crash rate number method, over-representation, CAT Scan quality assurance, HSM existing safety analysis, and No-Build Analysis. Kristen designed high-level concept exhibits, evaluated environmental impacts, and prepared high level cost estimates and comparison matrices to determine which preliminary alternatives best meet the purpose and need of the project. Kristen compiled all findings in the Stage 0 report and coordinated with stakeholders and local agencies to ensure the purpose and need of project is met.
03/19 - 11/19	LA 429 Connector Stage 0. <i>Ascension Parish, LA.</i> Task Leader. Kristen was the task leader for the preparation of a Stage 0 study to evaluate alignments for a limited-access corridor (LA 429) near I-10, between LA 30, LA 73, and US 61. Two alternatives for the widening and reconstruction of LA 429 were evaluated. The scope consisted of stakeholder and public meetings, site visits and data collection, phasing of alternative development for the corridor, scope and budget checklists, and an opinion of probable cost to prepare the Stage 0 Report. Kristen served as the civil engineer responsible for designing high level concept exhibits and comparison matrix to determine best preliminary alternatives moving forward to meet the purpose and need of the project. Compiled meeting agenda materials and minutes, coordinated with interchange study consultants for a cohesive project, and wrote report.
11/18 - 3/21	LA 3040 Feasibility / Safety Study Stage 0. <i>City of Houma, LA.</i> Project Engineer. Kristen served as project engineer for a study to identify safety and operational issues along 2.5 miles of Martin Luther King Boulevard (LA 3040) in Houma, LA to evaluate reasonable alternatives to address any deficiencies discovered. Kristen was responsible for compiling a data collection plan for submittal to DOTD, including count locations, determined peak periods, and peak hours. Kristen performed peak period observations in the field and geometric field checks, as well as unmet demand observations and calculations. Kristen prepared TMC figures, as well as performed existing analysis in Vistro. Compiled all data collected into Appendices A and B per the DOTD Traffic Process and Report and wrote Chapter 1 of report. Kristen represented the project at stakeholder meetings to discuss project status..
04/18 - 04/19	I-49 at US 190 and LA 31 Interchange Improvements Stage 0. <i>St. Landry Parish, LA.</i> Project Engineer. Kristen was the project engineer responsible for crash and safety analysis, report writing, planning, and designing for this Stage 0 Study to evaluate alternatives to improve traffic operations and safety at the I-49 interchanges with US 190 and LA 31. Crash and safety analysis was performed using the DOTD CAT Scan tool and IHSDM, and line and grade was prepared to DOTD Design Standards for various corridors, including arterial collectors and freeway ramps. Close coordination with traffic engineer ensured maximum improvement of safety and operations given limited right-of-way and utility conflicts along the corridors.
09/17 - 09/18	LA 73 Corridor Study Stage 0 LA 74 to LA 621. <i>Ascension Parish, LA.</i> Designer. Kristen was the designer responsible for concept development, report writing, and impact analysis for a Stage 0 study. The purpose of the study was to evaluate conceptual alternatives to improve capacity and operations along the LA 73 corridor and its connecting transportation network. The scope included the evaluation of three interchange configurations for the interchange of I-10 at LA 73 in conjunction with two corridor alternatives for LA 73, resulting in six different alternatives for which line and grade, impacts, and high-level cost estimates were prepared.

16. Staff Experience:

Firm employed by		Vectura Consulting Services, LLC			
Name	Reece Rodrigue, PE, PTOE		Years of relevant experience with this employer	5	
Title	Project Traffic Engineer		Years of relevant experience with other employer(s)	7	
Degree(s) / Years / Specialization		B.S. / 2013 / Civil Engineering			
Active registration number / state / expiration date		PE No. 0042074 / Louisiana / exp. 3/31/2026			
Year registered	2017	Discipline	Civil		
Contract role(s) / brief description of responsibilities		Project Engineer for Traffic Control Design / Temporary Traffic Signal Analysis and Design			
Reece is a skilled traffic and ITS project engineer with experience in traffic signal design, construction inspection, and intelligent transportation systems. He has contributed to multiple DOTD and City-Parish projects across Louisiana, including signal upgrades, temporary signal designs for roundabout construction, and ITS deployments along major corridors like I-10 and I-110. Reece's expertise includes signal timing, fiber interconnect layouts, traffic impact analysis, and shop drawing reviews. He regularly collaborates with DOTD, contractors, and design teams to ensure compliance with state standards and deliver efficient, safety-focused transportation solutions.			 ✓ Supported Laurence and the Vectura Team on numerous traffic engineering projects for DOTD and various LPAs		
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
04/21 - current		MOVEBR Direct Select for Traffic Signal Design. <i>City of Baton Rouge, LA.</i> Project Engineer. Reece is a project engineer for the design of traffic signal upgrades at 10 intersections. This project included a traffic design report, preliminary and final plans for traffic signals that included traffic signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout. The design also included traffic signal synchronization signal timing and pedestrian signal timing.			
07/21 - current		BR Computerized Traffic Signal, Phase VB. <i>City of Baton Rouge, LA.</i> Traffic Engineer. Reece is part of the team responsible for Construction Engineering and Inspection. Reece has reviewed the signal mast arm shop drawings to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Reece, with the DOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.			
06/23 - current		Monroe Phase 3 SEA. <i>Ouachita Parish.</i> ITS Engineer. Reece performed a field inventory of the ground mounted traffic signal controllers. Reece visited the project site to document the controller type and detection needs at each signalized intersection within the right-of-way.			
06/22 - 02/23		ITS Fiber Management System Data Collection. ITS Engineer. Reece performed the field observations for 40 sites to verify the ITS FMS and inventory services.			
01/21 - 05/21		I-10 ITS Scott to Lake Charles. <i>Lafayette, Acadia, and Jefferson Davis Parishes.</i> Traffic Engineer. Reece was a member of the subconsultant team who was tasked with reviewing the ITS plans for 15 sites along I-10 where CCTV cameras were being installed. Reece was responsible for measuring anticipated construction quantities and producing a cost estimate for said quantities by using DOTD's Bid Tabulation and Cost Estimating Tool.			
09/20 - 12/21		Roundabout: US 171 at Boone St. <i>Vernon Parish.</i> Project Engineer. Reece was a project engineer, who participated in the production of the temporary signal design associated with the sequence of construction for the roundabout at US 171 at Boone St. He conducted a thorough analysis of the US 171 corridor's existing allowable movements and identified the movements that would be restricted during the proposed construction process and how it would impact the typical traffic patterns.			

09/20 – 12/21	LA 30 Roundabouts at Tanger I-10. <i>Ascension Parish. Project Engineer.</i> Reece was a project engineer, who assisted in the production of the temporary signal design associated with the sequence of construction for the roundabouts on LA 30 in Gonzales, LA. This project consists of eight proposed construction phases. He assisted in calculating the temporary pole heights, determining the placement location for the temporary poles for each phase, measuring and calculating clearance intervals. Reece conducted a thorough analysis of the LA 30 corridor's existing allowable movements and identified the movements that would be restricted during the proposed construction process and how it would impact the typical traffic patterns.
04/20 - current	DOTD Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project. <i>DOTD. Project Engineer.</i> Reece is the project engineer who designed the temporary traffic signal for the intersection of LA 23 at Engineers Rd. The design of the temporary signals is set for eight phases of construction per anticipated sequence of construction. Temporary pole location and heights were recommended for placement for use for all construction phases. Vehicle clearance interval calculations were conducted for each phase in accordance with DOTD and ITE guidance. Reece is responsible for producing the traffic impact analysis portion of the Traffic Management Plan, which was also used in planning for the permanent and temporary signal timing plans. Reece also produced permanent signal plans for the LA 23 intersections at Engineers Road and at Burmaster Street. He evaluated STOP bar locations, calculated vehicle, and pedestrian clearance intervals, designed the railroad preemption sequence for both at-grade crossings, designed the wiring layout, and developed the interconnect plan. Reece maintains correspondence with the fellow design engineering team for product consistency. In addition, Reece reviewed and approved shop drawings that were submitted by the contractor.
02/20 – 09/21	College Drive Corridor Enhancement from Perkins Road to I-10. <i>City of Baton Rouge, LA. Task Leader.</i> Reece was the task leader for organizing and formatting the data collection of the College Drive project limits. Tasks included in data collection were 7-day tube counts, intersection turning movement counts, approach tube counts, unmet demand observations, driveway counts, travel time runs, pedestrian / bicycle counts, and weaving counts.
07/19 – 12/19	Burgess Avenue at Duff Road Traffic Signal Design. <i>City of Walker, LA. Designer.</i> Reece was responsible for the design of a fully actuated signalized intersection in the city of Walker, LA. The traffic signal was determined to meet signal warrants upon completion of the Foxglove subdivision in Livingston Parish, LA. Plans included road widening, signal face indication schedule, signal sequence chart, sign schedule, detector schedule, controller timing, wiring diagram, and free operation phasing diagram. Reece met with city officials to discuss the feasibility of constructing a traffic signal as opposed to other alternative measures for improving the intersection.
02/16 - 12/16	US 190 Superstreet Task Order. <i>St. Tammany Parish. Traffic Signal Designer.</i> Reece was a team member responsible for the layouts for the US 190 Superstreet signal designs. He created the preliminary plans using CAD software program MicroStation V8i. He aided in the technical design of each intersection. He conducted field inspections to verify locations of existing equipment as well as observing the area for feasible proposed utility locations. He attended project team meetings to discuss the project details as well as the plan-in-hand walk-through.
01/16 – 11/17	Ochsner Main Campus Traffic Signals. <i>Jefferson Parish. Design Engineer.</i> Reece served as a design engineer for the traffic signal plans for the two Ochsner Main Campus access traffic signals with US 90 (Jefferson Hwy). The goal of the design was to implement updated pedestrian timings as well as optimize progression through the US 90 corridor. He reviewed traffic data and assigned time of day coordination timing parameters for the two intersections so that they may be included in the coordinated system west of the intersections. He used TruTraffic to determine the appropriate offset parameters so that vehicles may progress efficiently through the coordinated system. Plans for the two intersections were drafted in the form of DOTD's latest version of the TSI format. He was responsible for estimating construction quantities using DOTD's 2016 Spec Item list.
10/16 – 05/17	Loyola Interchange Modification Request. <i>City of Kenner, LA. Traffic Designer.</i> Reece was a team member in the production of an Interchange Modification Report (IMR) for the I-10 at Loyola Dr. Interchange. He was an active member in collecting vehicle travel time data and processing the data. He also aided in collecting vehicle queues at the study intersections. He also assisted in the Vissim model calibration
02/15 – 12/15	Retainer Contract for DOTD District 02 Traffic Signal Inventories - Nola 3. <i>DOTD. Lead Engineer.</i> Reece served as the lead engineer in the production of the traffic study for the District 02 Traffic Signal Inventories. The objective was to effectively correct the progression of traffic through the US 90 (Broad St) corridor. He reviewed vehicle crash data at all intersections in the study scope. He conducted travel time runs. He created a model with existing traffic signal timing information using Synchro 8 Software. He recommended traffic signal pedestrian clearance times and yellow and red clearance times for each intersection. He used MicroStation V8i when designing traffic signal plans in DOTD's TSI format.

16. Staff Experience:

Firm employed by		Terracon Consultants, Inc.	
Name	Ryan Poindexter, PE		Years of relevant experience with this employer
Title	Geotechnical Project Engineer		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		BS / 2013 / Civil Engineering	
Active registration number / state / expiration date		PE No. 46285 / LA / Exp. 3/31/26	
Year registered	2021	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		Geotechnical Support	



Ryan has nearly a decade of geotechnical engineering experience working for commercial, industrial, and transportation clients. His experience includes field and office tasks such as drill crew supervision, soil laboratory testing, data quality control, engineering calculations, geotechnical report preparation, and project management. Ryan now focuses on managing full-spectrum geotechnical projects, many of which are for DOTD through our geotechnical retainer contract. Ryan is TCS Certified.

- ✓ Experienced in multiple aspects of geotechnical engineering
- ✓ Managed several DOTD geotechnical projects through Terracon's geotechnical retainer contract

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
03/25 - Ongoing	H.012059 - LA19 - Bridges near Zachary - Zachary, LA, DOTD. Project Manager. The project involves replacing existing bridge structures along LA Highway 19 near Zachary, Louisiana, with new slab span bridges and/or box culverts to improve the crossing. Terracon is providing geotechnical engineering services, including subsurface soil exploration, laboratory testing, engineering analysis, and preparation of geotechnical recommendations addressing soil conditions, groundwater, and seismic site classification.
02/25 - Ongoing	H.014990 - S. Tiger Bend Road & E. Achord Road - Baton Rouge, LA, DOTD. Project Manager. Terracon is providing geotechnical engineering services that include subsurface exploration, laboratory testing, and engineering analysis to support the design and construction for the proposed bridge replacement.
07/24 - Ongoing	H.014984 - Libuse Cutoff Road over Flagon Bayou - Pineville, LA, DOTD. Project Manager. Terracon is providing subsurface exploration, laboratory testing, and geotechnical data analysis to support the design of a replacement bridge. Scope includes soil and groundwater testing, along with seismic site classification, based on two borings advanced to depths of 85 and 70 feet.
07/23 - Ongoing	H.015338 - Off-System Bridge Replacement - Cameron, LA, DOTD. Project Manager. Terracon is providing geotechnical engineering services, including site exploration, analysis, and recommendations for earthwork, foundation design, and construction for infrastructure projects.
07/23 - Ongoing	H.012537 - LA154, LA157 - Red Chute BYU & Flat RVR BRS - Elm Grove, LA, DOTD. Project Manager. Terracon is providing geotechnical engineering services that include field exploration, laboratory testing, and engineering analysis to evaluate subsurface conditions and develop design recommendations for foundations, pavements, and earthwork.
07/23 - Ongoing	H.012048 - Castor Creek and Relief Bridges - Tullos, LA, DOTD. Project Manager. Ryan is responsible for overseeing all geotechnical investigation activities. This includes coordinating the advancement of 16 soil borings to depths of 60 to 110 feet using rotary drilling methods, ensuring proper sampling techniques such as Shelby tubes and Standard Penetration Tests (SPT), and monitoring groundwater levels during drilling. Ryan also managed laboratory testing to evaluate soil properties—moisture content, plasticity, particle-size distribution, density, and shear strength—ensuring compliance with ASTM standards and LDOTD protocols. Additionally, Ryan ensured accurate classification of soils using the Unified Soil Classification System (USCS) and the preparation of detailed documentation, including boring logs and graphs, while maintaining alignment with project goals and regulatory requirements.

01/24 - Ongoing	H.015447 – IJA Off-System Bridge Program – Simmesport, LA. DOTD. Project Manager. Ryan is responsible for overseeing all aspects of the geotechnical investigation. This includes coordinating the drilling of a 122-foot soil boring using flight auger and mud rotary techniques, ensuring proper sample collection at regular intervals, and managing laboratory testing for moisture content, Atterberg limits, dry unit weight, grain size analysis, and undrained unconsolidated compression. He will also ensure accurate geological characterization and seismic site classification, and guide the development of engineering recommendations for earthwork, foundations, floor slabs, and pavements, all while maintaining compliance with project specifications and regulatory standards.
10/22 - 02/25	H.003931.5-2 - I-10- Calcasieu River Bridge Additional Borings – Lake Charles, LA. DOTD. Project Manager. Ryan coordinated all phases of subsurface exploration and laboratory testing. This includes managing the execution of 37 deep bridge borings—some over water and within a navigable channel—and 39 shallow roadway borings, as well as an additional 17 test borings using specialized drill rigs along various segments of the I-10 corridor. Ryan also ensured proper sampling methods were used, such as thin-walled tube and split-barrel techniques, and that groundwater levels are accurately recorded. In the lab, Ryan oversaw testing for moisture content, plasticity, particle-size distribution, density, and triaxial compression strength, ensuring all procedures comply with ASTM standards and LDOTD protocols.
09/22 - 10/25	H.002868 - I-49 Frontage Road Bridges PDA Testing – Lafayette, LA. DOTD. Project Manager. Ryan oversaw this design-build project and was responsible for coordinating geotechnical engineering efforts related to bridge substructures and MSE (mechanically stabilized earth) walls. This included managing the development of pile foundation designs, such as determining nominal capacities and resistance factors, and overseeing WEAP (Wave Equation Analysis of Piles) analysis to establish driving criteria for the proposed pile driving equipment. During construction, Ryan ensured that dynamic pile testing was conducted and that CAPWAP (Case Pile Wave Analysis Program) results were reviewed to adjust resistance factors or pile lengths as needed. Additionally, Ryan supported DOTD during construction by evaluating settlement monitoring data for MSE walls, ensuring compliance with contract requirements, facilitating pile bent acceptance, and resolving non-conformance reports (NCRs).
05/20 – 01/21	H.005121 - LA-1 and LA-415 Connector – Port Allen, LA. DOTD. Project Manager. Coordinated field work, access, and initial lab testing prior to project being suspended.
05/18 – Ongoing	H.011235.5 - I-49 South @ Verot School Road US 90 - Lafayette, LA. DOTD. Staff Engineer. Reviewing field logs, samples, and data. Assisted in coordinating lab testing.
06/18 – 06/21	H.005967.5: Nelson Rd. Extension and Bridges - Calcasieu Parish, LA. DOTD. Assistant Project Manager. The project consisted of providing a site characterization report for the new road and bridge, pile design, and pavement design recommendation. The geotechnical field exploration consisted of soil borings adjacent to the existing roadway, borings in undeveloped land adjacent to the Port of Lake Charles, and borings in Bayou Contraband. Field exploration was completed safely over the course of multiple weeks with up to four land and water drill crews on site at once. Laboratory testing included consolidation testing, compressive strength testing, and testing for classifying of soil samples collected in accordance with DOTD standards. Terracon provided recommendations for precast concrete piles, pavement design, and site preparation.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Elizabeth Brock		Years of relevant experience with this employer	7
Title	Environmental Specialist		Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization		BS / 2010 / Environmental Science		
Active registration number / state / expiration date		N/A		
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities		Environmental Support		
Elizabeth is highly experienced in natural resources investigation and related GIS mapping, and in performing Environmental Site Assessments (ESAs), wetland delineations and evaluations, and Joint Permit Applications. She has conducted Phase I ESAs for projects pursuant to ASTM Standard E1527-13, which involves site inspections, land records reviews, aerial photograph analyses, topographic and geologic reviews, and technical report preparation. In addition, she completes technical reports for review by the USACE for Section 404 permitting purposes.			Highly familiar with conducting wetlands evaluations and deliniations in compliance with USACE and related standards Experienced in performing construction compliance monitoring	
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
09/23 – 09/23		Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program – District 07, Louisiana. DOTD. Environmental Specialist. Supported research on environmental constraints that could serve as a roadblock for the replacement of a bridge structure. The information gathered allowed the engineers to make decisions on which bridges structures should move forward in design based off these environmental constraints. Currently, Michael Baker has submitted stamped final plans for two projects (4 bridges/culverts) while other six projects are at various final submittal stages. There are a total of 12 bridges and culverts among the eight projects under this contract.		
08/22 - Ongoing		Barksdale AFB Entrance Roads, Bossier Parish, Louisiana. NAVFAC. Environmental Scientist. Responsible for the procurement of environmental permits for the new entrance roads for Barksdale AFB. The project includes a new roundabout at the Air Force Base gates along with new 4-lane divided highway to tie into the new LA 1267 highway constructed by DOTD under the I-20/I-220 Design Build interchange improvements. Additional responsibilities include coordination with the U.S. Army Corps of Engineers and Bossier Parish Engineering Department. The project was broken into two separate construction plans (Rough Grade and Final Design) and required additional coordination with DOTD and USACE. The new roundabout is designed to be a multi-lane roundabout that accommodates the new LA 1267 spur of the I-20/220 interchange.		
03/19 – 06/19		Saline and Caddo River Bridges Design Services, Pike, Howard, and Sevier Counties, AR. Arkansas DOT. Environmental Specialist. Responsible for environmental services. Michael Baker provided roadway and bridge design for the replacement of three bridges in Sevier, Pike, and Howard counties in Arkansas. Individual sites on the project include Highway 70 over the Caddo River, Highway 70 over the Saline River, and Highway 278 over the Saline River. Michael Baker provided plans for the replacement of the bridges and approaches and hydraulic and geotechnical studies and completed the environmental clearance documentation at all locations.		
10/19 – 11/19		S.R. 27 over Big Black River Replacement Project, Warren and Hinds Counties, MS. MDOT. Environmental Specialist. Responsible for conducting environmental investigations necessary to prepare the Wetland Delineation in support of the proposed project to replace the existing bridge (Bridge # 117.9) over Big Black River along S.R. 27, in Hinds and Warren County, Mississippi. Michael Baker provided engineering services to assess potential impacts to wetlands and other waters resulting from the replacement of the bridge on S.R. 27 over Big Black River. For the project, Michael Baker reviewed the project plans for the bridge replacement site as well as aerial photography and other mapping of the project area. Michael Baker conducted field investigations in the project area to locate, identify, and delineate wetlands and waters of the United States in accordance with the USACE 1987 Wetland Delineation Manual and 2010 Regional Supplement guidance. It also mapped jurisdictional wetland areas and prepared technical reports.		



11/22 – Ongoing	Runway 31 Approach Obstruction and Acquisition, Hammond, LA. <i>City of Hammond.</i> Environmental Scientist. Responsible for environmental services. Michael Baker provided professional services associated with the development and submittal of the necessary NEPA Documentation in the form of a short form Environmental Assessment for the Runway 31 Approach Obstruction Mitigation project at Hammond Northshore Regional Airport.
11/21 – Ongoing	Heart of Georgia Taxiway A Rehabilitation Categorical Exclusion, Eastman, GA. <i>Heart of Georgia Regional Airport Authority.</i> Environmental Scientist. Assisting with environmental services, which includes review for wetland impacts in support of preparation of NEPA documentation. Michael Baker provided engineering and environmental services for the rehabilitation of Taxiway A for Runway 02-20, which has a length of 6,500 feet and a width of 50 feet. Rehabilitation will include milling of the existing surface, crack/joint sealing, placement of new HMA surface, and pavement markings.
09/19 – 11/19	S.R. 12 over Moccasin Creek Bridge Replacement Project, Lexington, MS. <i>MDOT.</i> Environmental Scientist. Responsible for conducting environmental investigations necessary to prepare the Wetland Delineation in support of the proposed project to replace the existing bridge (Bridge # 69.2) over Moccasin Creek along S.R. 12 in the city of Lexington in Holmes County, Mississippi. Michael Baker provided engineering services to assess potential impacts to wetlands and other waters resulting from the replacement of a bridge over Moccasin Creek on S.R. 12. For the project, Michael Baker reviewed the project plans for the bridge replacement site as well as aerial photography and other mapping of the project area. Michael Baker conducted field investigations in the project area to locate, identify, and delineate wetlands and waters of the United States in accordance with the USACE 1987 Wetland Delineation Manual and 2010 Regional Supplement guidance. Additionally, Michael Baker provided wetland mapping and a technical report.
09/21 – 08/22	I-59 and US-11 Interchange Feasibility Study, Forrest County, Mississippi. <i>MDOT.</i> Environmental Scientist. Responsible for GIS services and assisted with the environmental services. Michael Baker prepared a feasibility study for the I-59 and US-11 Interchange, located in Forrest County, Mississippi, near the southwest boundary of Hattiesburg. The feasibility study included desktop and field data collection, traffic analysis, safety analysis, environmental and planning analysis, conceptual engineering design, and planning level cost estimates, as well as agency coordination and stakeholder outreach as required to successfully deliver 3 interchange concepts.
03/19 – 01/21	Lemoyne Boulevard Erosion Control, St. Martin, Mississippi. <i>Jackson County Board of Supervisors.</i> Environmental Scientist. Responsible for assisting with environmental services. Michael Baker provided professional services associated with performing a detailed drainage study for new erosion control improvements to an existing open channel drainage way located north of Lemoyne Boulevard in the St. Martin Community. The purpose of the drainage and erosion control study was to provide recommendations to the stormwater drainage channel to address channel re-alignment and implement new erosion control measures to mitigation channel migration and sedimentation of channel banks and bottom.
08/20 – 11/20 01/22 – 02/22	S.R. 601 Canal Road Wetlands Assessment, Harrison County, MS. <i>MDOT.</i> Environmental Scientist. Responsible for conducting environmental investigations necessary to prepare the Wetland Delineation in support of the proposed project in the City of Gulfport in Harrison County, Mississippi. Michael Baker provided engineering services to assess potential impacts to wetlands and other waters resulting from the construction of a new road to connect southern Gulfport to I-10. For the project, Michael Baker compiled and analyzed preliminary information regarding the project sites, including color infrared aerial photography, soil surveys, design plans for the roadway, and other readily available information. We then performed site investigations to delineate wetlands and other waters of the United States, completed data forms, and took representative photographs of identified resources
04/19 – 08/19	Bush Lane and Carol Plantation Road Resurfacing, Restoration, and Rehabilitation, Mobile, AL. <i>Mobile County Engineering Department.</i> Environmental Specialist. Responsible for assisting with environmental services. Michael Baker is performing engineering services for a resurfacing, restoration, and rehabilitation project on Bush Lane and Carol Plantation Road. Michael Baker is developing reports, plans, and calculations to support 50%, 90%, and 100% design review submissions. Major items of work include preliminary and final design plans; safety audit; preliminary and final cost estimates; and construction administration.
08/19 – 09/19	Padgett Switch Road Resurfacing, Restoration, and Rehabilitation (RRR), Mobile County, AL. <i>Mobile County Engineering Department.</i> Environmental Scientist. Assisted with environmental services. Michael Baker provided engineering services for the rehabilitation of Padgett Switch Road from Highway 90 to Half Mile Road. Michael Baker's services include design, bidding-phase support, and construction services for grading, drainage, base, and paving of the roads. The project was funded by the 2016 Pay-As-You-Go funding program.

16. Staff Experience:

Firm employed by		Terracon Consultants, Inc.	
Name	April Smith, PhD, RPA		Years of relevant experience with this employer
Title	Archaeologist/Principal Investigator		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		PhD / 2020 / Anthropology, University of Georgia; MA / 2010 / Anthropology, Georgia State University; BS / 2005 / Biological Science, Georgia State University	
Active registration number / state / expiration date		Registered Professional Archaeologist No. 5242	
Year registered	2020	Discipline	N/A
Contract role(s) / brief description of responsibilities		Environmental Support	



Dr. Smith is an Archaeologist and Principal Investigator for Terracon's Gulf Coast offices with 12 years of training in archaeological theory and methods. She is a bioarcheologist with experience with the recovery, stabilization, and conservation of human skeletal remains from archaeological contexts in the field and laboratory. Dr. Smith has worked on Phase I and III archaeological investigations in international and domestic contexts. She is experienced in field and laboratory methods, archival research, technical report writing, managing field logistics, and has played a key role in public engagement and outreach efforts.

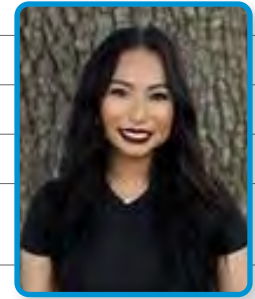
- ✓ Experience with historic, urban, and precontact sites
- ✓ Proficient in historic and precontact artifact identification and analysis

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
2025	Reconnaissance-Level Survey, Proposed Wadley Solar Farm, Wadley, GA. Principal Investigator. Responsible for conducting background research, field supervision, cultural resource assessments (photography, pedestrian survey, and shovel testing), and report writing. This survey was conducted for Arevon USA, Inc., and encompassed ~1,500 acres of agricultural land.
2025	Phase I Cultural Resources Survey, Fisher House Site Project, Shreveport, LA. Principal Investigator. Responsible for conducting background research, the cultural resource assessment (photography, pedestrian survey, and shovel testing), and report writing. The survey was conducted to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, for the Overton Veteran's Affairs Medical Center
2024	Phase I Cultural Resources Survey, Zachary Tower Telecommunication Project, Zachary, LA. Principal Investigator. Responsible for conducting background research, the cultural resource assessments (photography, pedestrian survey, and shovel testing), and report writing. The survey was conducted to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, for the construction of a 310-foot self-supported radio tower.
2024	Phase I Cultural Resources Survey, Blue Green Corridors, New Orleans, LA. Project Archaeologist. Conducted cultural resource assessments, including pedestrian survey and trenching. This project was conducted in compliance with Section 106 of the NHPA for the City of New Orleans for proposed right-of-way improvements on major street corridors and parks.
2024	Phase II Cultural Resources Survey for Site 9BA120, Commerce, GA. Principal Investigator. Responsible for conducting background research, field supervision (photography, pedestrian survey, unit excavation, trenching, and shovel testing), laboratory analysis, report writing (management summary and final report). This survey was conducted to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, for the construction of a 4.74-mile sewer line.
2022	Phase I Cultural Resources Survey, Westside Express Lanes, Atlanta, GA. Principal Investigator. Responsible for conducting the background research (including archival research at the Kenan Research Institute, Cobb and Fulton County Board of Assessors, and Georgia Archaeological Site File), fieldwork (supervising/directing [crew of ~4-12], resource identification and documentation, photography, data collection, shovel testing, GPR data collection, cemetery probing survey), writing (primary author in all sections of the three methodology memos, three management summaries, and final report), site evaluation for NRHP eligibility, GEC/PMC/GDOT coordination, stakeholder coordination and interviews, and proposal development. This survey was conducted in compliance with Section 106 of the NHPA for the construction of express lanes along I-20, I-285, and I-75.

16. Staff Experience:

Firm employed by		Terracon Consultants, Inc.		
Name	Laci Nguyen		Years of relevant experience with this employer	< 1
Title	Senior Scientist		Years of relevant experience with other employer(s)	8
Degree(s) / Years / Specialization			BS / 2017 / Renewable Natural Resources and Management, Louisiana State University	
Active registration number / state / expiration date			LA Asbestos Inspector, Supervisor – AI 208732; LA Lead Inspector – AI 208732; 38-Hour USACE Regional Supplement Wetland Delineation Training; 24-Hour NEPA Navigator	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Environmental Support	
Laci Nguyen is a Senior Scientist in Terracon's Baton Rouge office. She is responsible for wetland projects in the southeast region and has performed wetland delineations, timber marking, coastal mitigations, forest inventories, T&E surveys, migratory bird surveys, timber stand improvement, native and invasive species surveys, reforestation evaluation surveys, groundwater sampling across the southeast U.S. Laci is skilled in identifying birds, mammals, reptiles, amphibians, fish, trees, and plant species in the southeast U.S; understands Section 404 of the Clean Water Act, NEPA, the Endangered Species Act, Migratory Bird Treaty Act, USACE Gulf Coast Regional Supplement, etc.; assisting in permitting processes; GPS unit capabilities and experience with ArcGIS software.			✓ Skilled in identifying a wide range of animal and plant species native to the Southeastern U.S.	
Experience dates (mm/yy-mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
2025 - Ongoing		Edged Monroe, Wetland Delineation, Permit Matrix, and T&E Assessment, Monroe, AL. Environmental Scientist. Responsible for the collection of data points involving soil, vegetation, and hydrological characterization, the demarking and GPS tracking of wetland and stream boundaries, identification of Waters of the United States on site, and Jurisdictional Determination Requests (JDRs) on a 30-acre project site.		
2025 - Ongoing		Stockton Solar, Wetland Delineation, Permit Matrix, and T&E Assessment, Stockton, AL. Environmental Scientist. Responsible for the collection of data points involving soil, vegetation, and hydrological characterization, the demarking and GPS tracking of wetland and stream boundaries, identification of Waters of the United States on site, and Jurisdictional Determination Requests (JDRs) for a proposed 4,500-acre solar farm.		
2023		The Nature Conservancy (TNC) – Lake Calcasieu Oyster Reef & Shoreline Protection, Phases I-III - Cameron Parish, LA. Environmental Field & Operational Lead. Responsible for leading a multi-phase marine habitat restoration project within the Sabine National Wildlife Refuge focused on restoring oyster reef habitat and stabilizing coastal marsh systems along Lake Calcasieu. She led a field crew of up to 12 personnel during the construction, assembly, and deployment of more than 2,000 limestone-filled gabion baskets, coordinating vessel operations, material staging, reef alignment, and construction sequencing. Laci maintained authority over daily site safety decisions, including weather limits, water conditions, and operational controls. She conducted daily safety meetings and ensured all airboat captains clearly understood assignments, navigation routes, loading responsibilities, and communication protocols prior to deployment. She applied ecological knowledge of oyster recruitment, settlement, growth stages, and habitat requirements to guide reef placement strategy. Laci studied and documented oyster life-cycle dynamics to support long-term restoration success and adaptive management. She prepared technical documentation, supported reporting, and served as a primary client communication liaison throughout project execution.		
2022		FHWA / USACE Vicksburg District – Wetland Delineation, Vicksburg National Military Park, MS. Environmental Scientist. Conducted wetland and waters delineations in accordance with USACE and NPS protocols. She identified hydric soils, hydrophytic vegetation, hydrology indicators, wetland boundaries, and ordinary high-water marks (OHWM). She prepared defensible delineation documentation and technical reporting.		





16. Staff Experience:

Firm employed by		Marrero, Couvillon & Associates, L.L.C.		
Name	Kimball Schlafly, PE		Years of relevant experience with this employer	6
Title	Sr. Electrical Engineer		Years of relevant experience with other employer(s)	36
Degree(s) / Years / Specialization		Bachelor of Science / 1988 / Electrical Engineering		
Active registration number / state / expiration date		PE No. 27699/ Louisiana/ exp. 9/30/26		
Year registered	1993	Discipline	Electrical	
Contract role(s) / brief description of responsibilities		Electrical & Lighting Design		
Mr. Schlafly has over 35 years of engineering experience in electrical engineering, project engineering and project management. He has been responsible for various projects requiring design of lighting, low and medium voltage power distribution, standby and emergency power systems, telecommunications, fire alarm, access control, video surveillance, and theatrical audio/visual and lighting systems.			✓ Substantial Experience with DOTD Projects ✓ Area of Expertise: Lighting ✓ Sr. Electrical Engineer	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage,” “designed girders,” “designed intersection,” etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
07/17 – 11/20		I-10 and 73 Widening – Design Build. LA DOTD. Sr. Electrical Engineer. Provided electrical engineering and design for lighting on the I-10 Widening from Highland to LA 30 design-build project.		
04/18 – 02/19		Howard Avenue Extension (Loyola Avenue to LaSalle Street) New Orleans, LA. City of New Orleans. Sr. Electrical Engineer. Marrero, Couvillon & Associates is responsible for the Electrical Services for the Howard Avenue Extension. Work includes revising roadway lighting from high pressure sodium lights to LED lights per new City of New Orleans Standards. Revisions include changing light fixtures, downsizing electrical conductors and revising drawings including bill of materials. Performing lighting calculations and following illumination guidelines per the latest IES roadway lighting recommended practices issued in 2014.		
01/20-06/20		Bluebonnet Blvd. (Picardy to Highland) Roadway Lighting, Baton Rouge. City/Parish of East Baton Rouge. Sr. Electrical Engineer. The scope of work includes additional lane capacity in each direction. Bluebonnet Blvd is two lanes in each direction currently. Pedestrian facilities are interspersed throughout the corridor and there is commercial development abutting the corridor. The project is to add an additional travel lane in each direction and provide for connected pedestrian facilities throughout the corridor. MCA is responsible for all activities necessary to complete a lighting plan and a photometric analysis report that containsillumination analysis of all roadways and/or interchanges within the project limits and conform to illumination criteria specified in the design guidelines are included in this scope.		
09/23 - Ongoing		I-20 Widening, Wells to LA34 Electrical and Lighting Design , Baton Rouge. LA DOTD. Sr. Electrical Engineer. The scope of work is to provide additional traffic capacity in each direction. This was accomplished primarily by increasing the entrance/exit ramps. MCA provided design services to analyze the existing conditions of the roadway lighting, which consisted of high pressure sodium fixtures on low mast poles, and provide modifications to the existing lighting systems as necessary to accommodate the changes in roadway geometry. This includes upgrading the existing fixtures to LED, re-position select poles, and upgrading the secondary controllers to current standards.		
9/2023-Ongoing		I-10 and Pecue Lane - Lighting design, Baton Rouge. LA DOTD. Sr. Electrical Engineer. Currently, there is no access to I- 10 from Pecue Lane and the existing Pecue Lane consists of 2 traffic lanes. The existing overpass will be removed and replaced with two overpass structures, with 3 lanes in each direction. Pecue Lane will be reconstructed to a curb and gutter section, with a raised median and 3 lanes in each direction. South of I-10 there will be two bridge structures for Pecue to cross Ward’s Creek.		

16. Staff Experience:

Firm employed by		Marrero, Couvillon & Associates, L.L.C.		
Name	Christian Schade, PE		Years of relevant experience with this employer	8
Title	Sr. Electrical Engineer		Years of relevant experience with other employer(s)	24
Degree(s) / Years / Specialization		Bachelor of Science / 1993 / Electrical Engineering		
Active registration number / state / expiration date		PE No. 32483/ Louisiana/ exp 9/30/26		
Year registered	2006	Discipline	Electrical	
Contract role(s) / brief description of responsibilities		Electrical & Lighting Design		
Mr. Schade's areas of expertise include electrical engineering, power distribution, power generation, lighting, specification writing and contract administration. His experience includes Power system analysis, consisting of load flow, fault, arc flash and coordination studies using SKM Power Tools for Windows and ETAP. Proficient with incident energy level method of Arc Flash calculations per NFPA 70E, 2015 version. Electrical design support for small to medium size projects in industrial facilities, including installation of new pumps, agitators, metering equipment, lighting, and power distribution centers.			✓ Substantial Experience with DOTD Projects ✓ Area of Expertise: Lighting ✓ Sr. Electrical Engineer	
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
07/17 – 11/20	I-10 and 73 Widening – Design Build. LA DOTD. Sr. Electrical Engineer. Provided electrical engineering and design for lighting on the I-10 Widening from Highland to LA 30 design-build project.			
04/18 – 02/20	France Road – North, Roadway and Drainage Improvements, New Orleans, LA. Port of New Orleans. Sr. Electrical Engineer. MCA provided the electrical and mechanical engineering services for the roadway, lighting, and drainage improvements.			
11/16 – 6/17	Louis Armstrong New Orleans Airport International Airport Pavement Remediation at Eastern Side of Runway 11-29, Kenner, Louisiana. City of New Orleans. Sr. Electrical Engineer. Electrical design services for Pavement Remediation of sag in existing runway pavement on the eastern side of Runway 11-29 near Taxiway Alpha at the airport..			
04/18 – 02/19	Howard Avenue Extension (Loyola Avenue to LaSalle Street) New Orleans, LA. City of New Orleans. Sr. Electrical Engineer. Marrero, Couvillon & Associates is responsible for the Electrical Services for the Howard Avenue Extension. Work includes revising roadway lighting from high pressure sodium lights to LED lights per new City of New Orleans Standards. Revisions include changing light fixtures, downsizing electrical conductors and revising drawings including bill of materials. Performing lighting calculations and following illumination guidelines per the latest IES roadway lighting recommended practices issued in 2014.			
01/20-06/20	Bluebonnet Blvd. (Picardy to Highland) Roadway Lighting, Baton Rouge. City/Parish of East Baton Rouge. Sr. Electrical Engineer. The scope of work includes additional lane capacity in each direction. Bluebonnet Blvd is two lanes in each direction currently. Pedestrian facilities are interspersed throughout the corridor and there is commercial development abutting the corridor. The project is to add an additional travel lane in each direction and provide for connected pedestrian facilities throughout the corridor. MCA is responsible for all activities necessary to complete a lighting plan and a photometric analysis report that contains Jillumination analysis of all roadways and/or interchanges within the project limits and conform to illumination criteria specified in the design guidelines are included in this scope.			
09/23-On-going	I-20 Widening, Wells to LA34 Electrical and Lighting Design , Baton Rouge. LA DOTD. Sr. Electrical Engineer. The scope of work is to provide additional traffic capacity in each direction. This was accomplished primarily by increasing the entrance/exit ramps. MCA provided design services to analyze the existing conditions of the roadway lighting, which consisted of high pressure sodium fixtures on low mast poles, and provide modifications to the existing lighting systems as necessary to accommodate the changes in roadway geometry. This includes upgrading the existing fixtures to LED, re-position select poles, and upgrading the secondary controllers to current standards.			

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.			
Name	Rosemary Seiwald, PE			Years of relevant experience with this employer	5
Title	Senior Engineer - Electrical			Years of relevant experience with other employer(s)	30
Degree(s) / Years / Specialization		BS / YYYY /Discipline, School			
Active registration number / state / expiration date		PE No. 47624 / Louisiana / exp. 09/30/27; PE No. 37121 / Colorado / exp. 10/31/27			
Year registered	2002 (CO); 2023 (LA)	Discipline	Electrical		
Contract role(s) / brief description of responsibilities		Electrical & Lighting Design			





Rosemary is an Electrical Engineer with more than 30 years of experience providing designs, design reviews, and quality assurance on a wide range of transportation, structural, and facility projects. She will apply her familiarity with DOTD's facilities and standards from her work on the Barksdale Air Force Base project to lead our team in efficient and accurate electrical design reviews.

- ✓ 35 years experience
- ✓ Extensive experience with DOTs nationwide

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
08/22 - 05/23	Barksdale AFB Entrance Road and Gate Complex, Barksdale Air Force Base, LA. NAVFAC Southeast. Lead Electrical Engineer. Responsible for power and lighting design for a new Entry Control Facility (ECF) at the north side of the base and will connect with a new state highway being constructed by DOTD. This project extends the DOTD state highway up to a roundabout north of the proposed ECF. The roadway includes travel lanes, medians, shoulders, barriers, fencing and site light per DOTD standards. In addition, the highway will continue from the roundabout to the new ECF and continue until intersects another roundabout and base road. The new ECF and roadway will be designed per Entry Control Facilities/Access Control Points guidelines and standards. The ECF includes a new Gate House, Canopy with Guard Booths, POV, Large Commercial Vehicle Inspection, Overwatch Tower and Visitor Center.
03/21 - Ongoing	Hartford Line Railroad Stations Design, New Haven, CT to Springfield, MA. Connecticut DOT. Electrical Engineer. Responsible for review and recommendations of subconsultant's electrical grounding system design for new train station. Michael Baker is developing the design for eleven new or upgraded high-speed passenger rail stations from New Haven, Connecticut, to Springfield, Massachusetts. Michael Baker is preparing erosion and sedimentation control and designs for pedestrian bridges and parking facilities that comply with Americans with Disabilities Act standards. Additionally, Michael Baker is preparing permit applications, performing right-of-way and utility coordination, constructability reviews, and construction management, and overseeing landscape design.
06/21 - 06/21	ARA Aircraft Rescue and Fire Fighting (ARFF) Facility, New Acadiana Regional Airport (KARA), New Iberia, LA. Iberia Parish Airport Authority. Electrical Engineer. Michael Baker provided planning, architectural design, engineering, and design management services for the New Acadiana Regional Airport in Iberia Parish, Louisiana. The airport provides critical services to the off shore oil fields and post hurricane recovery for the region. Michael Baker provided programming, alternative planning concepts, architectural design services and building engineering services associated with the schematic design, design development, and contract documents for the new ARFF Station.
12/24 - Ongoing	List 15-18 - State Bridge Rehabilitation Program, Statewide, CT. Connecticut DOT. Electrical Engineer. Michael Baker provided final design and construction support services for six existing structures as part of the client's statewide List 15-18 Bridge Rehabilitation Program. Typical tasks include highway geometric design, deck replacement, superstructure and bearing replacement, substructure rehabilitation, load rating, foundation design, utility relocation, environmental permitting, scour mitigation, construction staging, and maintenance and protection of traffic plan preparation.
01/12 - 10/13	Southeast Wyoming Welcome Center, Cheyenne, Wyoming. Wyoming DOT. Lead Electrical Engineer. Responsible for electrical designs for 27,000 SF welcome center that replaced the existing facility challenged by size and site limitations. New mechanical and electrical systems feature a series of strategies that are designed to minimize the project's resource demand while maximizing the use of on-site resources. Daylight harvesting minimizes electrical demand and solar photovoltaic panels and wind turbines are sources of renewable energy for the site.

03/21 - Ongoing	New Haven-Hartford-Springfield Rail Station Design, New Haven, CT to Springfield, MA. Connecticut DOT. Electrical Engineer. Responsible for review and recommendations of sub-consultant's electrical grounding system design for new train station. Michael Baker is developing the design for 11 new or upgraded high-speed passenger rail stations from New Haven, Connecticut, to Springfield, Massachusetts. The New Haven-Hartford-Springfield (NHHS) rail project represents a broad partnership among the state of Connecticut, Amtrak, and the Federal Railroad Administration, along with the states of Massachusetts and Vermont. Michael Baker's tasks include preparing erosion and sedimentation, ensuring ADA compliance, preparing permit applications, performing right-of-way and utility coordination, performing constructability reviews, overseeing landscape design, performing construction management, and creating site, station, pedestrian bridge, and parking facility designs.
1997 - 1998	I-25/Circle Drive/ Lake Avenue Interchange, Colorado Springs, CO. Colorado DOT. Electrical Engineer. Provided electrical design for \$50-million reconstruction of existing highway interchange. Design included new lighting for all three roadways, pedestrian overpass lighting, and pedestrian underpass lighting, along with traffic management system conduit design.
07/21 - 09/21	DOE Legacy Management Headquarters Facility, Grand Junction, Colorado. U.S. Army Corps of Engineers, Sacramento District. Electrical Engineer. Responsible for electrical power distribution design for new building and electrical service distribution for the site. Michael Baker is providing design and engineering services to create the design-bid-build (DBB) acquisition package for the construction of a new operations facility and site upgrades to the Department of Energy Office of Legacy Management (DOE-LM) site. The site upgrades include noncontiguous parking areas, a secure GOV parking area, a pedestrian crossing, relocation and improvement of a railroad crossing , and campus-type development. Utility infrastructure enhancements are required to provide independent utility feeds and enhanced service for new and existing buildings. The operations facility is a new three-story building of approximately 36,000 square feet, which also includes a new 95-stall parking lot for POVs. This project incorporates the Department of Energy's requirements for High-Performance Sustainable Design and is designed to a LEED Gold® standard. 7/21/2021 - 9/2/2021

16. Staff Experience:

Firm employed by		NTB Associates, Inc.			
Name	Amy K. Schulze, PE, CFM			Years of relevant experience with this employer	7.5
Title	Sr. Project Engineer			Years of relevant experience with other employer(s)	20
Degree(s) / Years / Specialization		BS / 1998 / Civil Engineering, Ohio Northern University CFM National Certification: US-16-08839/Electro-Magnetic Locating Instruments Certified Certificate of Locating Competency/ #WA2028 (Staking University)			
Active registration number / state / expiration date		PE No. 30295 / Louisiana / exp. 03/31/2027			
Year registered	2002	Discipline	Professional Engineer		
Contract role(s) / brief description of responsibilities		SUE Project Lead			
Mrs. Amy Schulze, PE, CFM will serve as the SUE Project Engineer/ Manager during this contract. She will supervise and manage any required subsurface utility designating/ locating services. Amy has nearly 30 years of SUE experience.					✓ 25+ years of experience providing SUE and utility coordination services for DOTD and various LPAs
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).				
06/25 – 03/26	Upper Ward Creek Clearing & Snagging Project. East Baton Rouge Parish, LA. SUE Project Manager. Managed QL C, B, and D surface utility designating, utility coordination services, and surveys in support of SUE for flood reduction and associated channel-improvement work.				
11/25 – 03/26	Kings Hwy: Healthcare & Development Corridor, Caddo Parish, LA. DOTD. SUE Project Manager. Coordinated for surveys in support of SUE, QL B, C, & D utility designating, and utility coordination services in support of rehabilitation and design for roadway reconstruction.				
01/22 – 03/26	Jimmie Davis Bridge (LA 511) Design-Build, Bossier & Caddo Parishes, LA. DOTD. SUE Project Manager. Coordinated for surveys in support of SUE, 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.				
04/21 – 03/26	Rural Bridge Replacement Initiative Phase II, Districts 02, 03, 07, 61, & 62, LA. DOTD. SUE Project Manager. Managed for QL C & D subsurface utility services and surveys in support of SUE for 21 bridge and culvert replacements as a subconsultant.				
08/21 – 03/26	Rural Bridge Replacement Initiative Phase II, Districts 05, 08, & 58, LA. DOTD. SUE Project Manager. Managed for QL C & D subsurface utility services and surveys in support of SUE for 34 bridge and culvert replacements as a subconsultant.				
08/22 – 03/26	Delta Utilities/ CenterPoint Energy Survey & SUE Services. Delta Utilities / CenterPoint Energy. SUE Project Manager. Managed QL B, C, & D subsurface utility designating services and surveys in support of SUE in various parishes throughout Louisiana to assist with utility relocation activities. 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..				
08/20 – 03/25	Baton Rouge North Airpark Utility Corridor Phase 2. Baton Rouge, LA. SUE Project Manager. Managed QL B, C, & D subsurface utility designating and surveys in support of SUE at the Baton Rouge Metropolitan Airport. Surveys were performed to locate subsurface utilities within the designated limits. As part of Q LB designating, 4-way sweeps of the area were also performed to confirm that no other utilities exist within the project area.				
01/25 – 02/25	Contract for Topographic Surveys, Box Culvert Replacements, Tasks Orders 1-4, Evangeline, St. Landry, & Bienville Parishes. DOTD. SUE Project Manager. Managed QL D subsurface utility record research services and surveys in support of SUE for preliminary designs of box culvert initiative projects.				
04/18 – 11/24	I-10: LA 415 to Essen Lane, West & East Baton Rouge Parishes, LA. DOTD. SUE Project Manager. Managed QL B, C, and D subsurface utility designating as well as for surveys in support of SUE for approximately 13 miles of roadway.				





06/24 – 08/24	St. Tammany Parish Government Carroll Road Survey & SUE. <i>St. Tammany Parish, LA. SUE Project Manager.</i> Managed QL B, C, and D utility designating services and surveys in support of SUE throughout the approximately 1.5 miles of the project corridor of Carroll Road including all surface streets, drainage ways, and 2 major intersections within and surrounding the project corridor.
06/24 – 08/24	Ascension Parish Government LA 73 to LA 30 Roundabout. <i>Ascension Parish, LA. SUE Project Manager.</i> Managed for QL B, C, and D subsurface utility designating services and surveys in support of SUE for the intersection improvements for the design of a new roundabout as a subconsultant to GEC, Inc.
02/20 – 07/24	MOVEBR Bluebonnet Blvd. (Perkins – Picardy). <i>East Baton Rouge Parish, LA. SUE Project Manager.</i> Managed for QL A, B, C, and D subsurface utility designating/locating and surveys in support of SUE throughout the approximately 1.5 miles of the project corridor.
02/21 – 02/24	IDIQ Contract for SUE Services, I-10, Task Orders 1, 2, 4, & 5, East Baton Rouge Parish, LA. <i>DOTD. SUE Project Manager.</i> Directed QL B, C, D subsurface utility designating services and surveys in support of SUE for four task orders for several additional areas around the I-10 corridor in conjunction with the on-going design-build contract.
06/22 – 04/23	I-20 Monkhouse to I-49, Caddo Parish, LA. <i>DOTD. SUE Project Manager.</i> Directed QL C & D subsurface utility services and surveys in support of SUE for interstate rehabilitation.
08/21 – 08/21	LA 47 IWGO Bridge Rehabilitation, Historic Bridge Improvement (HBI), Orleans Parish, LA. <i>DOTD. SUE Project Manager.</i> Directed QL C & D subsurface utility services and surveys in support of SUE for bridge repair/ rehabilitation.
12/20 – 03/21	LA 6: Youngs Bayou Bridge Rehab, Natchitoches Parish, LA. <i>DOTD. SUE Project Manager.</i> Assisted in the review of survey and utility data for topographic surveying services for bridge rehabilitation.
04/18 – 12/20	Walter O. Bigby Carriageway (N. Pkwy Ext.) <i>Bossier Parish, LA. SUE Project Manager.</i> Managed QL A, B, C, and D subsurface utility designating/locating services in support of surveys and right-of-way mapping for a parkway facility design featuring new roads, additional lanes, roundabouts, and a bridge.
07/19 – 02/20	I-10: Loyola Interchange, Kenner, Jefferson Parish, LA. <i>DOTD. SUE Project Manager.</i> Managed QL B, C, and D subsurface utility designating services and surveys in support of SUE for approximately 5 miles.
12/18 – 01/20	LA 951: Roadway Washout Repairs, East Feliciana Parish, LA. <i>DOTD. SUE Project Manager.</i> Managed QL A, B, C, and D subsurface utility designating/locating and surveys in support of SUE for approximately 2,600 feet of roadway.
12/18 – 03/19	West End Subdivision, Phase B125. <i>City of New Orleans. SUE Project Manager.</i> Managed QL B, C, and D subsurface utility designating along with surveys in support of SUE for preliminary and final design services for FEMAeligible street repairs
06/18 – 10/18	I-10: Williams Blvd. to Veterans Blvd., Jefferson Parish, LA. <i>DOTD. SUE Project Manager.</i> Managed QL B, C, and D subsurface utility designating and surveys in support of SUE for approximately 2 miles for interstate rehabilitation as a sub to GEC, Inc.
09/15 – 04/18	City of Zachary Developmental Projects. <i>Zachary, LA. City Planner/Floodplain Manager.</i> Provided QL C and D subsurface utility services for various development projects within the city limits. Coordinated utility relocation services.
08/04 – 08/15	City of Baton Rouge/Parish of East Baton Rouge. <i>Baton Rouge, LA. Chief of Wastewater Operations and Maintenance.</i> Provided QL C and D subsurface utility services in conjunction with several Sanitary Sewer Overflow (SSO) projects. Coordinated QL B services when necessary. Coordinated utility relocation services and prepared utility relocation agreements.
10/02 – 04/04	Off-System Bridge Project, Rapides Parish, LA. <i>DOTD. Project Engineer.</i> Provided QL C and D subsurface utility services in conjunction with the design of seven bridge locations. Coordinated utility relocation services.

16. Staff Experience:

Firm employed by		NTB Associates, Inc.	
Name	Daniel Brooks		Years of relevant experience with this employer
			1
Title	SUE Coordinator		Years of relevant experience with other employer(s)
			33
Degree(s) / Years / Specialization		ITI Technical College / 1994 / Electrical Technology	
Active registration number / state / expiration date		N/A	
Year registered	2021	Discipline	Certificate of Locating Competency
Contract role(s) / brief description of responsibilities		NTBA SUE Coordinator	



Mr. Daniel Brooks will serve as NTBA SUE Coordinator during this contract. He will supervise and manage field operations and process data for subsurface utility designating/ locating. Daniel is also experienced in meeting with utility companies to discuss known conflicts of existing utility facilities and coordinating the resolution.

- ✓ 30+ years of focused utility coordination experience, serving DOTD and various LPAs
- ✓ ATSSA Certified Flagger

Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
11/25 - 03/26	Upper Ward Creek Clearing & Snagging Project, East Baton Rouge Parish, LA. SUE Coordinator. Assisting with designating and survey crews, performing QA/QC on field work, and reviewing data collected from field crews for QL C, B, and D surface utility designating, utility coordination services, and surveys in support of SUE for flood reduction and associated channel-improvement work.
08/25 - 03/26	I-20: Sam R. Fert Dr. to Red River Bridge, Caddo Parish, LA. DOTD. SUE Coordinator. Assisting with the designating and survey crews, performing QA/QC on field work, and reviewing data collected from field crews for QL C & D subsurface utility services 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	Kings Hwy: Healthcare & Development Corridor, Caddo Parish, LA. DOTD. SUE Coordinator. Assisting with the designating and survey crews, performing QA/QC on field work, and reviewing data collected from field crews for QL B, C, & D utility designating, utility coordination services, and surveys in support of SUE in support of rehabilitation and design for roadway reconstruction.
02/25 - 03/26	Jimmie Davis Bridge (LA 511) Design-Build, Bossier & Caddo Parishes, LA. DOTD. SUE Coordinator. Assisting with designating and survey crews, performing QA/QC on field work, and reviewing data collected from field crews for QL A, B, C, & D utility designating/locating, and utility coordination services, and surveys in support of SUE for the design-build project to replace the Jimmy Davis Bridge across the Red River.
02/25 - 03/26	Bossier HP Phase 2 SUE Services, Bossier Parish, LA. Delta Utilities / CenterPoint Energy. SUE Coordinator Assisting with QL B, C, & D subsurface utility designating services, performing QA/QC on field work, and reviewing data collected from field crews for QL B subsurface utility designating services and surveys in support of SUE as part of a construction project.
02/25 - 05/25	Box Culvert Initiatives, Task Orders 2-4, Bienville & St. Landry Parish, LA. DOTD. SUE Coordinator. Supervised the designating field crew and performing QL D subsurface utility record research based on existing records to identify potential utility relocations in support of topographic surveys for the preliminary designs of box culvert initiative tasks.
02/25 - 04/25	Baton Rouge North Airpark Utility Corridor Phase 2. City of Baton Rouge. SUE Coordinator. Supervised QL B, C, & D subsurface utility designating collecting all records, reviewing submittals, and QA/QC all field data for SUE and surveying services at the Baton Rouge Metropolitan Airport. Surveys were performed to locate subsurface utilities within the designated limits. As part of Q LB designating, 4-way sweeps of the area were also performed to confirm that no other utilities exist within the project area.

FIRM EXPERIENCE



Courtland Street Bridge Replacement over CSX Railroad, Atlanta, GA



Courtland Street Bridge Repl. over CSX Railroad, Atlanta, GA



Courtland Street Bridge Repl. over CSX Railroad, Atlanta, GA

DOTD can rely on the Michael Baker Team's extensive expertise delivering similarly complex projects for the Department and other state transportation agencies, such as the Courtland Street Bridge Replacement over CSX Railroad in Atlanta for GDOT.

Michael Baker International's Projects

17. Firm Experience:

Firm name	Michael Baker International			Past Performance Evaluation Discipline(s)*	Bridge, Road, Traffic, Geotech
Project name	Courtland Street Bridge over CSX Design-Build			Firm responsibility (prime or sub?)	Lead Designer (Subconsultant to Contractor)
Project number	N/A		Owner's Name	Georgia Department of Transportation (GDOT)	
Project location	Atlanta, GA		Owner's Project Manager	Rick O'Hara, Design-Build Project Manager	
Owner's address, phone, email		600 W Peachtree Street NE, Atlanta, GA 30308 404-631-1169 ro'hara@dot.ga.gov			
Services commenced by this firm (mm/yy)		08/17		Total consultant contract cost (\$1,000's)	\$1,379
Services completed by this firm (mm/yy)		06/19		Cost of consultant services provided by this firm (\$1,000's)	\$1962

Michael Baker served as the lead designer for the replacement of the Courtland Street Bridge over the CSX Railroad and MARTA transit system in downtown Atlanta through the design-build delivery method. The Courtland Street Bridge is an important artery for the city providing access to university and government buildings, as well as sporting venues, in Atlanta, GA. However, it showed significant signs of deterioration and needed to be replaced. The 0.4-mile-long project replaced 28 spans of the 110-year-old structurally-deficient bridge with a 12-span, 1,130-foot-long by 58-foot-wide bridge. The substructure has concrete intermediate bents supported by piles footings. The roadway approaches were reconstructed to tie into the existing road on both sides of the proposed bridge with four 12-foot lanes and urban shoulders.



Urban Constraints: The existing bridge had several different types of foundations that had been retrofitted over the years. We used ground-penetrating radar to determine foundation types, ultimately discovering a building had been constructed around one of the bridge foundations. To overcome these challenges, the team plotted all driveways, utilities, and existing footings to determine an appropriate span length that would accommodate minimal site conflicts while allowing for material deliveries in a narrow right-of-way. This plan worked very well, and ***all but five footings were built without conflicts*** to utilities and footings.

Geotechnical Innovation: Because of the six-month closure period for the bridge replacement, Michael Baker used micropile foundations that could be installed underneath the existing bridge while the road remained in service. Innovative-phased design packages, including foundations and substructure, allowed the contractor to begin work three months after the notice to proceed.

Innovative Solutions Minimized Impacts to Schedule & the Public: The team recognized that utility conflicts and a restricted right-of-way posed a major challenge. Conventional Accelerated Bridge Construction (ABC) techniques were not viable on this project due to the constricted right-of-way; therefore, the only way to meet project schedule goals was an aggressive work schedule and innovative use of materials. The team also understood the Courtland Street Bridge's importance as a thoroughfare in Atlanta and sought to minimize the impact of the project while working with an accelerated timeline. This was achieved by:

- Construction of protected access/exit areas through the work zone to key Georgia State University buildings
- Use of specialized equipment and micropiles to install new foundations beneath the existing bridge ***in advance of the road closure***. Most foundations and support piers were constructed ***without affecting traffic, eliminating four months of road closures***.
- Use of accelerated concrete mixes that achieved the required strength in 24 hours
- Use of precast concrete beams for expedited completion of bridge superstructure. ***Michael Baker successfully developed a first-of-its-kind detail*** for prefabricated steel-edge beams on a concrete girder bridge ***that eliminated a week of construction labor on each bridge span, reducing the road closure time up to six weeks***. GDOT plans to integrate these new details into their ABC tool kit for future applications.

In the end, the Courtland Street Bridge project moved so efficiently that ***it opened five days ahead of its already accelerated schedule***. The finished bridge is better suited to safely handle larger traffic volumes and heavier vehicles. Additionally, the new bridge includes a 12-foot lane and expanded sidewalks to better accommodate buses and pedestrians.

PROJECT SIMILARITIES

- Highly Constrained Urban Bridge Replacement over Rail
- Micropile Foundations at all Bents
- Extensive Survey & Utility/Stakeholder Coordination
- Bridge, Wall, & Lighting Design
- Traffic Analysis
- Accelerated Schedule & High Public Impact

Participating Team Members:

George Manning, PE, SE

Award-Winning Project

- ✓ 2019 Best in Small Projects Award, Design-Build Institute of America 2019
- ✓ GPTQ Preconstruction Design Award - Category 9: Design-Build, ACEC Georgia, 2018
- ✓ State Award, ACEC Georgia

VALUE ADDED: TIME-SAVING INNOVATIONS

While using prefabricated steel diaphragms mid-span is a common practice, to expedite this project, the team took the unusual step of using a steel end diaphragm at the end of each span. A Georgia first, the team's use of pre-fabricated steel k-frames at each end reduced each span placement by a week through eliminating the labor time needed to form the traditional cast in place concrete end diaphragms. This innovative approach helped ensure the project achieved the schedule.

17. Firm Experience:

Firm name	Michael Baker International		Past Performance Evaluation Discipline(s)*	Road, Bridge, Environmental
Project name	US 371: KCS Railroad Overpasses HBI		Firm responsibility (prime or sub?)	Prime
Project number	H.012030	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Sibley & Minden, Webster Parish, LA	Owner's Project Manager	Hamed Babaizadeh, PE	
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802 225-379-1033 Hamed.Babaizadeh@la.gov		
Services commenced by this firm (mm/yy)		11/21	Total consultant contract cost (\$1,000's)	\$980
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$630

Michael Baker was selected by DOTD to provide bridge, structural, and transportation services for the replacement of three bridges along US 371 at two locations in Sibley, LA and Minden, LA. All bridges span KCS Railroad at two locations along their rail line.

Sibley Bridge: The existing bridge at Sibley, LA was built in 1934 and is currently a **three-span, concrete girder bridge** for a total length of 120' resting on concrete substructure. This bridge has sidewalks on both sides of the bridge and ties to existing sidewalks along the route. **Daniel and Shalin's design team was tasked with determining the most efficient and cost-effective bridge to replace the existing structure.** A bridge structure report is required to determine if the new bridge will either be concrete or steel girder type. The new structure and road improvements will meet the latest DOTD design guidelines. One of the challenges at this location is the **grade difference between the bridge and existing properties with the railroad underneath.** Coordination with KCS railroad will help determine the final location of the bridge foundations in relationship with the rail line. Michael Baker submitted the 60% design plans before the Sibley bridge was removed from the original project plans; we are currently delivering the remaining design services for Sibley as a separate project.

Minden Bridges: The two bridges at Minden, LA serve as part of the I-20 interchange at US 371. The bridges were built at different times around 1930 and **both bridges are three-span, steel and concrete girder bridges.** One bridge is normal skew to the roadway while **the other bridge was built on a skew aligning with the rail line.** Similar to the Sibley bridge, the design team will prepare a bridge structure report determining the most efficient and cost-effective bridges while minimizing impact to the local traffic. With these bridges being located at an interchange, the bridge replacements pose additional challenges such as maintenance of traffic, phased construction, and shifting of traffic. At this location, one bridge will be removed and replaced while reducing travel to one-lane on the other bridge to keep roadway open to existing traffic. **Daniel and Shalin's design team is tasked with determining if the new bridge will be concrete or steel girder type while maintaining minimal adjustment to the existing roadway grade** to reduce the amount of roadway necessary to tie to existing roadway.

Proven Teaming Success: Vectura Consulting Services is a subconsultant to Michael Baker on this project, providing traffic engineering services. This shared experience on a successful project speaks to the **history of coordination and collaboration efforts between both our firms.**



PROJECT SIMILARITIES

- Multiple Aging Steel Girder Bridge Replacements over Railroad
- DOTD Project Meeting the Latest DOTD Design Guidelines
- Extensive Railroad Coordination (KCS)
- Proven Success Working with PM Hamed Babaizadeh
- Bridge & Roadway Design
- Traffic Engineering, including Maintenance of Traffic
- Proven Teaming Success with Vectura

Participating Team Members:

Daniel Thornhill, PE | Shalin Sheth, PE | Jeff McRae, PE | Jim Nelson, PE | Alison Gonzalez, PE | Celina Sumrall, PE, PTOE | Marcela Trochez | Alexis Harrouch, EI | Jacob Rish, EI | Haley Stevens | TJ Holliday, PWS | Elizabeth Brock

17. Firm Experience:

Firm name	Michael Baker International		Past Performance Evaluation Discipline(s)*	Road, Bridge
Project name	SR 471 from US 80 to Grants Ferry Road		Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's Name	Mississippi Department of Transportation	
Project location	Rankin County, MS	Owner's Project Manager	Richard Pittman, PE, Roadway Design Division Engineer	
Owner's address, phone, email		401 North West Street, P.O. Box 1850, Jackson, MS 39215 601-359-7257 rpittman@mdot.ms.gov		
Services commenced by this firm (mm/yy)		05/12	Total consultant contract cost (\$1,000's)	\$1,366
Services completed by this firm (mm/yy)		12/14	Cost of consultant services provided by this firm (\$1,000's)	\$1,366

Michael Baker provided engineering services for the relocation and widening of S.R. 471 from U.S. 80 in Brandon to Grant's Ferry Road. The relocation portion is about 1.5 miles long and the widening portion is about 1.5 miles long and goes from two lanes to five lanes. Michael Baker's services included the development of roadway and bridge construction plans for the roadway improvements.

The roadway plans included plan-profile sheets, earthwork quantities, pavement typical sections and details, traffic control, and other specified plan details and plan quantities necessary for the construction of the project.

The bridge plans included two new bridges. The first bridge is a replacement of the S.R. 471 bridge over I-20 with a new five-lane bridge to be constructed in phases. The bridge will have a superstructure of AASHTO prestressed girders on multiple diamond shaped columns and a pile footing substructure. Also included were demolition plans for the first bridge, which is a continuous concrete box girder.

The second bridge is 1,500 feet long and **spans the KCS Railroad and Value Road**. The bridge has complex geometry, with two horizontal curves and a tangent section in full superelevation and transitions that include reversing the superelevation near one end of the bridge.

The superstructure of the new second bridge will be a combination of prestressed girder spans and a two-span, continuous, welded steel-plate girder unit. The substructure for the second bridge will have multiple round columns more than 50 feet tall on concrete drilled shafts. Contract plans for the second bridge included erection plans for the steel spans and plans for a construction ramp on the railroad embankment, which will partially remain in place to stabilize geotechnical slide problems in the railroad embankment.

Michael Baker performed all bridge design in accordance with AASHTO load and resistance factor design specifications.

PROJECT SIMILARITIES

- Bridge Replacement over Rail
- Bridge, Roadway, & Drainage Design
- Steel Plate Girder Bridge
- Geotechnical Challenges
- Demolition Plans

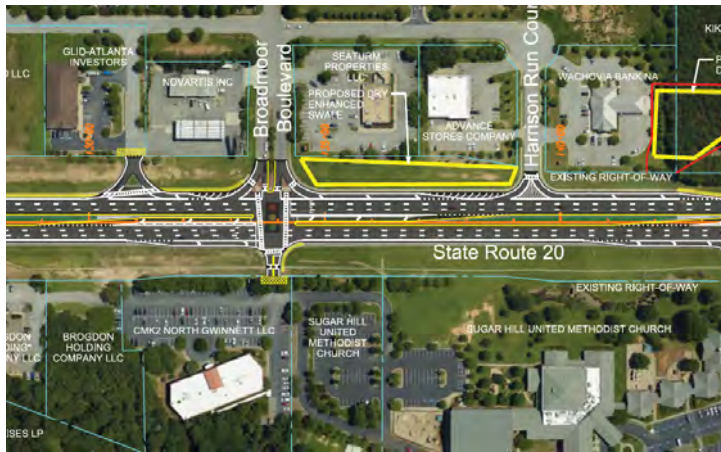
Participating Team Members:

Kenny Collins, PE | Jeff McRae, PE | Brooks Miller, PE, PTOE



17. Firm Experience:

Firm name	Michael Baker International		Past Performance Evaluation Discipline(s)*	Bridge, Road, Traffic
Project name	SR 20 Widening		Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's Name	Gwinnett County Department of Transportation	
Project location	Gwinnett County, GA	Owner's Project Manager	Tshaya Jackson, Project Manager	
Owner's address, phone, email		446 West Crogan Street, Suite 410, Lawrenceville, GA 30046 770-822-7488 Tshaya.Jackson@gwinnettcountry.com		
Services commenced by this firm (mm/yy)		03/18	Total consultant contract cost (\$1,000's)	\$403
Services completed by this firm (mm/yy)		12/21	Cost of consultant services provided by this firm (\$1,000's)	\$403



Michael Baker provided engineering services for the widening of Buford Drive/S.R. 20 from Peachtree Industrial Boulevard to Buford Highway/S.R. 13 from two lanes to three lanes in each direction. ***The project area included a bridge, approximately 1.31 miles long, over Railroad Avenue and Norfolk Southern Railroad.***

Michael Baker provided services for conceptual design, roadway, drainage, erosion control, right-of-way, traffic signals, bridge widening, and wall design and managed subconsultant services for survey, geotechnical, traffic counts, and MS4 design. This work was provided under an on-call task order arrangement.

This project connects two important north-south

routes – Peachtree Industrial Boulevard and Buford Highway – and carries traffic from I-985 to western Gwinnett County, and eventually to Cumming and Forsyth counties. This widening project enhances safety and reduce congestion along this portion of S.R. 20 and provides better mobility within the commercial district and improved access to S.R. 13.

The existing four span steel beam bridge was widened on both sides to accommodate a new lane in each direction, a sidewalk on the left side of the bridge and a shared use path on the right side of the bridge. The bridge was widened using simple span steel girders supported by hammerhead bents on steel h-pile footings. The final bridge plans included staging plans to allow traffic to use the bridge during construction. In addition to the widening, improvements to the bridge included jacking the bridge to meet railroad vertical clearance requirements, adding crash walls to meet railroad horizontal requirements, and providing an overlay on the bridge deck to improve long-term performance. The project is currently under construction.

PROJECT SIMILARITIES

- Constrained Bridge Replacement over Rail
- Bridge, Wall, Traffic Signals, & Drainage Design
- Survey
- Stakeholder & Rail Coordination

Participating Team Members:

George Manning, PE, SE



17. Firm Experience:

Firm name	Michael Baker International		Past Performance Evaluation Discipline(s)*	Bridge, Road, Environmental
Project name	New Orleans Rail Gateway Program		Firm responsibility (prime or sub?)	Prime
Project number	S.P. No. H.005168	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Jefferson Parish, LA	Owner's Project Manager	G. Kevin Lawson, Rail Program Director	
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802 225-274-4350 kevin.lawson@la.gov		
Services commenced by this firm (mm/yy)		09/19	Total consultant contract cost (\$1,000's)	\$3,105
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$2,209

The Jefferson Highway Rail Crossing Relocation project and the Avondale PEL Study project are continuations of the New Orleans Rail Gateway (NORG) Program, a public-private partnership between DOTD, the FRA, and the six Class 1 railroads operating in the metropolitan area, in coordination with the Federal Highway Administration, the New Orleans Regional Planning Commission, the New Orleans Public Belt Railroad, and Amtrak.

JEFFERSON HIGHWAY RAIL CROSSING RELOCATION ENVIRONMENTALASSESSMENT (EA)

Michael Baker is providing operations, engineering and environmental studies and preparing an environmental assessment (EA) for combining and possibly grade-separating two at-grade highway-rail crossings (CN/NOPB and CPKC) of Jefferson Highway (US 90) in Jefferson Parish, between the Ochsner Health Foundation Hospital and Monticello Avenue.

Michael Baker is performing solicitation of views (SOV) including Native American government-to-government coordination through FRA, environmental resources investigations, GIS mapping, freight rail operations forecasting and crossing occupancy time analyses, roadway traffic and crash analyses, rail and roadway/bridge conceptual design, cost estimates, alternatives analyses, stakeholder and agency coordination, and preparing the EA and Errata to EA/FONSI.

Two at-grade highway-rail crossings, a Canadian National Railway / New Orleans Public Belt Railroad (CN/NOPB) crossing and a Kansas City Southern Railway (KCS) crossing are less than 700 feet apart between the hospital and Monticello Avenue. The study is evaluating four alternatives: combining the two crossings into a single, dual-track at-grade crossing at the CN/NOPB crossing location; combining the two crossings into a single, dual-track at-grade crossing at the KCS crossing location; grade separating the dual-track CN/NOPB crossing with a roadway overpass; or grade separating the dual-track KCS crossing with a roadway overpass.

Environmental Assessment: Michael Baker is preparing the EA and Errata EA/FONSI in accordance with DOTD procedures including the Stage 1 (Planning/Environmental) Manual of Standard Practice, NEPA requirements and related laws, Council on Environmental Quality regulations and guidance, and the procedures promulgated by the FRA.

AVONDALE PLANNING AND ENVIRONMENTAL LINKAGES (PEL) STUDY

Michael Baker provided operations, engineering, and environmental studies and prepared the PEL study to evaluate the consolidation, road-over-rail grade separation, or closure of four UPRR/BNSF at-grade highway-rail crossings (Live Oak Boulevard, Willswood Lane, George Street, and Avondale-Garden Road) in the Waggaman/Avondale area. Michael Baker performed project management, solicitation of views, secondary-source environmental resources inventory, GIS mapping, freight rail operations forecasting and crossing occupancy time analyses, roadway traffic and crash analyses, purpose and need, roadway/bridge conceptual design, cost estimates, alternatives analyses, stakeholder and agency coordination, public outreach and prepared the PEL document identifying the alternatives recommended to be carried forward into DOTD Stage 1 (NEPA).

The goals of the study were to improve safety by eliminating at-grade railway-highway crossings, reduce vehicle delay by eliminating crossing blockages due to the switching operations at the Avondale Rail Yard, eliminate truck traffic from roadways posted as "No Truck Route" with a five-ton limit, and improve intermodal connectivity with the UPRR/BNSF Avondale Yard and UPRRs New Orleans Intermodal Terminal.

PROJECT SIMILARITIES

- Environmental Assessment
- GIS Development Mapping
- Rail and Roadway Operations Analyses
- Roadway/Bridge Conceptual Design
- Cost Estimates
- Alternatives Analysis
- Public Outreach
- Stakeholder Coordination
- EA & Errata EA/FONSI

Participating Team Members:

Daniel Thornhill, PE | Chris Gesing, PE | TJ Holliday, PWS | Carla Dietrich, PE, PTOE | Alexis Harrouch, EI



Subconsultant Projects

17. Firm Experience:

Firm name	HDR Engineering, Inc.		Past Performance Evaluation Discipline(s)*	Bridge, Road
Project name	Bridge Preservation IDIQ - LA 577 at I-20 Repair PS&E		Firm responsibility (prime or sub?)	Prime
Project number	H.015472	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Waverly, LA	Owner's Project Manager	Phillip Grasso	
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802 225.379.1412 Phillip.grasso@la.gov		
Services commenced by this firm (mm/yy)		11/22	Total consultant contract cost (\$1,000's)	\$241
Services completed by this firm (mm/yy)		07/23	Cost of consultant services provided by this firm (\$1,000's)	\$241

DOTD contacted HDR to assist with an emergency site inspection and assess the condition of a prestressed, precast concrete girder overpass bridge (built in the late 1960s) across I-20 that was struck by a dump truck. Work was authorized using HDR's Bridge Preservation IDIQ contract (Task Orders 1 and 2). The first two girders were damaged beyond repair, and secondary damage was done to the middle girder and abutment cap.

HDR's Phase 1 design consisted of developing plans, specifications, and estimates (PS&E) for the phased demolition of the west side of the damaged span to get a single lane of traffic back open on the eastern portion of the bridge. The remaining section is supported by three girders (two undamaged and one partially damaged). An LRFR load rating analysis was completed as part of the demolition design, traffic control layout, and signage for the temporary condition. HDR's Phase 2 design involved the split-phased design of a replacement span. The existing girders were AASHTO Type 3 (interior) and 4 (exterior).



In a discussion with DOTD, HDR decided to utilize AASHTO Type 3 girders for the replacement and added a girder due to the split-phased construction. The existing substructure was modified to accommodate the new girder layout, while the existing substructure was analyzed for the new loading configuration. Additional load rating analysis was developed for the interim and final conditions of the span. The guard rail was designed to match the old "post and beam" section prevalent during that period, traffic control layout and signage for phased construction, and the final condition. HDR also provided construction-related engineering services.

PROJECT SIMILARITIES

- DOTD Project
- Bridge Rehabilitation and/or Replacement
- Preliminary Bridge and/or Roadway Design
- Concrete Girder Design
- Substructure rehabilitation
- Traffic Engineering
- Split phased construction

KEY PROJECT ELEMENTS

- Emergency Inspection of Damaged Bridge Span
- Repair/Rehabilitation Design - Multi-Phased
- LRFR Load Rating
- Roadway/Traffic Control & Bridge Design PS&E
- Bid Phase Engineering Services
- Engineering Services During Construction

Participating Team Members:

Wes Jacobs, PE | Sarah De Moya

17. Firm Experience:

Firm name	HDR Engineering, Inc.		Past Performance Evaluation Discipline(s)*	Bridge, Road, Traffic
Project name	Liberty Bridge Rehabilitation		Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's Name	Pennsylvania Department of Transportation, Engineering District 11-0	
Project location	Pittsburgh, PA	Owner's Project Manager	Jason Zang, PE	
Owner's address, phone, email		45 Thoms Run Road, Bridgeville, PA 15017 413.429.4912 jzang@pa.gov		
Services commenced by this firm (mm/yy)		12/11	Total consultant contract cost (\$1,000's)	\$4,754
Services completed by this firm (mm/yy)		12/18	Cost of consultant services provided by this firm (\$1,000's)	\$3,348

The Liberty Bridge has been a landmark structure and Pittsburgh icon since it opened in 1928. It created the modern suburbs, quadrupled property values south of Pittsburgh, and opened with a five-mile-long parade. However, by 2014, the bridge, which carried 55,000 vehicles per day over the Monongahela River, I-376, and railroad tracks, was in poor condition. It could no longer carry trucks and had become a poster child for America's infrastructure crisis. Sixty Minutes, profiling America's neglected infrastructure, highlighted the bridge. Referring to Liberty Bridge and others like it, Ray LaHood, United States Secretary of Transportation, stated plainly: "Our infrastructure is on life support right now."

PennDOT and HDR responded with a rehabilitation project that preserves the structure and meets current engineering and accessibility standards, using innovations including:

- Accelerated bridge construction techniques to replace a bridge deck the size of three football fields while minimizing traffic impacts
- A new Exodermic deck - the first ever used in Pennsylvania to provide a stiff, lightweight replacement for the failing grid deck



This complex, urban project was made more challenging by an accidental construction fire that heated and buckled a primary truss member, crippling the bridge and requiring immediate closure. Working around the clock, a first-of-its-kind jacking frame was designed, fabricated, and installed to straighten the warped member and reopen the bridge in just 24 days.

Thanks to innovative solutions, today, Liberty Bridge is off life support. The new bridge will support life in Pittsburgh for generations, with an ADA-accessible sidewalk allowing everyone to enjoy crossing this historic structure.

PROGRAM SUMMARY

Since opening day in 1928, Liberty Bridge has been noteworthy, and its recent rehabilitation is no exception. Impacts to 55,000 vehicles per day were reduced using innovative techniques to maintain traffic while a deck the size of three football fields was replaced with the first Exodermic deck ever used in Pennsylvania. When a fire nearly destroyed the bridge during construction, the project team worked around the clock for 24 days to invent and install a jacking frame and fix the structure. The rehabilitated bridge will support life in Pittsburgh for generations, allowing everyone to enjoy crossing this historic structure.

PROJECT SIMILARITIES

- Bridge Rehabilitation
- Preliminary Bridge and Roadway Design
- Traffic Engineering and Maintenance of Traffic
- Constrained Project Site
- Historic Structure
- Stakeholder and Railroad Coordination

Participating Team Members:

Nick Burdette, PE

17. Firm Experience:

Firm name	HDR Engineering, Inc.		Past Performance Evaluation Discipline(s)*	Bridge, Road, Traffic
Project name	US 87 Over UPRR and Beals Creak		Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's Name	Texas Department of Transportation, Abilene District	
Project location	Big Spring, TX	Owner's Project Manager	Mike Roetheli	
Owner's address, phone, email		4250 N Clack St, Abilene, TX 79601 325-676-6957 michael.roetheli@txdot.gov		
Services commenced by this firm (mm/yy)		07/17	Total consultant contract cost (\$1,000's)	\$300
Services completed by this firm (mm/yy)		01/21	Cost of consultant services provided by this firm (\$1,000's)	\$200

HDR performed an extensive condition assessment using visual methods supported by ground penetrating radar scan, thermography, and steel coating assessment. Access to the underside of the bridge was provided with UBIV over the existing railroad yard and required extensive coordination with the UPRR yardmaster. Locked up bearing devices and leaking expansion joints contributed to significant bent cap and column deterioration. The bridge included significant map cracking on the underside of deck accompanied with rust-stained efflorescence, and coring of the concrete confirmed high chloride content throughout. HDR concluded that the deck was at the end of its service life and recommended a full deck replacement. The proposed scope of repair work was documented in an Exhibit A package and submitted to the railroad for approval.



The final repair plans detailed the deck replacement as well as upgrade of the existing railing and the addition of steel stud connectors and increased the load rating of the bridge. Repairs to the deteriorated steel girders and damaged diaphragms were also developed. Substructures were repaired with intermediate concrete repairs and wrapped in CFRP to provide additional confinement and protection against future chloride infiltration. Finally, the steel superstructure was completely cleaned and painted with a new System III-A coating, which should provide substantially longer service life in the high chloride environment. In addition to the bridge repair plans, HDR's complete PS&E included roadway plans, traffic control sequencing, illumination and pedestrian improvements

PROJECT SIMILARITIES

- Bridge Rehabilitation
- Railroad Overpass
- Evaluation of Remediation Alternatives
- Preliminary and Final Bridge Design
- Traffic Engineering
- Constrained Project Site
- Stakeholder and/or Railroad Coordination

KEY PROJECT ELEMENTS

- Complete Condition Assessment with Railroad Coordination
- Deck replacement Design
- Steel girder repairs and strengthening
- Substructure concrete repairs and strengthening utilizing CFRP
- Roadway, Bridge & Traffic Control PS&E
- Engineering Design Service During Construction

Participating Team Members:

Greg Kochersperger, PE

17. Firm Experience:

Firm name	Terracon Consultants, Inc.		Past Performance Evaluation Discipline(s)*	Geotech
Project name	US 71 Emergency Bridge Repair		Firm responsibility (prime or sub?)	Subconsultant
Project number	H.014361	Owner's Name	Louisiana Department of Transportation and Development Gresham Smith	
Project location	Shreveport, LA	Owner's Project Manager	John Weres, PE	
Owner's address, phone, email		10000 Perkins Rowe #280, Baton Rouge, LA 70810 (225) 960-5480 john.weres@greshamsmith.com		
Services commenced by this firm (mm/yy)		05/20	Total consultant contract cost (\$1,000's)	\$13
Services completed by this firm (mm/yy)		08/20	Cost of consultant services provided by this firm (\$1,000's)	\$13

Terracon was a geotechnical subconsultant supporting the repair of the east abutment of the N. Market Street (US 71) bridge over the KCS railroad in Shreveport, LA, which was damaged by a train derailment. The project included repairing damaged steel columns and constructing a new cast-in-place reinforced concrete crash wall to protect the bridge bent, supported by a deep foundation system.

Terracon provided geotechnical engineering services that included subsurface exploration through a deep soil boring and a shallow hand auger, laboratory testing, and evaluation of site soil and groundwater conditions. Their staff developed geotechnical recommendations for foundation design, excavation and shoring considerations, and construction sequencing, and provided soil parameters to support the design of a helical pile foundation system and temporary cofferdam. Terracon also performed lateral load analyses to support foundation performance criteria and provided seismic site classification and general construction recommendations to support the implementation of the emergency repairs. ***Lynne Roussel and her team will bring this first-hand familiarity with the Market Street Bridge's site conditions and design to develop the safest, most effective solutions possible for this proposed project.***

PROJECT SIMILARITIES

- DOTD Project
- Local Experience
- Bridge Rehabilitation and/or Replacement
- Preliminary Bridge and/or Roadway Design
- Traffic Engineering
- Constrained Project Site
- Stakeholder and/or Railroad Coordination

Participating Team Members:

Lynne Roussel, PE | Steve Greaber, PE | Matthew Minton



17. Firm Experience:

Firm name	Terracon Consultants, Inc.		Past Performance Evaluation Discipline(s)*	Geotech
Project name	I-49 South at Verot School Road		Firm responsibility (prime or sub?)	Subconsultant
Project number	H.011235	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Lafayette, LA	Owner's Project Manager	Corey Landry, PE	
Owner's address, phone, email		1201 Capitol Access Rd, Baton Rouge, LA 70802 225-379-1387 corey.landry@la.gov		
Services commenced by this firm (mm/yy)		06/18	Total consultant contract cost (\$1,000's)	\$468
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$468

Terracon was a geotechnical subconsultant responsible for performing 30 deep borings, 67 shallow borings, including 33 located within the existing roadways, 15 CPT soundings, lab testing, installed and monitored piezometer, and prepared soil surveys and boring logs for planned new bridges, roadway widening, and retaining wall structures.



Prior to mobilizing exploration equipment, Terracon's drilling manager and drilling personnel conducted extensive site visits to mark boring locations, meet with private landowners and utility locators, and verify boring access and site conditions. Terracon coordinated field activities with DOTD district personnel, including the required traffic control. Traffic control, including shoulder and both daytime and overnight lane closures were required to complete several borings. Terracon mobilized multiple pieces of exploration equipment to complete all field work in a timely and provided regular updates to team members about the project.

After completing the field exploration and lab testing programs, Terracon prepared pile nominal resistance

calculations for the planned bridge substructures in accordance with DOTD standards. Terracon additionally performed stability and settlement analyses for the MSE Walls. Terracon communicated with the design team and updated the analyses and recommendations throughout the design process, as necessitated by changes in the design.

PROJECT SIMILARITIES

- DOTD Project
- Local Experience
- Bridge Rehabilitation and/or Replacement
- Preliminary Bridge and/or Roadway Design
- Traffic Engineering
- Stakeholder and/or Railroad Coordination

Participating Team Members:

Lynne Roussel, PE | Steve Greaber, PE | Ryan Poindexter, PE | Matthew Minton

17. Firm Experience:

Firm name	Terracon Consultants, Inc.		Past Performance Evaluation Discipline(s)*	Geotech
Project name	Nelson Road Extension and Bridge		Firm responsibility (prime or sub?)	Prime
Project number	H.011235	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Lafayette, LA	Owner's Project Manager	Kristy Smith, PE	
Owner's address, phone, email		1201 Capitol Access Rd, Baton Rouge, LA 70802 225-379-1387 Kristy.Smith2@la.gov		
Services commenced by this firm (mm/yy)		07/18	Total consultant contract cost (\$1,000's)	\$364
Services completed by this firm (mm/yy)		06/21	Cost of consultant services provided by this firm (\$1,000's)	\$364

Terracon provided soil borings, lab testing, boring logs, and engineering for a planned roadway extension and bridge. Provided pile nominal capacity calculations and recommendations for resistance factors for design. Provided design support for impact dolphins to be placed in front of the bridge to protect the superstructure from impact by large ships from the adjacent Port of Lake Charles.



PROJECT SIMILARITIES

- DOTD Project
- Local Experience
- Bridge Rehabilitation and/or Replacement
- Preliminary Bridge and/or Roadway Design
- Traffic Engineering
- Constrained Project Site
- Stakeholder and/or Railroad Coordination

Participating Team Members:

Lynne Roussel, PE | Steve Greaber, PE | Ryan Poindexter, PE | Matthew Minton

17. Firm Experience:

Firm name	NTB Associates, Inc.		Past Performance Evaluation Discipline(s)*	Survey, Right-of-Way, Other (SUE)
Project name	Jimmie Davis Bridge (LA 511) Design-Build		Firm responsibility (prime or sub?)	Subconsultant
Project number	H.001779	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Bossier & Caddo Parishes, LA	Owner's Project Manager	Catherine Mastin	
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802 225-379-1652 catherine.mastin@la.gov		
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

NTBA performs 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 for the design-build project to replace the Jimmie 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 DOTD during the original survey. NTBA also 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 ensure 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. NTBA's team is coordinating with the utility owners to relocate utilities that conflict with the construction and will monitor the relocation to ensure compliance with relocation plans. NTBA is utilizing the DOTD Survey and Design Manual Addendum A as well as CI/ASCE Standard 38-02.



PROJECT SIMILARITIES

- DOTD Project
- Local Project
- Surveying, Right-of-Way, and SUE Services
- Complex Bridge Replacement Project
- Utility Coordination

Participating Team Members:

Amy Schulze, PE, CFM | Bryan Bunch, PLS | Daniel Brooks

17. Firm Experience:

Firm name	NTB Associates, Inc.		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 Project No. 8-15	Owner's Name	City of Bossier City	
Project location	Bossier Parish, LA	Owner's Project Manager	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

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 for 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.



PROJECT SIMILARITIES

- DOTD Project
- Local Experience
- Survey, Right-of-Way, SUE, & Utility Coordination to support New Bridge Over Rail
- Preliminary Bridge and/or Roadway Design
- Railroad Coordination
- Urban Constraints

Participating Team Members:

Amy Schulze, PE, CFM | Bryan Bunch, PLS

17. Firm Experience:

Firm name	NTB Associates, Inc.		Past Performance Evaluation Discipline(s)*	Survey, Other (SUE), Right-of-Way
Project name	Rural Bridge Replacement Initiative Phase II		Firm responsibility (prime or sub?)	Subconsultant
Project number	4400019338	Owner's Name	Louisiana Department of Transportation and Development Waggoner	
Project location	Districts 02, 03, 07, 61, & 62, LA	Owner's Project Manager	Robert J. Lear, Jr., PE, LS	
Owner's address, phone, email		10305 Airline Highway, Baton Rouge, LA 70816 225-298-0800 rlear@sigmacg.com		
Services commenced by this firm (mm/yy)		09/20	Total consultant contract cost (\$1,000's)	\$1,328
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$1,328

NTBA is performing GPS Control surveys, topographic surveys utilizing HDS 3D Terrestrial Laser Scanning methods of data collection, property surveys, 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 throughout South Louisiana. Topographic surveying includes surveying of all sub-surface drainage structures, 200 feet upstream and downstream with cross-sections every 50 feet along channels, deck gutter lines, centerline of joints, low chord elevations, bent locations, and right-of-way 800 feet either side of the structure. Subsurface utility engineering services include QL C and QL D utility mapping. NTBA produced electronic topographic drawings in MicroStation depicting all utility and topographic information. Data was provided to the engineering consultant for incorporation into their hydraulic model being utilized to evaluate the system.

Boundary surveying has been performed for 15 bridges with approximately 50 parcels. Services include surveying of each parcel affected by either construction servitude or additional right-of-way requirements as well as production of property survey submittal, preliminary and final right-of-way maps, and parcel descriptions. All services are being completed in accordance with the Location and Survey Manual Addendum A and all currently accepted Location and Survey Automated procedures



PROJECT SIMILARITIES

- DOTD Project
- Survey, Right-of-Way, SUE, & Utility Coordination to support numerous Bridge Replacement projects
- Stakeholder and/or Railroad Coordination

Participating Team Members:

Amy Schulze, PE, CFM | Bryan Bunch, PLS

17. Firm Experience:

Firm name	Vectura Consulting Services, LLC			Past Performance Evaluation Discipline(s)*	Traffic
Project name	US 11 (Front St.) at US 190 Bus. (Fremaux Ave.) Traffic Study			Firm responsibility (prime or sub?)	Subconsultant
Project number	N/A	Owner's Name		City of Slidell	
Project location	Slidell, LA		Owner's Project Manager		Eric Lundin
Owner's address, phone, email		250 Bouscaren St., Slidell, LA 70458 985-646-4320 elundin@cityofslidell.org			
Services commenced by this firm (mm/yy)		09/17		Total consultant contract cost (\$1,000's)	Unknown
Services completed by this firm (mm/yy)		11/17		Cost of consultant services provided by this firm (\$1,000's)	\$39

Vectura was hired as a sub-consultant to the prime consultant to perform a traffic study for the City of Slidell as part of improvements to the intersection of US 11 (Front St.) at US 190 Bus. (Fremaux Ave.). The goal of the study was to determine if a pedestrian crossing and pedestrian traffic signal heads were warranted. To conduct the pedestrian study, the following tasks were performed by Vectura:

DATA COLLECTION

- AM and PM peak hour turning movement counts for five intersections
- AM / PM peak 15-minute turning movement counts for 10 driveways on Fremaux Ave.
- 24-hour traffic approach volumes, speed data, crash history and sight distance for the intersection of US 190 Bus. (Fremaux Ave.) at US 11 (Front St).
- Weekday and weekend pedestrian counts for the intersection of US 190 Bus. (Fremaux Ave.) @ US 11 (Front St).

DRAFT TRAFFIC STUDY

This task included a Crosswalk Traffic Study for US 190 Bus. (Fremaux Ave.) at US 11 (Front St.) as Per DTOE, Traffic Engineering Manual (TEM) Section 3B.2.9, Section 20.2 & EDSM VI.3.1.6 Section 6. This task included the following elements:

- Developed three-year crash analyses
- Performed pedestrian crosswalk warrants as per TEM Section 3B.2.9
- Performed Vistro and HCS analyses for AM and PM Peak existing conditions, Implementation and design year conditions. The analyses included intersection and segment levels of service as well as signal timing and progression for the five intersections.
- Developed traffic study and electronic files. The Study documented how traffic will be routed with the proposed median on Fremaux Ave., the impacts to Front St., and conflict analysis for the crosswalks and pedestrian heads.

**PROJECT SIMILARITIES**

- LA Municipal Project
- Traffic Data Collection
- Traffic Study Preparation

Participating Team Members:

Brin Ferlito, PE, PTOE | Laurence Lambert, PE, PTOE, PTP

17. Firm Experience:

Firm name	Vectura Consulting Services, LLC		Past Performance Evaluation Discipline(s)*	Traffic
Project name	I-12 To Bush - LA 3241 (I-12 - LA 36) Corridor Study		Firm responsibility (prime or sub?)	Subconsultant
Project number	H.0049575	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Lacombe, LA	Owner's Project Manager	Joachim Umeozulu, PE	
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802 225-379-1386 Joachim.Umeozulu@la.gov		
Services commenced by this firm (mm/yy)		09/16	Total consultant contract cost (\$1,000's)	\$1,895
Services completed by this firm (mm/yy)		05/17	Cost of consultant services provided by this firm (\$1,000's)	\$84

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

TASK 1: DATA COLLECTION

Vectura collected the following traffic data for 10 intersections:

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

TASK 2: TRAFFIC STUDY

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

- Performed Vistro and Sidra analyses for existing conditions
- Performed Vistro and Sidra analyses for implementation and design years
- Intersection alternatives included restricted median openings, signalized and unsignalized intersections, median U-turns at existing signal locations, restricted crossing U-turn (RCUT) intersections, and roundabouts
- Developed Vissim model of the preferred corridor layout
- Developed draft traffic study report

TASK 3: SAFETY ANALYSES

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

**PROJECT SIMILARITIES**

- DOTD Project
- Traffic Data Collection
- Traffic Study Preparation
- Safety Analyses

Participating Team Members:

Brin Ferlito, PE, PTOE | Laurence Lambert, PE, PTOE, PTP

17. Firm Experience:

Firm name	Vectura Consulting Services, LLC		Past Performance Evaluation Discipline(s)*	Traffic
Project name	I-20: LA 544 Overpass Replacement		Firm responsibility (prime or sub?)	Subconsultant
Project number	H.010616	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Baton Rouge, State	Owner's Project Manager	Jacob Fusilier	
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802 225-379-1185 Jacob.Fusilier@la.gov		
Services commenced by this firm (mm/yy)		04/23	Total consultant contract cost (\$1,000's)	Unknown
Services completed by this firm (mm/yy)		10/23	Cost of consultant services provided by this firm (\$1,000's)	\$132

Vectura performed a **Level 2 Traffic Management Plan (TMP)** that included the following activities:

- Preliminary and final traffic studies
- Temporary and final traffic signal plans
- Traffic Management Plan (TMP)
 - » safety strategy that included a CAT Scan,
 - » LOS determination utilizing Citrix data,
 - » lane closure recommendations based on a queue analysis,
 - » cost estimate,
 - » and public information strategies



PROJECT SIMILARITIES

- DOTD Project
- Level 2 Traffic Management Plan

Participating Team Members:

Brin Ferlito, PE, PTOE | Laurence Lambert, PE, PTOE, PTP | Reece Rodrigue, PE, PTOE | Kristen Farrington, PE, PTOE

17. Firm Experience:

Firm name	CDM Smith Inc.		Past Performance Evaluation Discipline(s)*	Traffic
Project name	Mississippi River Bridge - LA1 to LA 30 Connector (MRB South GBR)		Firm responsibility (prime or sub?)	Subconsultant
Project number	H.013284	Owner's Name	Louisiana Department of Transportation and Development	
Project location	East Baton Rouge, LA	Owner's Project Manager	Paul Vaught	
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802 paul.vaughtIII@la.gov		
Services commenced by this firm (mm/yy)		08/20	Total consultant contract cost (\$1,000's)	Unavailable
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)	Unavailable

The Mississippi River Bridge Connector Project was initiated to address the growing transportation needs in the Baton Rouge Metropolitan Area. The project aims to construct a new crossing over the Mississippi River, connecting LA 1 on the west side to LA 30 on the east side. This connector is strategically located between the LA 70 "Sunshine" river crossing and the I-10 river crossing. The primary goal of the project is to alleviate traffic congestion, improve regional connectivity, and support economic growth in the region. Challenges include addressing environmental constraints, stakeholder coordination, and developing a comprehensive plan that meets federal and state requirements.

Project Specifics: The project involved an Enhanced Planning Phase to lay the groundwork for future development. Key tasks included:

- Developing a preliminary statement of Purpose and Need.
- Preparing a list of cooperating and participating agencies and a coordination plan.
- Identifying stakeholders, including governmental entities, utilities, environmental groups, and neighborhood associations, and creating a public involvement plan.
- Reviewing previous studies and plans for a new Mississippi River Bridge in the study area.
- Developing a project-specific macroscopic traffic model and validating a mesoscopic traffic model to analyze traffic patterns and forecast demand.
- Conducting a preliminary environmental review to identify constraints, "showstoppers," and potential mitigation strategies.
- Preparing "level 1 - sketch" toll analyses and traffic and revenue forecasts for viable corridors.
- Hosting public meetings in multiple parishes to gather input and build consensus on the screening methodology.

The project also included the preparation of a comprehensive report documenting all tasks and findings, ensuring that the work aligns with the National Environmental Policy Act (NEPA) and other regulatory requirements.

Project Results: The Enhanced Planning Phase successfully provided a detailed framework for the Mississippi River Bridge Connector Project. Deliverables included a macroscopic traffic model, a validated mesoscopic traffic model, an environmental inventory document, and a comprehensive report summarizing all findings and recommendations. The project identified feasible corridors for further evaluation and established a robust public and stakeholder engagement process. These efforts have laid the foundation for subsequent phases, including environmental evaluations and detailed design. The project has significantly advanced the region's efforts to address traffic congestion and improve connectivity, ensuring long-term benefits for the community and the economy.

PROJECT SIMILARITIES

- DOTD Project
- Preliminary Bridge and/or Roadway Design
- Traffic Engineering
- Stakeholder and/or Railroad Coordination

Participating Team Members:

Sai Sirandas, PE

17. Firm Experience:

<i>Firm name</i>	Marrero, Couvillon & Associates, L.L.C.	<i>Past Performance Evaluation Discipline(s)*</i>	Other (Electrical)
<i>Project name</i>	I-20 Widening, Wells to LA34	<i>Firm responsibility (prime or sub?)</i>	Subconsultant
<i>Project number</i>	H.015052	<i>Owner's Name</i>	Louisiana Department of Transportation and Development
<i>Project location</i>	Baton Rouge, LA	<i>Owner's Project Manager</i>	Jesse Tisdale
<i>Owner's address, phone, email</i>	1201 Capitol Access Road, Baton Rouge, LA 70802 225-388-4220 tisdalejesse@stanleygroup.com		
<i>Services commenced by this firm (mm/yy)</i>	01/23	<i>Total consultant contract cost (\$1,000's)</i>	Unavailable
<i>Services completed by this firm (mm/yy)</i>	Ongoing	<i>Cost of consultant services provided by this firm (\$1,000's)</i>	\$368

The scope of work is to provide additional traffic capacity in each direction. This will be accomplished primarily by increasing the entrance/exit ramps. MCA provided design services to analyze the existing conditions of the roadway lighting, which consisted of high pressure sodium fixtures on low mast poles, and provide modifications to the existing lighting systems as necessary to accommodate the changes in roadway geometry. This includes upgrading the existing fixtures to LED, re-position select poles, and upgrading the secondary controllers to current standards. The project is being designed and administered by Kimball Schlafly, and is ongoing at this time.

PROJECT SIMILARITIES

- DOTD Project
- Roadway Lighting Design

Participating Team Members:

Kimball Schlafly, PE

17. Firm Experience:

<i>Firm name</i>	Marrero, Couvillon & Associates, L.L.C.	<i>Past Performance Evaluation Discipline(s)*</i>	Other (Electrical)
<i>Project name</i>	I-10 Widening, LA73 to LA 30	<i>Firm responsibility (prime or sub?)</i>	Subconsultant
<i>Project number</i>	DOT22009.801	<i>Owner's Name</i>	Louisiana Department of Transportation and Development
<i>Project location</i>	Baton Rouge, LA	<i>Owner's Project Manager</i>	John Raymond
<i>Owner's address, phone, email</i>	1201 Capitol Access Road, Baton Rouge, LA 70802 225-296-1335 jraymond@skaengr.com		
<i>Services commenced by this firm (mm/yy)</i>	09/22	<i>Total consultant contract cost (\$1,000's)</i>	Unavailable
<i>Services completed by this firm (mm/yy)</i>	01/24	<i>Cost of consultant services provided by this firm (\$1,000's)</i>	\$186

MCA scope of services is to modify the existing high mast lighting at LA73 interchange, as needed to accommodate the widening of I-10. This required a photometric analysis to be performed on the existing conditions, and again on the proposed relocation for the high mast poles to accommodate the added travel lanes and new bridge construction over LA73. The high mast poles shall be re-used, with new LED light fixtures and lowering devices provided. Design was completed by Chris Schade, and Kimball Schlafly managed the project. Project is currently awaiting bid by DOTD.

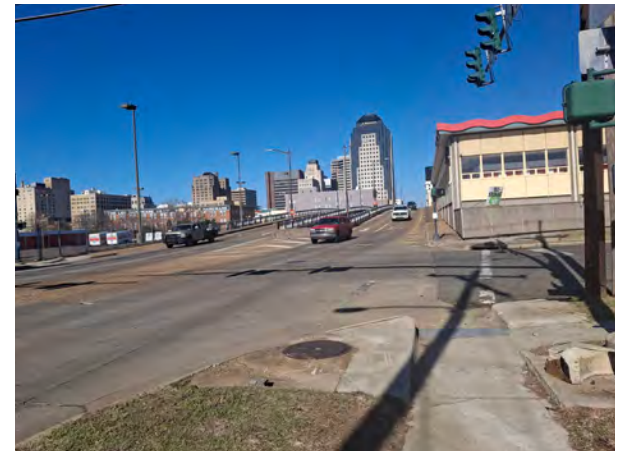
PROJECT SIMILARITIES

- DOTD Project
- Roadway Lighting Design in support of Roadway Improvements and New Bridge Design

Participating Team Members:

Kimball Schlafly, PE | Chris Schade, PE

APPROACH & METHODOLOGY



Michael Baker's key discipline leads have visited the project site, carefully reviewed available data, and developed a unique approach to safely and efficiently deliver this project, based on our experience solving identical project challenges.

DOTD will benefit from Michael Baker's lessons learned from numerous similar bridge rehabilitation/replacement projects over railways, as well as the specialized expertise of our teaming partners, which will result in innovative, time-saving, and cost-effective design solutions. Our team has studied the available information and developed the following approach to meet the challenges of this complex project.

Michael Baker International, Inc. (Michael Baker) brings years of successful experience delivering projects for DOTD and has assembled a highly capable team well versed with the DOTD specific requirements stemming from the Bridge Design and Evaluation Manual and the latest 2026 specifications. Our recent work on the replacement of the railway overpass bridges on US 371 in the nearby city of Minden and our proven ability to coordinate with the KCS/CPKC railroad requirements positions us as an exceptionally qualified partner for this effort. Additionally, Michael Baker is currently evaluating rehabilitation and phased construction alternatives for the US 371 bridge at Sibley, a structure with numerous site and railroad related constraints that make the effort particularly challenging. This work further demonstrates our capability to successfully navigate similar projects involving railroads in the region.

PROJECT UNDERSTANDING

This project includes engineering services for two separate structures along the US 71 corridor, each requiring a distinct technical approach due to their condition and type of work.

US 71 - KCS/CPKC Railroad Overpass Rehabilitation (HBI): This structure spans the Kansas City Southern/Canadian Pacific Kansas City (KCS/CPKC, or KCS) Railroad and requires a comprehensive rehabilitation to restore structural capacity, extend service life, and improve safety while maintaining traffic operations. Work must comply with KCS engineering requirements, clearance standards, and construction access protocols.

US 71 - Market Street Bridge Replacement over ICG Railroad (HBI): These twin bridges cross the KCS/CPKC Railroad and require full replacement due to existing deficiencies and functional limitations. The bridges are 585' long and have concrete I-beam and steel I-beam spans. The replacement will consist of a single structure and will be in compliance with current DOTD and KCS/CPKC clearance requirements, LRFD design loads, and design standards while minimizing impacts on both roadway users and railroad operations.

Overall Design Strategy: Our team will use a coordinated, multidisciplinary approach that includes structural design, roadway improvements, geotechnical investigations, traffic control development, utility coordination, and railroad interface management. Across both bridges, our strategy includes:

- Ensuring compliance with KCS clearance and engineering requirements
- Maintaining active rail operations with minimal disruption
- Applying targeted rehabilitation techniques where appropriate
- Delivering a complete replacement bridge that satisfies both structural and functional design criteria.
- Conforming to DOTD standards, guidelines, specifications, and deliverable requirements

All work will be sequenced to align with DOTD milestone submissions while accommodating each railroad's required review and approval timelines.

US 71 / SPRING STREET - RAILROAD OVERPASS REHABILITATION

For the Spring Street Bridge Rehabilitation, an in-depth evaluation of the existing structure will be conducted in accordance with the BDEM Guidelines for Existing Structure Evaluations. Michael Baker's Bridge Rehabilitation Design team will review the as-built plans for the original construction, as-builts for various repairs and modifications to the bridge, existing load rating reports, and bridge inspection reports to develop an inspection plan for the field visit.

Due to site constraints, the team will use underbridge inspection units (UBIs) to inspect the spans over the railroad and a combination of lift and ladder access to inspect the spans outside the railroad right-of-way to minimize impacts to vehicular and rail traffic

Both Michael Baker and our major teaming partner, HDR, have long-standing relationships with KCS/CPKC railroad and will coordinate with them for the appropriate right of entry, inspection windows and logistics. **A Level 2 Transportation Management Plan will be developed for proper maintenance of vehicular traffic** during the inspection process. This will be heavily coordinated with the District Bridge Engineer for approval. The Rehabilitation Design team will also employ **innovative drone technology to supplement the inspection process** and promote thorough documentation. This site inspection will help determine whether or not detour alternatives are feasible for the site. Following the inspection, we will notify the District Bridge Engineer and PM of any serious deficiencies.

Once the inspection is completed, the Rehabilitation Design team will work with the Geotechnical, Traffic, and Survey teams to incorporate the appropriate data into the design plans. Because the site is geometrically constrained within the railroad clearance envelope, by the existing structure below the bridge near the north abutment, and within the cross-braced spans, the team will need to determine type, size and location for member replacement and potential for new foundations.

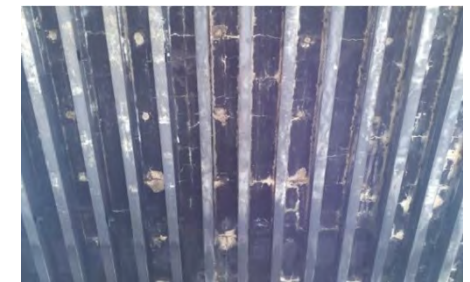


Figure 1: Spalls at Span 3 between Girders 8-14

It is likely that drilled shafts will need to be used to mitigate vibrations and space constraints. Several areas of damage have been noted in previous routine and emergency inspections in the past. Numerous concrete spalls with exposed rebar have been documented in the deck between nearly every girder (spans 5 - 9 on nearly every girder). The team will develop alternative methods for deck rehabilitation and present them to DOTD to determine whether or not rehabilitation of the existing deck is feasible or if deck replacement is necessary.

Based on the load rating reports and our field inspection, steel girders, which are deficient, will be either retrofitted with cover plates to increase their capacity or replaced with a heavier

section. Damaged steel columns will be heat straightened, and steel members will be cleaned and repainted. Repairs or replacements will be conducted in accordance with the Historic Bridge Preservation Guidelines and supervised by staff who have completed the NHI required course (MPR # 11). For steel girder retrofits, it may be required to develop girder saddle details similar to the existing repairs.

Typical Existing Steel Girder Saddle Repairs:

Our team is well versed with DOTD's processes and procedures for preliminary/final design, as required by the BDEM and the scope of work. Bridge design criteria and a scope of work for repairs, rehabilitation, and replacement strategies will be developed prior to preliminary design work. We will work closely with DOTD during 60% design to promote concurrence on the repair concepts and methods, paving a smooth path to 90%, 100% and ultimately Final PS&E phase.



Figure 2: Existing steel girder saddle.

US 71 MARKET STREET BRIDGE REPLACEMENT OVER ICG RAILROAD

The Market Street structure will be fully replaced to address structural deficiencies, meet current specifications, and improve safety for motorists and railroad operations below.

Replacement Design Tasks:

- Evaluate structure types that satisfy DOTD and KCS requirements
- Develop roadway geometry and vertical alignment to maintain required clearances
- Design new superstructure and substructure components using AASHTO LRFD
- Incorporate foundations capable of resisting railroad surcharge and vibration effects
- Improve drainage, safety features, and approach roadway transitions
- Replace the existing street lighting systems with modern, advanced-technology lighting to improve driver visibility, safety, and overall user experience

KCS-Specific Considerations:

- Compliance with KCS Design Requirements for Overhead Structures
- Vertical and horizontal clearance verification; span railroad right-of-way
- Shielding/false decking requirements for demolition and construction
- Controlled access, railroad safety training, and flagging during field work
- Submit staging, temporary works, demolition plans, and drainage modifications to KCS for approval

Accelerated Bridge Construction (ABC) concepts will be evaluated where beneficial to reduce time working over active tracks and improve safety.

SURVEY, SUE, & UTILITY COORDINATION

Our key team member, NTB Associates, has a long history of providing high-quality surveying and SUE services to DOTD, ensuring projects meet or exceed requirements. Our team's SUE Lead, Amy Schulze, PE, CFM, oversaw operation and maintenance activities of a sanitary sewer system for over 10 years as well as a water and gas system for nearly 3 years. This knowledge of operating public utilities, coupled with her knowledge of utility designating services,

provides a point of view from both sides of the process, allowing for a smoother and more efficient approach to each project.

Utility coordination is a key component, and NTBA provides subsurface utility engineering (SUE) services across Quality Levels A-D. This includes **Quality Level A** (Precise location of utilities using test holes), **Quality Level B** (Utility location through surface geophysical methods), **Quality Level C** (Visual surface indications), and **Quality Level D** (Record research to identify utility locations). NTBA's comprehensive SUE services will accurately identify and locate utilities, **minimizing design and construction risks associated with underground infrastructure.**

NTBA's utility designating group is cross-trained with their surveying group, allowing them to offer complete turn-key services. 3D LiDAR scanning capturing the bridge deck, travel lanes, and substructure as well as railroad track structure and detail provides a comprehensive record of existing utilities that may be attached to the bridge. The laser scanning data, coupled with their conventional SUE data, allows them to produce a comprehensive picture of all utilities affected - not just those underground. This integration eliminates the hassle of coordination between multiple contractors, ensuring that utility and survey data are delivered in a streamlined, efficient manner. DOTD will be able to make informed decisions during the design phase, which in turn will help **mitigate and manage utility risks, reducing utility conflicts, construction delays, and redesign costs, ultimately enhancing project efficiency.**

With their office less than three blocks from the project site in Shreveport, NTBA can mobilize quickly to serve DOTD's needs, handling this complex project efficiently and effectively. All work will be performed under the responsible charge of Louisiana Professional Land Surveyors and Engineers, and delivered in accordance with the project schedule and DOTD standards.

Quality Control: Each phase of the project is reviewed for compliance with the scope, design parameters, and applicable standards. This ensues ongoing technical review throughout the life of the project, preventing errors by addressing them early. The Project Manager and Professionals of Record are involved at each phase to verify that information is accurately incorporated into the deliverables.

GEOTECHNICAL APPROACH TO FOUNDATIONS

Both the Rehabilitation and Replacement projects present several geotechnical challenges typical of urban bridge sites in northwest Louisiana, including soil and groundwater conditions, but also strict constructability constraints associated with active railroad operations and adjacent buildings. Limited right-of-way and proximity to existing structures and railways will constrain foundation installations and sequencing, necessitating close coordination with structural design and railroad stakeholders to minimize impacts during construction.

To address these challenges, we anticipate **deep foundation systems to be the most viable and reliable foundation option** for new and rehabilitated substructures. Different foundation options will be evaluated based on subsurface conditions, structural demands, constructability, and railroad clearance requirements. The geotechnical investigation will be designed to support selection of the most appropriate foundation type by advancing deep borings to characterize soil stratigraphy, strength, and variability at depth. If the span arrangements warrant using drilled shafts due to higher substructure loads, we will verify

the feasibility in terms of getting the shaft reinforcement cages in place, especially for the rehabilitation project. If driven piles are to be used, vibration monitoring and a construction site survey will be conducted for this purpose to ensure that the structures in the vicinity are not affected. Given the proximity of the existing structures around the project site, we will also investigate the option of micropiling. This multi-pronged approach allows the design team to optimize foundation performance while managing construction risk, accommodating site constraints, and ensuring long-term serviceability of the bridge structures.

TRAFFIC ENGINEERING & TRANSPORTATION MANAGEMENT PLAN

Both bridge sites will require a tailored MOT approach:

- **Rehabilitation bridge (KCS):** Maintain traffic via staged deck/beam repairs or partial-width construction.
- **Replacement bridge (KCS):** Evaluate feasible detours, partial-width staging, or ABC methods to minimize user delays and railroad exposure.
- All MOT plans will follow DOTD standards and incorporate railroad safety buffer zones and protective measures.

Mesoscopic Modeling: Mesoscopic traffic modeling occupies the middle ground between detailed microscopic simulations (vehicle-by-vehicle) and highly aggregated macroscopic models (traffic as flow). One of the primary challenges in mesoscopic modeling is balancing computational efficiency with sufficient behavioral realism. Because vehicles are typically grouped into packets or modeled with simplified interactions, capturing complex driver behaviors—such as lane-changing dynamics, queue spillback, and signal timing effects—can be difficult. In large transportation networks, especially urban corridors with closely spaced intersections, these simplified assumptions may reduce the accuracy of congestion representation and travel time estimates.

To address these challenges, modern mesoscopic modeling approaches incorporate **hybrid techniques and improved calibration methods**. Integrating elements of microscopic behavior—such as probabilistic lane-choice or intersection delay models—helps maintain realistic traffic dynamics while preserving computation times. Calibration using real-world data sources such as probe vehicle data, traffic sensors, and signal timing plans also improves model reliability. By combining efficient network-wide simulation with targeted behavioral enhancements, mesoscopic models can provide a practical, scalable solution for corridor studies, regional forecasting, and scenario testing where microscopic modeling would be impractical.

PROJECT MANAGEMENT APPROACH

Scoping Meeting: After selection, Michael Baker will request a meeting with the DOTD Project Manager and other required DOTD staff for a scoping meeting. This meeting will define the project scope where all parties involved have full understanding of the scope. Defining the design scope early helps to make sure these items are included as part of the final contract.

Kickoff Meeting: After execution of the contract and Notice to Proceed is issued, Michael Baker will request a kickoff meeting through the DOTD project manager. At this meeting, the Michael Baker PM will request the following existing data, if it is available:

- **Bridge inspection reports:** to determine load restrictions or maintenance of traffic requirements during phased construction.

- **Stage 0 (Feasibility Studies),** if available.
- **Stage 1 (Environmental Clearance) documents,** if available, to review purpose and need and environmentally sensitive areas
- **Historic traffic studies:** With the close proximity of the I-20 entrance and exit ramps to both Springs St. and Market St., reviewing existing traffic demand models and previous mesoscopic models and/or traffic studies will help engineers to determine best MOT mitigation practices.

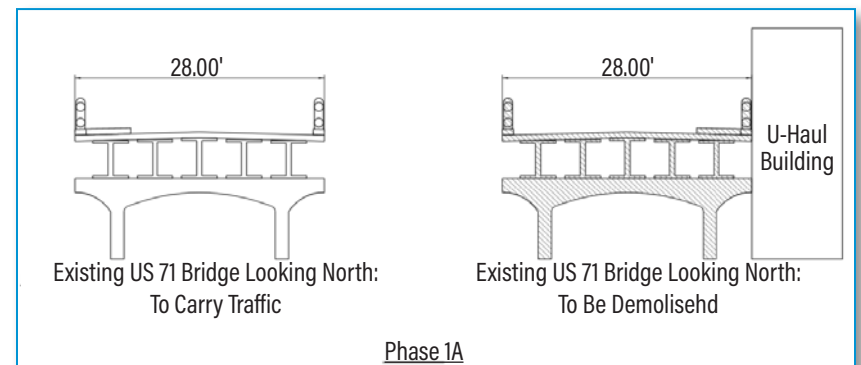
The kickoff meeting will be used to 1) establish design criteria for bridge and roadway design, 2) determine the frequency for design coordination progress meetings, 3) coordinate an on-site meeting with DOTD to determine if there are resources that need to be avoided, and 4) review any questions that may have arisen after the review of existing documents.

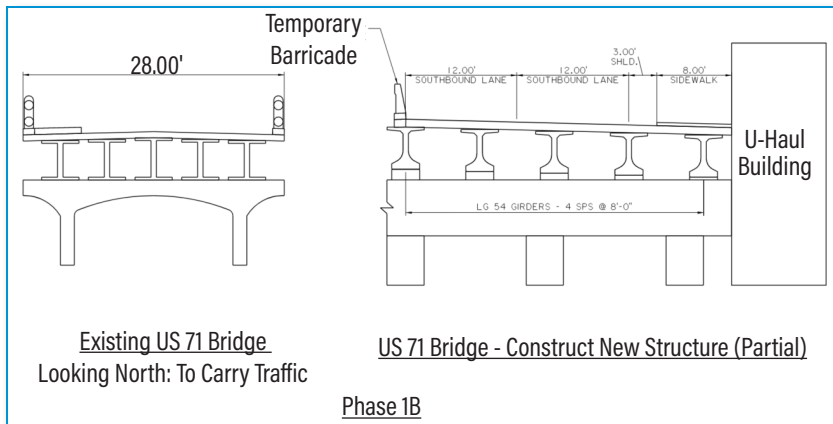
Michael Baker will use decisions made during the Kickoff Meeting to develop a Critical Path Method schedule that will set up a schedule baseline. Before finalizing the schedule, Michael Baker will have a railroad coordination meeting (described in the next section) to take into account review times by both DOTD and KCS Railroad for every submittal and potential design alternative that could help reduce construction time and disruption to the traveling public.

Railroad Coordination: Michael Baker has done previous projects similar in nature along KCS railroad infrastructure. Our team will make sure coordination between KCS Railroad and DOTD Bridge section is at the forefront and done immediately after the kickoff meeting.

As part of the coordination, our team will review the design criteria established at the kickoff meeting with KCS Railroad and establish the railroad specific design criteria needed for this project. This includes confirming the horizontal and vertical clearance requirements, as well as the construction clearance requirements. The Michael Baker team will work with both DOTD and the railroad regarding expediting the required permits and developing required exhibits.

Conceptual Layouts: It is anticipated that the existing two Market Street bridges will be replaced with a single structure maintaining the existing 4-lanes in one direction. Our team's initial concept layouts (below) determined a bridge layout consisting of approximately three 80' approach spans carried by LG-36 girders on either side of the railroad, and the 120' main span spanning across the railroad ROW carried by LG-54 girders. **Based on our experience with prior projects in the vicinity, KCS/CPKC prefers new structures to span their ROW wherever possible.** While the existing bridges have piers within the railroad ROW, this proposed layout will ensure that the center span comfortably avoids the ROW and optimizes the structural depth such that the KCS clearance requirements are fulfilled.

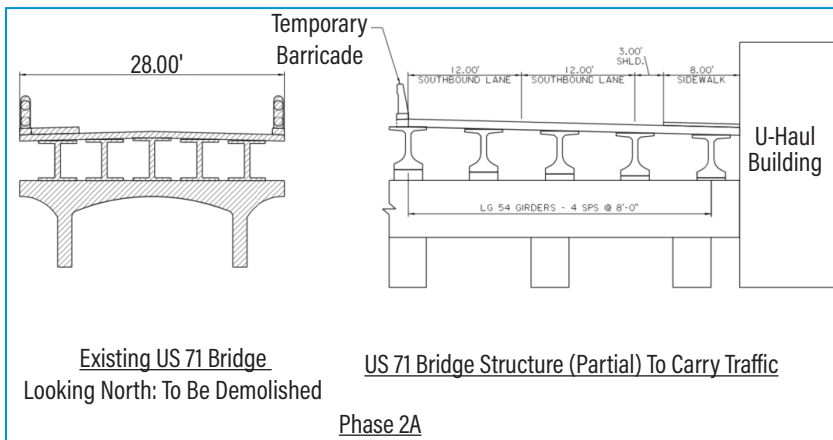




Please note this proposed layout is for illustrative purposes only, and the actual girder sizes, spacings, and other structural parameters will be modified once we have all required information about the project site and existing structures. We recognize that ***one of the unique challenges of this replacement will be to maintain pedestrian access to the U-Haul building*** on the east side of the existing bridges, as well as maintaining traffic flow and seamless connection to the I-20/I-49 and LA-1 on-ramps.

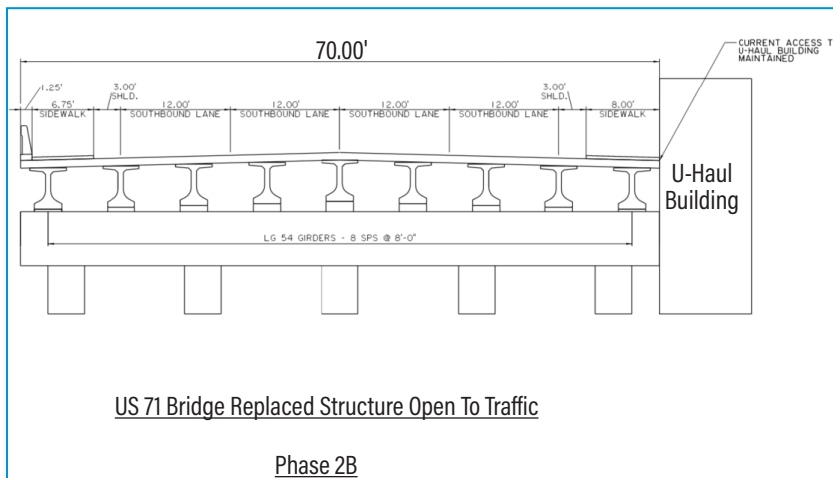
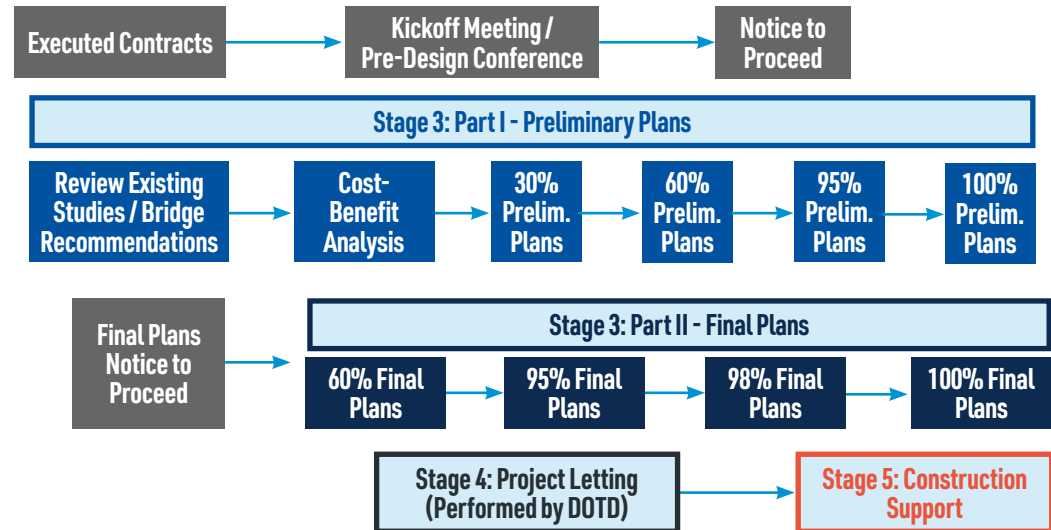
If it is determined that access will remain, bridge grades and elevations will have to be set to not only adhere to railroad vertical clearances but also maintain access to the U-Haul building. ***Our engineering team will have to determine if design exceptions/waivers may be necessary.*** If access is to be closed, bridge construction may be done ***to avoid the structures that are adjacent to buildings on both sides of the project site.***

Due to potential bridge longitudinal slopes and finished grade elevations, Michael Baker will investigate into using a steel girder main span while using concrete girder approaches, and will furnish a structure comparison report with cost estimates to finalize the structure type.



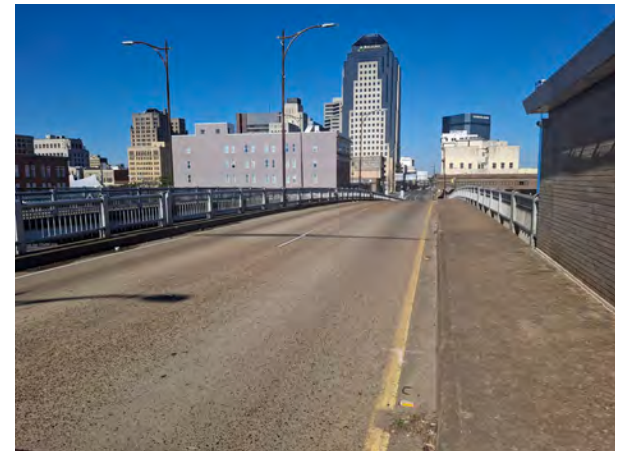
PROJECT SCHEDULE

Building on the schedule baseline developed based on the kickoff meeting, Michael Baker will finalize the project schedule for the deliverables in coordination with the DOTD. Based on the list of deliverables mentioned in the RFP, the anticipated submittals are shown below. Bridge replacement/rehabilitation will follow the same timeline:



Michael Baker recognizes that the Final Plan development services will be handled by a supplemental agreement. As with prior projects with DOTD, ***Michael Baker reaffirms its commitment to attend meetings including on-site, plan-in-hand meetings as well as submittal review meetings*** as required by the DOTD team members and appropriate agency stakeholders. Michael Baker also understands that as a part of the preliminary plan submittals, the list of deliverables includes the design reports, design waivers and design exceptions (if applicable), preliminary cost estimates, as well as any other supporting documentation and the coordination effort for them along with the plan sets.

WORKLOAD



Each member of the Michael Baker Team offers DOTD high current availability, backed by proven success on numerous past and present projects for the Department.

19. Workload:

<i>Firm(s)</i> ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	<i>Past Performance Evaluation Discipline(s)</i>	<i>Contract Number and State Project Number</i>	<i>Project Name</i>	<i>Remaining Unpaid Balance **</i>
Michael Baker International, Inc.	Road	Contract No. 4400021519 S.P. No. H.012030.5	US 371: KCS RR Overpasses HBI	\$40,000
	Bridge	F.A.P. No. H012030		
	Road	Contract No. 4400021519	US 371: KCS RR Overpasses HBI and US 371: ICG RR Overpass – Supplemental No. 3	\$66,164
	Bridge	S.P. No. H.012030.5 and S.P. No. H.016471.5		
	Road	Contract No. 4400025026	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program – District 07, Supplemental Agreement No. 1	\$54,350
	Bridge	S.P. No. H.015338 F.A.P. No. H015338		
	Road	Contract No. 4400019379	LA 30: EBR PL-I-10	\$310,000
	Bridge	S.P. No. H.013797		
	Environmental	F.A.P. No. H013797		
	Environmental	Contract No. 4400005484 S.P. No. H.005168 F.A.P. No. DE-9208 (500)	NORG EIS, New Orleans, Louisiana	\$189,351
	Environmental	Contract No. 4400005484 S.P. No. H.005168	NORG – Avondale PEL Study, New Orleans, Louisiana Supplemental Agreement	\$264,655
	Other (Water)	Contract No. 4400017092 Task Order No. 5	HUC8 Specific Hydrologic and Hydraulic Modeling for All HUC8s in the Contracted Region LWI Region 6 – Task Order #5	\$179,640
	Other (Water)	Contract No. 4400023101 Task Order No. 5 S.P. No. H.015047.2 F.A.P. No. H015047	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Three Mile Lake Flood Reduction	\$71,011
	Other (Water)	Contract No. 4400023101 Task Order No. 6 S.P. No. H.015040.2 and H.015041.2 F.A.P. No. H015040 and H015041	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Anacoco Creek Watershed Improve Lower and Upper	\$83,020

Michael Baker International, Inc.	Other (Water)	Contract No. 4400023101 Task Order No. 7 S.P. No. H.015044.2 F.A.P. No. H015044	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Bundick Lake Flood Surcharge Management	\$55,126
	Other (Water)	Contract No. 4400023101 Task Order No. 8 S.P. No. H.015040.2 and H.015041.2 F.A.P. No. H015040 and H015041	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Anacoco Creek Watershed Upper & Lower	\$559,143
	Other (Water)	Contract No. 4400023101 Task Order No. 9 S.P. No. H.015044.2 F.A.P. No. H015044	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Bundick Lake Flood Surcharge Management	\$1,066,579
	Other (Water)	Contract No. 4400023101 Task Order No. 10 S.P. No. H. 0150475 F.A.P. No. H015047	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Three Mile Lake Flood Reduction	\$38,000
	Other (Aviation)	Contract No. 4400019130 Task Order No. 1	IDIQ Contract for Statewide Aviation Program Update – Phase II Statewide	N/A
	CE&I/OV	Contract No. 4400025536 Task Order No. 3 S.P. No. H.013458 F.A.P. No. H013458	IDIQ Contract for Construction Engineering and Inspection Services in District 61, Manchac Acres & HH Wilson Rd Bridges	\$20,758
	CE&I/OV	Contract No. 4400025536 Task Order No. 5 S.P. No. H.012057 F.A.P. No. H012057	IDIQ Contract for Construction Engineering and Inspection Services in District 61, LA 431: Villar Canal and Drainage Bridges	\$459,473
	CE&I/OV	Contract No. 4400025536 Task Order No. 8 S.P. No. H.015944 F.A.P. No. H015944	IDIQ Contract for Construction Engineering and Inspection Services in District 61, LA 3125: LA 70 – LA 3213	\$82,537
	CE&I/OV	Contract No. 4400025536 Task Order No. 10 S.P. No. H.014088.6 F.A.P. No. H.014088	IDIQ Contract for Construction Engineering and Inspection Services in District 61, US 61: INT. Improvements at LA 427	\$479,006
	CE&I/OV	Contract No. 4400025536 Task Order No. 11 S.P. No. H.015440.6 F.A.P. No. H.015440	IDIQ Contract for Construction Engineering and Inspection Services in District 61, LA 69: 0.5 MI N of LA 404 – LA 1	\$314,364
	CE&I/OV	Contract No. 4400025536 Task Order No. 12 S.P. No. H.014993.6 F.A.P. No. H.014993	IDIQ Contract for Construction Engineering and Inspection Services in District 61, Lemon Rd Over Drainage Bayou	\$161,641

Michael Baker International, Inc.	CE&I/OV	Contract No. 4400024660 Task Order No. 2 H.014415.6 S.P. No. H.014415.6	IDIQ Contract for Construction Engineering and Inspection Services (CE&I) with Majority of Work in District 03 LA 352 Drainage Improvement	\$189,157
	CE&I/OV	Contract No. 4400024660 Task Order No. 3 H.009629.6 S.P. No. H009629.6	IDIQ Contract for Construction Engineering and Inspection Services (CE&I) with Majority of Work in District 03 US 90 RR-Pinhook_ LA 92-LA 88	\$154,558
	CE&I/OV	Contract No. 4400024660 Task Order No. 4 S.P. No. H.005967.6 F.A.P. H005967	IDIQ Contract for Construction Engineering and Inspection Services (CE&I) with Majority of Work in District 03 Nelson Rd Ext & Bridge	\$135,187
	CE&I/OV	Contract No. 4400024660 Task Order No. 5 S.P. No. H.012174.6 F.A.P. H012174	IDIQ Contract for Construction Engineering and Inspection Services (CE&I) with Majority of Work in District 03 I-10: JEFF DAV PL-I-49(OGFC/SLAB REPAIR)	\$914,769
	CE&I/OV	Contract No. 4400031142 S.P. No. H.010155.6 F.A.P. H010155	US 90 Railroad Overpass SE of LA 85 (CE&I) Route: US 90, Iberia Parish, LA	\$2,856,346
	CE&I/OV	Contract No. 4400031953 S.P. No. H.012587.6 F.A.P. H012587	I-10: W End of BR 290 – W End of LA 415 (CE&I)	\$217,470
HDR Engineering, Inc.	Bridge	4400024186 H.015472	LADOTD Br Preservation T04 - Project # 10390676	\$106,185
	Planning	4400026365 H.015223.2	Baton Rouge to New Orleans Rail Corridor Environmental Study – Project # 10368719	\$593,433
	Bridge	4400021517	Contract 5 for Movable Bridges (6) – Project # 10360261	\$1,391,105
	Bridge	4400024186	LADOTD LA301 Priest Canal T0#5 – Project # 10431757	\$40,072
	Planning	4400032783 H.015223.2	Baton Rouge – New Orleans Passenger Rail - Project #10437089	\$5,970,594
	Bridge	4400024186	LADOTD_Br Preservation T06 – Project # 10456551	\$124,057
	Other (Hydraulic)	440017091	LADOTD LWI Region 5 TO 5 – Project # 10451058	\$353,105
Terracon Consultants, Inc.	Geotech	400005673 H.011235	I-49 at Verot School Road	\$8,110
	Geotech	4400025027 H.015442 – 015449	IIJA Off System Bridge Program	\$11,400
	Geotech	4400025026 H.015338	IIJA Off System Bridge Program	\$66,600

Terracon Consultants, Inc.	Geotech	4400025024 H.015336, .015520, .015529	IIJA Off System Bridge Program	\$9,234
	Geotech	4400025023 H.015505-0.015517, .015335	IIJA Off System Bridge Program	\$39,000
	Geotech	4400006191 H.005967	Nelson Road Extension and Bridge	\$175,495
	Geotech	4400019014 H.012048.5	Caster Creek and Relief Bridges	\$28,158
	Geotech	4400019014 H.012537.5	LA 154, LA157 – Red Chute BYU & Flat RVR BRS	\$17,051
	Geotech	4400019014 H.014984	Libuse Cutoff Road over Flagon Bayou	\$19,878
	Geotech	4400024651 H.014988	Carey Road over Blackwater Bayou	\$49,946
	Geotech	4400024651 H.014990	S. Tiger Bend Road & E. Achord Road Bridge	\$20,034
	Geotech	4400024651 H.000284	US 90 Pearl River Bridges	\$971,478
	Geotech	4400024651 H.012059	LA 19 - Bridges near Zachary	\$303,640
NTB Associates, Inc.	Survey	4400019338 Multiple SP Nos. per bridge	Contract for Rural Bridge Replacement Initiative Phase II, Districts 05, 08, & 58 (Subconsultant)	\$57,492
	Survey	4400019337 Multiple SP Nos. per bridge	Contract for Rural Bridge Replacement Initiative Phase II, Districts 02, 03, 07, 61, & 62 (Subconsultant)	\$28,748
	Survey	4400025041 H.015406	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program - Lock No. 3 Bridge, St. Tammany Parish (Subconsultant)	\$10,216
	Survey	4400025041 H.015403	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program - W. Yellow Water Road Bridge, Tangipahoa Parish (Subconsultant)	\$12,661
	Survey	4400027686 H.008768.5	IDIQ Contract for Hydrographic Surveying Services – Task Order No. 7 – Spring Bridges	\$53,011
	Other (SUE)	4400026587 H.001779	Jimmie Davis Bridge (LA 511) (HBI) Design Build Project, Bossier Parish (Subconsultant)	\$0
	Survey	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
	Survey	4400027918 H.011310	IDIQ Contract for Professional Boundary Surveying Services – Task Order 4 – Ford Street Extension, District 61	\$13,872
	Survey	4400027918 H.015721	IDIQ Contract for Professional Boundary Surveying Services – Task Order 5 – LA 30 Roundabout, Ascension Parish	\$23,592

NTB Associates, Inc.	Survey	4400027918 H.015568	IDIQ Contract for Professional Boundary Surveying Services – Task Order 6 – LA 44 Pelican Point Roundabout & Widening, Ascension Parish	\$44,108
	Survey	4400027918 H.014059	IDIQ Contract for Professional Boundary Surveying Services – Task Order 7 – US 80: Bridges Near Minden, Webster Parish	\$15,906
	Survey	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
	Survey	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) Survey	4400030630 H.015724.5	Kings Hwy: Healthcare & Dev. Corridor, Caddo Parish (Subconsultant)	\$75,495
	Other (SUE)	Parish Proj. No. 2025-118 H.003855	Cong Relief Winfield Road, Bossier Parish (Subconsultant)	\$42,790
Vectura Consulting Services, Inc.	CE&I/OV	4400020018 H.007160	EBR Computerized Traffic Signal, Ph VB	\$23,595
	Traffic	4400021519 H.012030.5	KCS RR Overpasses HBI	\$572
	Traffic	4400025299 H.01564.5	LA 47 Hayne Blvd Safety Improvements	\$9,437
	Traffic	4400018271 H.014746.5	LA 383 Stage 0 Corridor Study	\$20,146
	Traffic	4400025299 H.014305	US 61: Cardinal Dr to Bert St	\$44,311
	Traffic	4400026026 H.016037	LA 1138-1 & LA 1138-2: Corridor Improvements	\$142,847
	Traffic	4400025299 H.016437.5	US 190: Wooddale to Livingston P/L Study	\$120,040
CDM Smith	Bridge	4400017438 H.013284	Mississippi River Bridge – LA 1 to LA 30 Connector (MRB South GBR)	\$10,000
Marrero, Couvillon & Associates, LLC	Road	H.015052	I-20 Widening Overlay	\$ 342,658

CERTIFICATIONS/LICENSES



The Michael Baker Team is fully certified and licensed in the appropriate fields and disciplines necessary to deliver this project in compliance with DOTD and industry standards.

20. Certifications/Licenses

MPR 10 - Mesoscopic Modeling Project References (Sai Sirandas, PE)

Berryessa Multimodal Transportation Improvement Plan, San Jose, CA

City of San Jose: Wilson Tam | 408-975-3295 | wilson.tam@sanjoseca.gov

I-80 Design Alternatives Assessment

Bay Area Metropolitan Transportation Commission: Kevin Chen | 415-778-5338 | kchen@bayareametro.gov

Better Market Street Environmental Impact Report, San Francisco, CA

City of San Francisco: Wade Wietgreffe | Wade.Wietgreffe@sfmta.com

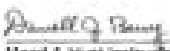
State Route 239 Project Approval and Environmental Documentation

Stephanie Hu — Director, Projects | stephanieh@ccta.ca.gov

South San Francisco General Plan, San Francisco, CA

City of South San Francisco: Billy Gross, 650-877-8535 | Billy.Gross@ssf.net

MPR 11 - DOTD Historic Bridge Maintenance & Rehabilitation Training (Wes Jacobs)

 In cooperation with the Louisiana Department of Transportation & Development presents this Certificate of attendance and participation for: <u>Wesley D. Jacobs Sr. PE.</u> Training Course: Maintenance and Rehabilitation of Historic Bridges Transportation Training and Education Center 4099 Gourmier Avenue, Room 179 Baton Rouge, Louisiana 70808	Please select the date you attended the course: ☒ Tuesday, April 12, 2016 ☐ Wednesday, April 13, 2016 ☐ Tuesday, May 10, 2016 ☐ Wednesday, May 11, 2016 ☐ Tuesday, July 12, 2016 ☐ Wednesday, July 13, 2016
You have earned 8 PDH units that can be applied to applicable continuing education requirements for professional engineering licensure.	 Mead & Hunt Instructor Amy Squitieri  Mead & Hunt Instructor Darrell Berry, PE, SE

MPR 10 - Mesoscopic Modeling Project References (Aamani Parthasarthy, PE, PTOE)

Master Thoroughfare Plan (MTP) and Walsh Ranch Analysis, Fort Worth, TX

City of Fort Worth: Dana Burghdoff | 817-392-1234 | Dana.Burghdoff@fortworthtexas.gov

Tornillo Port of Entry (POE) Study, Tornillo, TX

El Paso Metropolitan Planning Organization (MPO): Salvador Gonzalez-Ayala, PhD | 915-212-0258 | sgonzalez@elpasompo.org

Border Highway Connector Phase 2 Traffic Impact and Improvements Feasibility Study, El Paso, TX

El Paso MPO: Salvador Gonzalez-Ayala, PhD | 915-212-0258 | sgonzalez@elpasompo.org

Northwest Highway (Loop 12) / Bachman Traffic Study, Dallas, TX

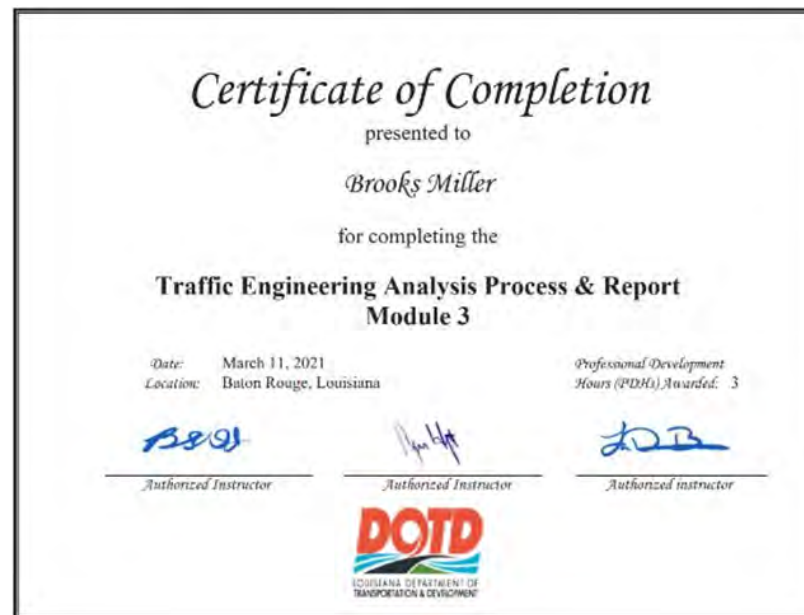
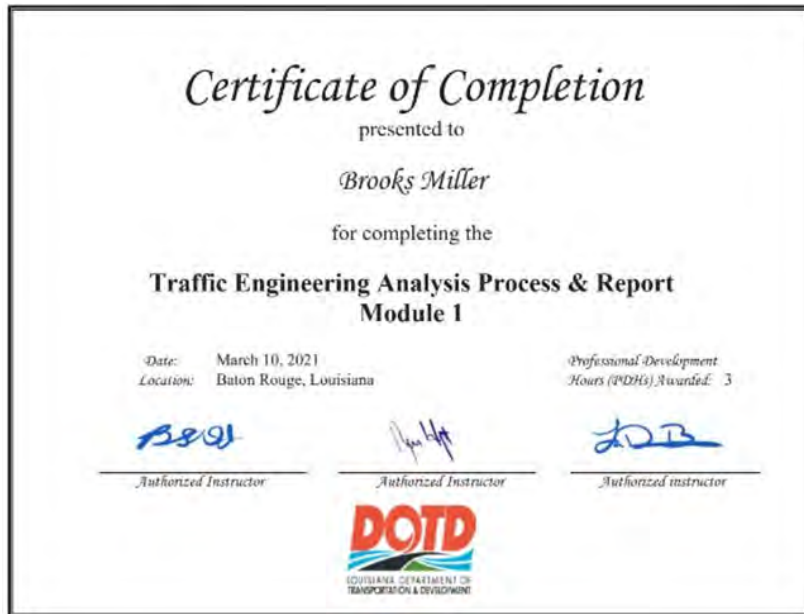
TxDOT Dallas District: Stephen Endres | 214-320-4469 | Stephen.Endres@txdot.gov

Reimagine I-10 Downtown, El Paso, TX

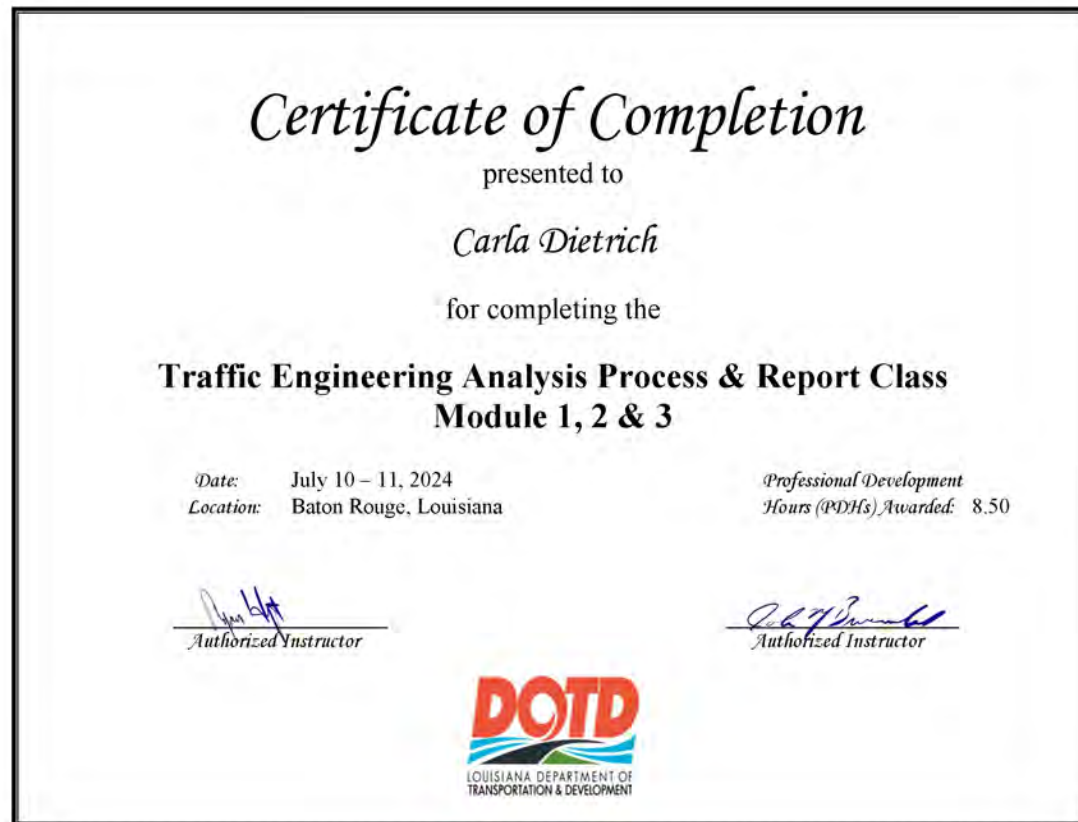
TxDOT El Paso District: Sheetal Patel, PE | 915 790-4436 | Sheetal.Patel@txdot.gov

20. Certifications/Licenses

Brooks Miller, PE, PTOE - Michael Baker International



Carla Dietrich, PE, PTOE - Michael Baker International



Celina Sumrall, PE, PTOE - Michael Baker International

Certificate of Completion

presented to

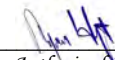
Celina Sumrall

for completing the

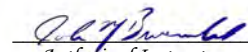
Traffic Engineering Analysis Process & Report Class Module 1, 2 & 3

Date: July 10 – 11, 2024
Location: Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded: 8.50



Authorized Instructor



Authorized Instructor



20. Certifications/Licenses

Brin Ferlito, PE, PTOE - Vectura Consulting Services

Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report Module 1

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

Professional Development
Hours (PDHs) Awarded: 4

Poly J. Calmes
Authorized Instructor

Don Holt
Authorized Instructor

C. G. Brummett
Authorized instructor



Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report Module 2

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

Professional Development
Hours (PDHs) Awarded: 4

Poly J. Calmes
Authorized Instructor

Don Holt
Authorized Instructor

C. G. Brummett
Authorized instructor



Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report Module 3

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

Professional Development
Hours (PDHs) Awarded: 3

Poly J. Calmes
Authorized Instructor

Don Holt
Authorized Instructor

C. G. Brummett
Authorized instructor



20. Certifications/Licenses

Laurence Lambert, PE, PTP, PTOE - Vectura Consulting Services

Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report Module 1

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

Professional Development
Hours (PDHs) Awarded: 2

Poly J. Calhoun
Authorized Instructor

Don Holt
Authorized Instructor

C. G. Brummett
Authorized instructor



Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report Module 2

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

Professional Development
Hours (PDHs) Awarded: 3

Poly J. Calhoun
Authorized Instructor

Don Holt
Authorized Instructor

C. G. Brummett
Authorized instructor



Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report Module 3

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

Professional Development
Hours (PDHs) Awarded: 3

Poly J. Calhoun
Authorized Instructor

Don Holt
Authorized Instructor

C. G. Brummett
Authorized instructor



20. Certifications/Licenses

Reece Rodrigue, PE, PTOE - Vectura Consulting Services

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report Module 1

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

Professional Development
Hours (PDHs) Awarded: 2

Poly J. Calhoun
Authorized Instructor

Don Holt
Authorized Instructor

Reece Rodrigue
Authorized instructor



Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report Module 2

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

Professional Development
Hours (PDHs) Awarded: 3.5

Poly J. Calhoun
Authorized Instructor

Don Holt
Authorized Instructor

Reece Rodrigue
Authorized instructor



Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report Module 3

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

Professional Development
Hours (PDHs) Awarded: 3

Poly J. Calhoun
Authorized Instructor

Don Holt
Authorized Instructor

Reece Rodrigue
Authorized instructor



20. Certifications/Licenses

Kristen Gahagan Farrington, PE, PTOE - Vectura Consulting Services

Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report Module 1

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

Professional Development
Hours (PDHs) Awarded: 2.5


Authorized Instructor


Authorized Instructor


Authorized instructor



Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report Module 2

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

Professional Development
Hours (PDHs) Awarded: 3


Authorized Instructor


Authorized Instructor


Authorized instructor



Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report Module 3

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

Professional Development
Hours (PDHs) Awarded: 3


Authorized Instructor


Authorized Instructor


Authorized instructor



20. Certifications/Licenses

Laboratory Accreditations - Terracon Consultants



SCOPE OF AASHTO ACCREDITATION FOR:

Terracon Consultants, Inc.
in Baton Rouge, Louisiana, USA

Soil

Standard:	Accredited Since:
T99 The Moisture-Density Relations of Soils Using a 5.5 lb [2.5 kg] Rammer and a 12 in. [305 mm] Drop	02/26/2010
T180 Moisture-Density Relations of Soils Using a 10 lb [4.54 kg] Rammer and an 18 in. [457 mm] Drop	02/26/2010
D421 Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test	02/26/2010
D422 Particle Size Analysis of Soils by Hydrometer	02/26/2010
D698 The Moisture-Density Relations of Soils Using a 5.5 lb [2.5 kg] Rammer and a 12 in. [305 mm] Drop	02/26/2010
D854 Specific Gravity of Soils	02/26/2010
D1140 Amount of Material in Soils Finer than the No. 200 (75-µm) Sieve	02/26/2010
D1557 Moisture-Density Relations of Soils Using a 10 lb [4.54 kg] Rammer and an 18 in. [457 mm] Drop	02/26/2010
D1883 The California Bearing Ratio	04/13/2016
D2166 Unconfined Compressive Strength of Cohesive Soil	02/26/2010
D2216 Laboratory Determination of Moisture Content of Soils	02/26/2010
D2435 One-Dimensional Consolidation Properties of Soils Using Incremental Loading	02/26/2010
D2487 Classification of Soils for Engineering Purposes (Unified Soil Classification System)	02/26/2010
D2488 Description and Identification of Soils (Visual-Manual Procedure)	02/26/2010
D2850 Unconsolidated, Undrained Compressive Strength of Cohesive Soils in Triaxial Compression	02/26/2010
D2974 Determination of Organic Content in Soils by Loss on Ignition	02/26/2010
D4253 Maximum Index Density and Unit Weight of Soils Using a Vibratory Table	09/18/2024
D4254 Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density	04/13/2016
D4318 Determining the Liquid Limit of Soils (Atterberg Limits)	02/26/2010
D4318 Plastic Limit of Soils (Atterberg Limits)	02/26/2010
D4546 One-Dimensional Swell or Settlement Potential of Cohesive Soils	01/12/2012
D4718 Oversize Particle Correction	12/26/2013
D4943 Shrinkage Factors of Soil by Wax Method	09/18/2024

Page 2 of 6

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SCOPE OF AASHTO ACCREDITATION FOR:

Terracon Consultants, Inc.
in Baton Rouge, Louisiana, USA

Quality Management System

standard:	Accredited Since
118 Establishing and Implementing a Quality System for Construction Materials Testing Laboratories	01/10/2011
1077 (Aggregate) Laboratories Testing Concrete and Concrete Aggregates	02/26/2022
1077 (Concrete) Laboratories Testing Concrete and Concrete Aggregates	04/03/2021
13740 (Soil) Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction	01/10/2021
329 (Aggregate) Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	02/26/2022
329 (Concrete) Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	11/08/2021
329 (Soil) Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	04/20/2022
329 (Sprayed Fire-Resistive Material) Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	07/23/2021

Page 1 of 6

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SCOPE OF AASHTO ACCREDITATION FOR:

Terracon Consultants, Inc.
in Baton Rouge, Louisiana, USA

Soil (Continued)

Standard:	Accredited Since:
D4972 pH Testing of Soils	01/12/2012
D5084 Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter	01/12/2012
D6938 In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)	02/26/2010

Page 3 of 6

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20. Certifications/Licenses

Laboratory Accreditations (continued) - Terracon Consultants



SCOPE OF AASHTO ACCREDITATION FOR:

Terracon Consultants, Inc.
in Baton Rouge, Louisiana, USA

Aggregate

Standard:	Accredited Since:
C29 Bulk Density (Unit Weight) and Voids in Aggregate	02/26/2010
C40 Organic Impurities in Fine Aggregates for Concrete	02/26/2010
C117 Materials Finer Than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing	02/26/2010
C127 Specific Gravity and Absorption of Coarse Aggregate	02/26/2010
C128 Specific Gravity (Relative Density) and Absorption of Fine Aggregate	02/26/2010
C136 Sieve Analysis of Fine and Coarse Aggregates	02/26/2021
C566 Total Moisture Content of Aggregate by Drying	02/26/2010
C702 Reducing Samples of Aggregate to Testing Size	02/26/2010
D75 Sampling Aggregate	12/26/2013

Page 4 of 6

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SCOPE OF AASHTO ACCREDITATION FOR:

Terracon Consultants, Inc.
in Baton Rouge, Louisiana, USA

Concrete

Standard:	Accredited Since:
C31 (Beams) Making and Curing Concrete Test Specimens in the Field	11/08/2013
C31 (Cylinders) Making and Curing Concrete Test Specimens in the Field	11/08/2013
C39 Compressive Strength of Cylindrical Concrete Specimens	07/27/2010
C78 Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)	11/08/2013
C138 Density (Unit Weight), Yield, and Air Content of Concrete	07/27/2010
C143 Slump of Hydraulic Cement Concrete	07/27/2010
C172 Sampling Freshly Mixed Concrete	07/27/2010
C173 Air Content of Freshly Mixed Concrete by the Volumetric Method	07/27/2010
C231 Air Content of Freshly Mixed Concrete by the Pressure Method	07/27/2010
C511 Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the testing of Hydraulic Cements and Concretes	11/08/2013
C617 (7000 psi and below) Capping Cylindrical Concrete Specimens	07/06/2023
C1064 Temperature of Freshly Mixed Portland Cement Concrete	07/27/2010
C1231 (7000 psi and below) Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders	11/08/2013

Page 6 of 6

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SCOPE OF AASHTO ACCREDITATION FOR:

Terracon Consultants, Inc.
in Baton Rouge, Louisiana, USA

Sprayed Fire-Resistive Material

Standard:	Accredited Since:
E605 Thickness and Density of Sprayed Fire-Resistive Material (SFRM) Applied to Structural Members	12/26/2013
E736 Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members	12/26/2013

Page 5 of 6

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20. Certifications/Licenses

Laboratory Accreditations (continued) - Terracon Consultants

 JEFF LANDRY GOVERNOR	 STATE OF LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE OF ENVIRONMENTAL SERVICES	COURTNEY J. BURDETTE SECRETARY
AI No. 30697 Activity No. ACC20230001 LELAP Lab ID No. 04009 Renewal Due June 30, 2026		
Ms. Lynne E. Roussel PE Terracon Consultants Inc 2822 O'Neal Ln Bldg B Baton Rouge, LA 70816 Re: Annual Environmental Laboratory Accreditation Dear Ms. Roussel PE: The Louisiana Department of Environmental Quality's laboratory accreditation program, in accordance with Louisiana Administrative Code Title 33, Part I, Subpart 3, Laboratory Accreditation, accredits this laboratory from July 1, 2025 to June 30, 2026. This accreditation does not constitute an endorsement of the suitability of the listed methods for any specific purpose. Accreditation of the environmental laboratory does not imply that a product, process, system, or person is approved by the Louisiana Environmental Laboratory Accreditation Program (LELAP). LELAP grants accreditation for those methods/analytes as indicated by the accreditation type on the attached scope of accreditation.¹ Accreditation is dependent on the laboratory's successful ongoing compliance with regulations as outlined in the Louisiana Administrative Code, Title 33, Part I, Subpart 3, Laboratory Accreditation and with the policy, rules, or standard of any other accreditation body (AB) listed on the scope of accreditation, as applicable. LAC 33:I.5313.A requires that the laboratory report include all relevant information. Therefore, the certificate number shall be placed in the upper right corner of all laboratory reports. If the test report includes results of any test for which the laboratory is not accredited, the unaccredited results must be clearly identified as such. ¹If the methods were partially identified on the LELAP application for secondary accreditation, the laboratory is accredited for the versions listed on the current application or referenced in the laboratory standard operating procedure. Form 7565_r03 2-14-25 Post Office Box 4313 • Baton Rouge, Louisiana 70821-4313 • Phone 225-219-3181 • Fax 225-219-3309 www.deq.louisiana.gov		

Ms. Lynne E. Roussel PE
Terracon Consultants Inc
Page 2 of 2

The accreditation certificate is the property of the State of Louisiana. Should your accreditation be suspended or revoked, your laboratory must return the certificate of accreditation to LELAP and delete any electronic copies until your accreditation status is restored.

We request that you examine the attached certificate and scope of accreditation for accuracy and completeness. If you note any errors, please notify us immediately.

If you have any questions, please contact your assigned assessor Alexandra Alvarado at (225) 219-7585 or Alexandra.Alvarado@LA.GOV.

Sincerely,


Tonya Landry
Administrator
Public Participation and Permit Support Division

6/25/2025
Date

TL:TR:aa

Attachments

Form 7565_r03
2-14-25

20. Certifications/Licenses

Laboratory Accreditations (continued) - Terracon Consultants

STATE OF LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY		Terracon Consultants Inc AI Number: 30697 Activity No. ACC20230001 Expiration Date: June 30, 2026		
Effective Date: July 1, 2025	2822 O'Neal Ln Bldg B, Baton Rouge, Louisiana 70816			
Certificate Number: 04009				
Air Emissions				
Analyte	Method Name	Method Code	Type	AB
Non Potable Water				
Analyte	Method Name	Method Code	Type	AB
Solid Chemical Materials				
Analyte	Method Name	Method Code	Type	AB
2084 - Moisture-Density of Soils (Modified Effort)	AASHTO T180	3991	AASHTO	AAP
2082 - Moisture-Density of Soils (Standard Effort)	AASHTO T99	4108	AASHTO	AAP
1730 - Amount Of Soil Finer Than The No. 200 Sieve	ASTM D1140	3550	AASHTO	AAP
1731 - Laboratory Compaction Of Soils (Proctor Density)	ASTM D1557	3551	AASHTO	AAP
1732 - Unconfined Compressive Strength Of Soil	ASTM D2166	3552	AASHTO	AAP
3850 - Moisture content	ASTM D2216-10	30025106	AASHTO	AAP
2439 - Hydraulic Conductivity (granular material)	ASTM D2434	3834	AASHTO	AAP
2086 - One-Dimensional Consolidation Properties of Soils	ASTM D2435	3994	AASHTO	AAP
1734 - Classification Of Soils For Engineering Purposes (Unified Soil Classification System)	ASTM D2487	3554	AASHTO	AAP
1735 - Soil Classification Visual - Manual (Field)	ASTM D2488	3555	AASHTO	AAP
1736 - Unconsolidated, Undrained Triaxial Compression	ASTM D2850	3556	AASHTO	AAP
2090 - Percentage of Organic Material in Soil	ASTM D2974-07A	30026450	AASHTO	AAP
2073 - Dry Preparation of Samples	ASTM D421	3972	AASHTO	AAP
1738 - Particle Size Analysis Of Soils	ASTM D422 63 (7)	30030854	AASHTO	AAP
1739 - Atterberg Limits of Soils	ASTM D4318	3559	AASHTO	AAP
1900 - pH	ASTM D4972	3560	AASHTO	AAP
1744 - Hydraulic Conductivity (Flexible Wall Permeameter)	ASTM D5084	3563	AASHTO	AAP
1954 - In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)	ASTM D6938	3854	AASHTO	AAP
1731 - Laboratory Compaction Of Soils (Proctor Density)	ASTM D698	3561	AASHTO	AAP
1743 - Specific Gravity Of Soils	ASTM D854	3562	AASHTO	AAP

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

Page 1 of 2

STATE OF LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY		Terracon Consultants Inc AI Number: 30697 Activity No. ACC20230001 Expiration Date: June 30, 2026		
Effective Date: July 1, 2025	2822 O'Neal Ln Bldg B, Baton Rouge, Louisiana 70816			
Certificate Number: 04009				
Biological Tissue				
Analyte	Method Name	Method Code	Type	AB

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

Page 2 of 2

20. Certifications/Licenses

Laboratory Accreditations (continued) - Terracon Consultants

AGGREGATE

Aggregate - C 29 - Unit Weight and Voids in Aggregate
Aggregate - C 40 - Organic Impurities
Aggregate - D 75 - Sampling
Aggregate - C 117 - Material Finer than 75 µm (No. 200) Sieve
Aggregate - C 127 - Specific Gravity & Absorption in Coarse Aggregate
Aggregate - C 128 - Specific Gravity & Absorption in Fine Aggregate
Aggregate - C 136 - Sieve Analysis of Aggregates
Aggregate - E 329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection
Aggregate - C 566 - Total Moisture Content
Aggregate - C 702 - Reducing Samples to Testing Size
Aggregate - C 1077 - Concrete and Concrete Aggregate Testing Standards (Quality Standards)

CONCRETE

Concrete - C 31 - Making and Curing Test Specimens in the Field
Concrete - C 39 - Compressive Strength of Cylindrical Specimens
Concrete - C 78 - Flexural Strength by Third Point Loading
Concrete - C 138 - Unit Weight and Air Content by Gravimetric
Concrete - C 143 - Slump
Concrete - C 172 - Sampling
Concrete - C 173 - Air Content by Volumetric ***required if C231 not performed***
Concrete - C 231 - Air Content by Pressure ***required if C173 not performed***
Concrete - E 329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection
Concrete - C 511 - Moist Cabinets, Moist Rooms, Water Storage Tanks
Concrete - C 617 - Capping Cylindrical Specimens
Concrete - C 1066 - Temperature of Concrete
Concrete - C 1077 - Concrete and Concrete Aggregate Testing Standards (Quality Standards)
Concrete - C 1231 - Unbonded Caps

SOILS

Soils - D 421 - Dry Preparation for Particle Size Distribution & Soil Constants
Soils - D 422 - Particle Size Analysis (Sieve and Hydrometer)
Soils - D 698 - Compaction Characteristics by Standard Effort
Soils - D 854 - Specific Gravity of Soils
Soils - D 1140 - Material Finer than 75 µm (No. 200) Sieve
Soils - D 1557 - Compaction Characteristics by Modified Effort
Soils - D 1883 - CA Bearing Ratio (CBR)
Soils - D 2166 - Unconfined Compressive Strength
Soils - D 2216 - Water Content
Soils - D 2435 - One-Dimensional Consolidation Properties
Soils - D 2487 - Classification of Soils
Soils - D 2488 - Description & Identification of Soils (Visual-Manual Procedure)
Soils - D 2850 - Unconsolidated, Undrained Strength in Triaxial Compression
Soils - D 2974 - Moisture, Ash, & Organic Matter of Peat & Other Organic Soils
Soils - D 3740 - Soil and Rock Testing Standards (Quality Standard)
Soils - D 4253 - Maximum Index Density by Vibratory Table
Soils - D 4254 - Minimum Index Density
Soils - D 4318 - Liquid & Plastic Limits & Plasticity Index
Soils - D 4546 - One-Dimensional Swell or Settlement Potential
Soils - D 4718 - Correction of Unit Weight and Water Content for Soils Containing Oversize Particles
Soils - D 4943 - Shrinkage Factors of Cohesive Soils by the Water Submersion Method
Soils - D 4972 - pH of Soils
Soils - D 5084 - Hydraulic Conductivity using a Flexible Wall Permeameter
Soils - D 6938 - Density and Water Content by Shallow Depth Nuclear Method

SPRAYED FIRE RESISTIVE

Sprayed Fire Resistive - E 329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection
Sprayed Fire Resistive - E 605 - Thickness and Density of Sprayed Fire Resistive Material (SFRM) Applied to Structural Members
Sprayed Fire Resistive - E 736 - Cohesion Adhesion of Sprayed Fire Resistive Materials Applied to Structural Members



USACE CERTIFICATE OF LABORATORY VALIDATION



Terracon Consultants, Inc.

2822 O'Neal Lane, Bldg. B
Baton Rouge, LA, United States
Matthew Minton
(225) 239-2629

has demonstrated, by abbreviated audit of its AASHTO accreditation, or by inspection of required records, equipment, procedures, facilities, and/or final reports, its proficiency to perform testing of construction materials, as established by the quality standards of AASHTO R 18 guidance and the requirements of the applicable ASTM standards.

THIS USACE CERTIFICATE OF LABORATORY VALIDATION IS ACCURATE AS OF ITS DATE AND TIME OF GENERATION:
09 JUL 2025 AT 08:50 HOURS

ALL METHODS LISTED ON THIS CERTIFICATE OF VALIDATION WILL EXPIRE ON 05/23/2027

PLEASE CONFIRM THE CURRENT VALIDATION STATUS OF THIS LABORATORY USING THE SEARCH FEATURE ON OUR PUBLIC WEBSITE: <https://mtc.erdcdren.mil>

Chad A. Gartrell, PE, Director
USACE Materials Testing Center
Vicksburg, Mississippi, USA

20. Certifications/Licenses

Secretary of State Registration - Michael Baker International

Name	Type	City	Status
MICHAEL BAKER INTERNATIONAL, INC.	Business Corporation (Non-Louisiana)	PITTSBURGH	Active

Previous Names

MICHAEL BAKER, JR., INC. (Changed: 7/6/2015)

Business: MICHAEL BAKER INTERNATIONAL, INC.

Charter Number: 30035020F

Registration Date: 12/29/1972

Secretary of State Registration - HDR Engineering

Name	Type	City	Status
HDR ENGINEERING, INC.	Business Corporation (Non-Louisiana)	OMAHA	Active

Previous Names

HDR INFRASTRUCTURE, INC. (Changed: 12/3/1987)

Business: HDR ENGINEERING, INC.

Charter Number: 34178558F

Registration Date: 6/17/1985

Secretary of State Registration - Terracon Consultants

Name	Type	City	Status
TERRACON CONSULTANTS, INC.	Business Corporation (Non-Louisiana)	WILMINGTON	Active

Previous Names

Business: TERRACON CONSULTANTS, INC.

Charter Number: 35701137F

Registration Date: 5/7/2004

Secretary of State Registration - NTB Associates

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

20. Certifications/Licenses

Secretary of State Registration - Vectura Consulting Services

Name	Type	City	Status
VECTURA CONSULTING SERVICES, LLC	Limited Liability Company	BATON ROUGE	Active

Previous Names

Business: VECTURA CONSULTING SERVICES, LLC
Charter Number: 41994609K
Registration Date: 8/24/2015

Secretary of State Registration - Marrero, Couvillon & Associates

Name	Type	City	Status
MARRERO, COUVILLON & ASSOCIATES, L.L.C.	Limited Liability Company	BATON ROUGE	Active

Previous Names

Business: MARRERO, COUVILLON & ASSOCIATES, L.L.C.
Charter Number: 34604188K
Registration Date: 12/31/1997

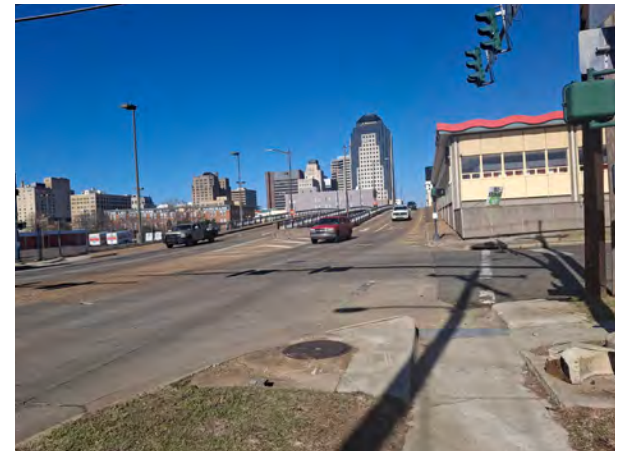
Secretary of State Registration - Terracon Consultants

Name	Type	City	Status
CDM SMITH INC.	Business Corporation (Non-Louisiana)	BOSTON	Active

Previous Names

CAMP DRESSER & MCKEE INC. (Changed: 12/15/2011)
Business: CDM SMITH INC.
Charter Number: 31231240F
Registration Date: 12/30/1975

QA/QC PLAN | SUB-CONSULTANT INFORMATION | LOCATION



Michael Baker will apply our proven QA/QC plan, customized for this project, and will ensure our subconsultants follow our rigorous quality standards, providing DOTD with a high-quality, safe, and compliant project.

21. QA/QC Plan

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

BRIDGE DESIGN QA/QC PLAN

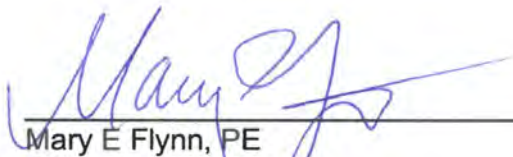
US 71: ICG RAILROAD OVERPASS REHAB (HBI)

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

REVISIONS

DATE	REVISION

APPROVALS:



Mary E Flynn, PE
Office Quality Manager

03-18-2026
Date



Daniel Thornhill, PE
Principal

03-18-2026
Date

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SECTION I - PROJECT QUALITY PLAN

1.0 Introduction

The following quality plan was prepared for the US 71: ICG RAILROAD OVERPASS REHAB (HBI) and US 71: MARKET ST BRIDGE OVER ICG RR (HBI). The individual members of the Michael Baker International Team shall collectively adopt and implement this Design QC/QA Plan for the project. All team members will maintain an up-to-date copy of the Design QC/QA Plan as documented by a certification of receipt.

The Michael Baker Team recognizes and acknowledges that they are responsible for the quality of construction documents and constructability of the project. The Design QC/QA Plan presented incorporates the overall control of establishing review procedures and provides for an independent Quality Control/Quality Assurance review team within the Michael Baker Team. The quality policy herein is relevant to Michael Baker's organizational goals and the expectations and needs of Louisiana Department of Transportation and Development (LA DOTD). Our commitment and objectives to quality shall be exhibited throughout the life of the design process as well as in construction support.

1.1 Scope of the Project Bridge Design QC/QA Plan

The Design QC/QA Plan is the overall methodology to ensure the deliverable of a quality set of construction documents. It is intended to establish a systematic approach to prepare, review and document the design development process and to assure that quality control has been effectively implemented.

All designers, technicians and reviewers recognize that quality is the result of several processes. It requires many individuals performing many appropriate activities at the right time during the plan development process. Quality Control does not solely consist of a review after a product is completed. It is an approach and a realization that quality is something that occurs throughout the design process. Quality requires performing all activities in conformance with valid requirements, no matter how large or small their overall contribution to the design process. Not only are accuracy in design activities and calculations required, but good CAD techniques, attention to detail and ensuring the plans are correct are essential to quality and the LA DOTD.

As an agent of LA DOTD, the Michael Baker Team is tasked with the primary responsibility for preparation of construction documents. The Michael Baker Team will ensure quality and adhere to established design policies, procedures, standards and guidelines in the preparation and review of all design products for compliance and good engineering practice as directed by this Design QC/QA Plan.

1.2 Objectives of the Project Bridge Design QC/QA Plan

- **Quality Control.** Procedures of 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 the specifications for the load-carrying members are adequate for the service and operation loads.
- **Quality Assurance.** Procedures of reviewing the work to ensure the quality control procedures are in place and effective in preventing mistakes, and consistency in the development of bridge design plans and specifications.
- **Roles and Responsibilities.** To define the roles of the various project participants and their respective responsibilities.

- **Documentation.** To provide a well-documented "trail" of the design process. A properly documented project file should be a by-product of the quality control process. A well-documented project file will be able to substantiate the LA DOTD's position should any legal, social or procedural issues arise regarding the project.
- **Feedback.** To provide informational feedback from reviews to the designers. The designer's improved expertise and general increase in knowledge from feedback should result in product improvement at early stages even before a project review is started. The Quality Control process thus serves as a parallel training program.

1.3 Quality Organization - Key Personnel

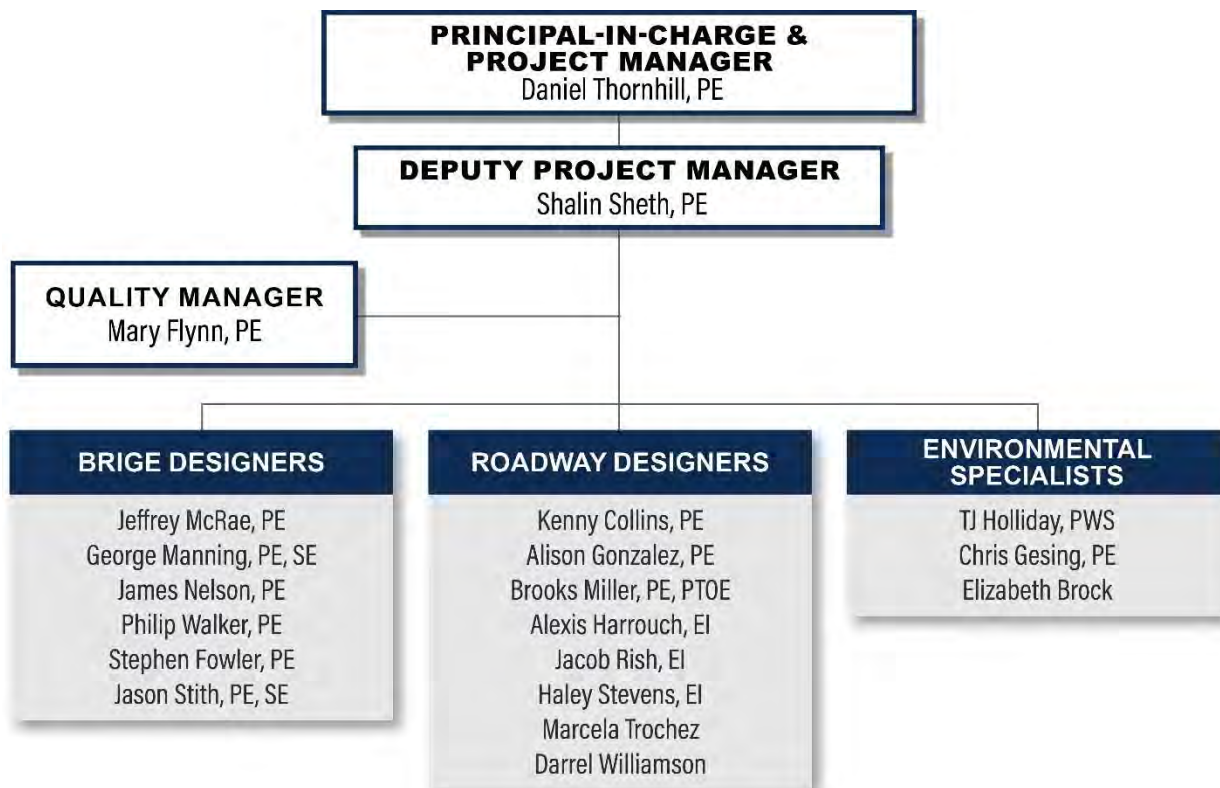
The following key personnel will contribute significantly to the overall quality of the project and their roles and responsibilities are defined here:

- Principal-In-Charge/Project Manager** – The Principal-In-Charge/Project Manager has the responsibility to determine the overall direction of The Michael Baker Team and its relationship to the quality efforts. The Principal-In-Charge/Project Manager will ensure that the quality policy is documented and understood by all team members and shall further ensure implementation of the quality policy. The Principal-In-Charge/Project Manager is the **team leader**, licensed by the State of Louisiana as a Professional Engineer, responsible for the planning, staffing qualified designers and detailers, coordination and controlling of a project from inception to completion, meeting the project's requirements and ensuring that each project is completed on time, within budget, within scope, and in conjunction with the Quality Manager, meets required quality standards. The Principal-In-Charge/Project Manager assigned for US 71: ICG RAILROAD OVERPASS REHAB (HBI) and US 71: MARKET ST BRIDGE OVER ICG RR (HBI) is **Daniel Thornhill, PE**.
- Deputy Project Manager (PM)** – The Deputy Project Manager helps ensure that project deliverables meet scope, schedule, and quality requirements, and works closely with the Principal-In-Charge and Quality Manager to support compliance with applicable standards and client expectations throughout project execution. The Deputy Project Manager assigned for US 71: ICG RAILROAD OVERPASS REHAB (HBI) and US 71: MARKET ST BRIDGE OVER ICG RR (HBI) is **Shalin Sheth, PE**.
- Quality Manager** – The Quality Manager Reports directly to the Principal-In-Charge and will be a person who is independent from the production of the design. The Quality Manager is the person responsible for the Quality Assurance of all work produced. The Quality Manager will assess and evaluate the completeness and effectiveness of design quality control activities. Once Quality Assurance has verified a complete package, she will provide recommendation to the Project Manager and certification to the LADOTD that the design quality control activities comply with the contract requirements and the Design QC/QA Plan. The Quality Manager assigned to the Baton Rouge Office is **Mary Flynn, PE**.
- Designers** – The Designers are the engineers responsible for their respective discipline or design efforts. The Designers must sign and seal design reports, design plans, working drawings and the project specifications for the assigned design activities. Designers are Louisiana licensed Professional Engineers, Engineers in Training, Engineer Aides and Senior Technicians, and have the necessary technical knowledge and experience required for this project. **The Designers assigned are Daniel Thornhill, PE; Kenny Collins, PE; Alison Gonzalez, PE; Brooks Miller, PE; Jeffrey McRae, PE; George**

Manning, PE; Philip Walker, PE; Shalin Sheth, PE; Stephen Fowler, PE; Jason Stith, PE; James Nelson, PE ; Alexis Harrouch, EI; Jacob Rish, EI; Haley Stevens, EI; Marcela Trochez and Darrel Williamson.

LADOTD – The LADOTD will review and approve design criteria and TS&L and selectively check dimensions and details as a cursory review of the plans for constructability, consistency, and clarity, but not as QC/QA of the Michael Baker Team’s work. The LADOTD is not responsible for the accuracy and completeness of design. It is the responsibility of Engineer of Record to ensure accuracy; adequacy; conformance to standards of practice; compliance with codes, standards and permits; cost effectiveness; quality; and fitness for purpose.

1.4 Quality Organizational Chart



SECTION II – DESIGN CRITERIA DEVELOPMENT

2.0 Design Input Requirements

During the course of the design, the design-input requirements relating to the scope of work and the applicable statutory and regulatory requirements related to the work to be/being performed shall be identified and documented and reviewed by the Project Manager for adequacy. Any incomplete, ambiguous, or conflicting requirements shall be resolved with the Project Manager (EOR) and LADOTD.

The Project Manager will determine what information is needed to design the project and will determine if sufficient information has been provided to carry out the assignment. It is the Project Manager's responsibility to obtain clarification of any unresolved ambiguity prior to proceeding with design information; sources and decisions made shall be documented and treated as a quality record.

Procedure: A team member noticing inconsistency with input requirements will notify the Project Manager. If the Project Manager is unable to resolve the inconsistency, a letter requesting clarification will be submitted to the LADOTD for clarification. The clarification provided by LADOTD will be recorded, documented and saved as a quality record, and a copy of the correspondence will be forwarded to the Quality Manager.

2.1 Design Criteria

Criteria specific for the US 71: ICG RAILROAD OVERPASS REHAB (HBI) and US 71: MARKET ST BRIDGE OVER ICG RR (HBI) will be developed, reviewed and accepted by the Project Manager, and submitted to the LADOTD for approval. A copy of the approved criteria will be provided to the Quality Manager. The Quality Manager will ensure the Michael Baker Team is working with the most updated criteria as they may change throughout the life of the project.

Bridge Design Criteria will include the following per LADOTD BDEM Chapter 3, Appendix A:

- a. Cover Sheet, with project number, name, revision date, and Team Leader signature.
- b. General design information including assumptions made and/or exemptions obtained
- c. Governing design and construction specifications and other references (AASHTO, LADOTD Bridge Design Manual, ACI, AISC, etc.)
- d. Hydraulic Design Criteria
- e. Design Factors and Loads
- f. Limit States
- g. Bridge Barrier and Guardrail
- h. Deck, Deck Drainage and Approach
- i. Bearing
- j. Joint Data
- k. Superstructure Data
- l. Substructure Data, including pile and drilled shafts
- m. Geotechnical, Mechanical, and Electrical Design
- n. Bridge Rating Criteria
- o. Software

SECTION III – DEVELOPMENT OF DESIGN AND PLAN DETAILS

3.0 Design and Plan Preparation:

An Engineer of Record (EOR) will be assigned for the project. He/she is directly responsible for the supervision and/or preparation of plans, sealing drawings, special provision including non-

standard items, and calculations. The EOR for the US 71: ICG RAILROAD OVERPASS REHAB (HBI) and US 71: MARKET ST BRIDGE OVER ICG RR (HBI) will be the Project Manager (EOR), **Daniel Thornhill, PE.**

The following are the guidelines to be used for Calculations, Plans and Specifications.

3.1 Calculations

Calculations will be prepared as a guide and support for the design and will be provided during all phases of quality reviews but shall not be considered as elements of the Contract Documents. All calculation sheets will be organized and maintained in a standard calculation book format. The calculations will be consistent with the requirements of the design. In general, calculations will include the following:

- Design Criteria as detailed in Section II.
- "Handwritten" Design Calculations will be made on standard calculation sheets; initialed by the designer; and, contain the date, job number, project title, and calculation title. All assumptions will be listed, verified and approved by the Project Manager (EOR). Where code dictates a requirement, the code, code date, section number and applicable table will be listed. When information is obtained from other calculations or disciplines, the source shall be properly referenced. Design iterations will be included as part of the final documentation. The final design will appear on the plans. During development of design calculations, proper sketches and details (when appropriate) will be presented in the design calculations for clarification purposes.
- Commercial Design Computer Software Calculations will be from the LA DOTD's approved list or approved for use by the Project Manager (EOR) and LA DOTD; training on usage and interpretation of results of software will be required for all inexperienced users. Generated output will be initialed by the designer; and contain the date, job number, project title, and calculation title. During development of design calculations, proper sketches and details (when appropriate) will be presented in the design calculations for clarification purposes.
- In-House Design Computer Programs will be approved for use by LA DOTD prior to use and may consist of spreadsheets, MathCAD worksheets, or other approved formats. Any in-house computer software used for design will be checked, or must have been previously checked, prior to use. All software checks will be documented and filed for future reference. The author will be responsible for updating the program and design manual (if required) to meet current code criteria. When the program is revised, the author will be responsible for informing the users. Results from in-house software will not be required as part of the deliverable.
- Design & Plan Preparation Computer Software will be a "total package" tool, in that a single software program is used throughout the design and detailing process to ultimately arrive at the final construction documents. Training on usage and interpretation of results of software is required for all inexperienced users. Where "industry standard" software is used, training should be readily available. Project Manager (EOR) should make the determination when training of individuals is needed. Planning, obtaining approval and scheduling of training sessions are responsibilities of the Project Manager (EOR).

3.2 Bridge Drawings

Drawings will show the structural member locations, sizes, reinforcing, and connections in sufficient scale and detail to enable the construction of the Bridge in a reasonable sequence. Elevations, sections, and details will be of appropriate scale, number, and extent to portray clearly the relationship of members to each other and their interconnection(s). Care will be taken to ascertain and determine that details noted "typical" are applicable to the US 71: ICG RAILROAD

OVERPASS REHAB (HBI) and US 71: MARKET ST BRIDGE OVER ICG RR (HBI), for the condition being portrayed.

In general, final bridge drawings will include the following:

- General Notes and Bridge Index
- Summary of Bridge Quantities
- General Plan & Elevation
- Foundation/Pile Layout
- Abutment Details and Elevations
- Intermediate Bent Details and Elevations
- Transition Bent Details and Elevations
- Framing Plan
- Girder Details
- Approach Slab Details
- Standard Bridge Plans & Details

3.3 Specifications

The 2026 LADOTD Standard Specifications will be used for construction as indicated in the construction plans. Where necessary, existing LA DOTD Non-Standard Specifications will be used. If a Non-Standard specification does not exist and is required, it will be developed and submitted to LA DOTD for their review and acceptance.

SECTION IV - QUALITY CONTROL

4.0 Scope of Quality Control Activities

As part of the Design QC/QA Plan, Quality Control will include activities performed by The Michael Baker Team to assess design and ensure the quality of the end product. The Quality Control will include activities in establishing and communicating policies and procedures; auditing of design reviews and checks; verifying completeness and accuracy of design; and, establishing procedures for and monitoring of document control, and production process control and inspection.

The Project Manager (EOR) will communicate design quality procedures and policies to the design staff at the outset of the project and ongoing communication of Design QC/QA Plan goals and initiatives as the project continues. Communication and directives to the design staff will also include details of the quality control activities for proper checking, back checking and signing of design computations and construction documents by the Designers.

The Quality Control efforts will establish design requirements for design codes, design standards, production formatting and detailing requirements.

4.1 Objectives of the Quality Control Plan

- Implement, monitor, review and provide recommendations for improvement of the Quality Control throughout the project
- Discuss and schedule all Design Reviews by LA DOTD
- Review of the adequacy and completeness of design solutions and design documents
- Review of design solutions, including work by other designers and subconsultants, to ensure that the requirements of the contract documents and Project scope are satisfied
- Review for conformance and completeness at all Project Design phase submittals with the overall project scope and overall contract documents

- Certify that all design documents, including work by other designers and subconsultants, are in conformance with the Design QC/QA Plan and conforms to the contract requirements
- Document that all design services are performed under the direction of a Professional Engineer licensed in the contracted State
- Arrange and schedule reviews of all design documents and other plans such as shop drawings and fabrication drawings
- Conduct independent design checks of critical project components and review findings with design staff
- Provide design verification throughout the project as required by the LA DOTD
- Check design for accuracy of designer's calculations, pay items, quantities, special provisions, including non-standard items, and cost estimate
- Check detail for dimension and quantity calculations, design information, and CAD standards
- Preparation of Quality Assurance information package to the Quality Manager

4.2 Training Processes

The Michael Baker Team will establish and maintain documented procedures for identifying training needs and provide for the training of all personnel performing activities affecting quality control. Personnel performing specific assigned tasks shall be qualified based on appropriate education, training, and/or experience, as required. Appropriate records of training will be maintained by the Michael Baker Baton Rouge Office.

4.3 Procedures for Internal Quality Control Audits

The Quality Manager shall audit the Design QC/QA Plan implementation on a regular basis to see that the quality records, indexes, and quality review schedules are being performed in accordance with the Design QC/QA Plan. Also, the Quality Manager may ask the independent reviewers (checkers) to provide an independent design of certain elements of the project to independently verify the adequacy of the design. The independent design calculations will become a part of the quality record.

SECTION V – QC OF DESIGN AND PLAN DETAILS

5.0 Quality Control:

The quality control process established to ensure correctness for design and plan preparation will be divided into two categories:

1. Ongoing through the process of design and plan preparation; and
2. Periodic reviews at particular phase submittals of the project.

A Design Reviewer (Checker) reporting directly to the Project Manager (EOR) will conduct full technical reviews during the design, including design calculations, drawings, special provisions, including Non-Standard items, and cost estimate. When the Project Manager (EOR) identifies that the design and plans are ready for an independent review, he/she will create hard-copy printouts to be used for the calculation or plan review set. The calculations and/or plan review sets should identify the original designer and should be signed and dated by the Reviewer.

- The Project Manager (EOR) will provide hard-copy calculations and/or plan sets to the Design Reviewer (Checker). The Project Manager (EOR) will indicate the phase of review.
- The Checker should sign and date the calculations or plan sheets being reviewed.
- The Checker should indicate with a highlighter (or check mark for calculations and spreadsheets) each item reviewed on the sheet. Reviewer comments should be indicated in 'red' pen or pencil on the printout.
- Design Quality Review Checklists will be created for each phase of submittal reviews. These checklists are to be used as guidance during the design review. Any checklist items which are not applicable to the project or to the stage of the design review will be marked "N/A" for "not applicable." Completed checklists will include the reviewer's initials and date of review, and a PDF copy of the checklist will be kept as a part of the quality record.
- The review comments will also be documented and listed in a separate document or quality record.
- Once the review is complete, the marked-up sheets, checklists, and listed comments should be returned to the Project Manager (EOR).
- The Project Manager (EOR) will review the comments for compliance with the contract and Design QC/QA Plan requirements.
- The Project Manager (EOR) will provide the review comments to the Designer. If needed, the Project Manager (EOR) may choose to hold a Design Review Conference to communicate the comments to the Designer.
- The Designer should thoroughly review and address the comments, indicating on the sheet his agreement and incorporation of the comment with a highlighter (of different color than that used by the Checker).
- If there is disagreement on how a particular item should be addressed, then the Project Manager (EOR) will make the final decision, and notes should be made on the markup sheet on how the comment is to be resolved.
- The Project Manager (EOR) will initial each response to verify that each comment has been addressed.
- Once the review is complete, all check sets and calculations will be scanned as a PDF and kept electronically in the project files for future reference and saved as a part of the Quality Assurance package.

5.1 Quality Control Procedures:

Design and plan checking procedures will be conducted in Michael Baker's traditional manner. Quality procedures will include plan components and total package reviews.

Plan Component Review — Designs, plans and specifications will be checked for appropriateness, code compliance, completeness, design verification, and accuracy.

1. All Calculations shall include the name of the MAKER (design engineer or engineer intern) and the CHECKER (independent design engineer). Calculations shall be checked for appropriateness, code compliance, completeness, and accuracy. All design calculations will either be performed by or checked by an engineer licensed to practice in the State of Louisiana.

- a. "Handwritten" Design and Quantity Calculations shall be performed on a photocopy of the original. After checking and backchecking/comment resolution is completed, the original is to be corrected by the MAKER.
 - b. Commercial Design Computer Software shall be checked to verify all input required for the design, as well as, support calculations required for input. Checking shall be performed on the original; with, "handwritten" support calculations checked accordingly. After checking and backchecking/comment resolution is completed, the input will be revised by the MAKER and a new output generated. The new output will be reviewed for correctness and initialed and dated by the CHECKER.
 - c. In-house Design and Quantity Programs shall be checked in the same manner as Commercial Design Computer Software.
 - d. A three-color system will be used for checking, backchecking/comment resolution and final checking and review. Each color will be used exclusively by the person whose initials are signed with that color.
 - CHECKER – first checking - Red
 - MAKER – first backchecking/comment resolution - Blue
 - CHECKER – final checking & review - Green
2. All Plans will be checked at completion. When a plan sheet has been completed to the satisfaction of those involved in its preparation, a half-size CHECKING PRINT shall be made of that sheet for the checker. All plans shall include the name of the MAKER and the CHECKER. Plans shall be checked for appropriate presentation, geometric conformance and accuracy, compliance with design calculations, and proper notes and references.
 - a. Appropriate presentation will include checking for conformance to customary layout, sections, details, and scales.
 - b. Geometric conformance will include checking for compatibility and fit with the overall project and adjacent components of the project. Accuracy checking shall include all horizontal and vertical dimensions and elevations for arithmetic correctness. Accuracy shall include checking against project calculations and spreadsheets, as well as independent computations.
 - c. Compliance with design calculations will include checking of plans to assure that dimensional and quantitative design requirements are correctly shown.
 - d. Proper notes and references will include checking of plans to ensure that code and design requirements are sufficiently indicated; and, cross referencing to other plan sheets and specifications are provided.
 - e. A four-color system is used, each color being used exclusively by the person whose initials are signed with that color. (Except for corrections made which may be signed off in red.)
 - CHECKER – Red. Every number and figure must be checked in red (if correct) or circled in red with the correction shown to the side (if wrong).
 - MAKER – Blue. Every number and figure circled and corrected by the CHECKER must be reviewed by the MAKER and checked off in blue or

discussed with the CHECKER if disagreement occurs. At that point, any changes agreed upon by the CHECKER and MAKER will be shown in blue.

- CORRECTIONS MADE – Yellow. Every number and figure circled and corrected shall be yellowed by the person making the revisions to signify completion of each correction.
- CORRECTIONS CHECKED – Green. Every number and figure circled and corrected shall be checked off in green by the CHECKER to signify that the correction has been made properly.
- Upon completion of this process, the CHECKING PRINT is considered a finished document.
- Any additional corrections to the drawing shall require a new Checking Print, and the process shall be repeated. (Note: Previous Checking Prints shall not be discarded.)

SECTION VI – QUALITY ASSURANCE

6.0 Scope of the Quality Assurance Plan

The Quality Assurance Plan sets forth those actions, procedures, and methods employed at the management and senior technical levels to observe and ensure that prudent quality procedures are in place and are being implemented so that the desired result of a quality product is achieved.

This Quality Assurance Plan establishes a Quality System Team that will be distinct and separate from the design and production staff which includes a Quality Manager and independent reviewers. The Quality Manager will ensure that the Design QC/QA Plan is understood, implemented, and maintained at all levels of the Michael Baker Team.

6.1 Objectives of the Quality Assurance Plan

- Develop and prepare the Design QC/QA Plan, for review and concurrence by LA DOTD
- Publish, communicate and educate the Michael Baker Team on the approved Design QC/QA Plan for the project
- Review status and effectiveness of the Design QC/QA Plan - including Overall Quality Assurance and Construction Quality Control criteria throughout the life of the project
- Implement and oversee the overall quality program
- Develop procedures to allow the constructor to have input into the design in order to provide Design QC/QA Plans and construction methods
- Develop procedures on how document changes are initiated, reviewed, approved, implemented and recorded
- Define the liaison and interface between the quality assurance team and the design arms of project team
- Ensure that the QC process is complete, and the design calculations, drawings, special provisions, and cost estimate are in accordance with LA DOTD Design practices, policies, and procedures

- Provide reviews focused on constructability, areas of critical structural importance, areas that are new to the design practice, and other areas that the Quality Manager deem necessary.
- Update the Design QC/QA Plan and its procedures during the progress of the project
- Review, check and audit the Design QC/QA Plan to ensure compliance and functionality
- Cooperate and assist LA DOTD's designated representatives for QA

Ensuring that the Design QC/QA Plan is properly administered will start with proper staffing. The Quality Manager will be responsible for tracking, updating and communicating the Design QC/QA Plan status. A Design QC/QA Plan list of milestones, certifications, reports, and critical and non-critical elements will be refreshed as needed for the project team and LA DOTD. The Quality Manager for the project will also track communication between the Michael Baker Team, LA DOTD and other organizations involved in the Design QC/QA Plan.

6.2 Procedures for Management Review

The Michael Baker Team's executive management will review the quality system at defined intervals sufficient to ensure its continuing suitability and effectiveness in satisfying the requirements of this standard and the designers stated quality policy and objectives. Management reviews will be at least at annual intervals.

6.3 Training Processes

The Michael Baker Team will establish and maintain documented procedures for identifying training needs and provide for the training of all personnel performing activities affecting quality assurance. Personnel performing specific assigned tasks shall be qualified based on appropriate education, training, and/or experience, as required. Appropriate records of training will be maintained by the Michael Baker Baton Rouge Office.

6.4 Procedures for Internal/External Quality Assurance Audits

The Quality Manager can audit the Design QC/QA Plan implementation at any time to see if the quality records, indexes, and quality review schedules are being performed in accordance with the Design QC/QA Plan. Also, the Quality Manager may perform independent design or calculation checks of certain elements of the project to verify the accuracy of checks. The independent checks may become a part of the quality record if necessary.

SECTION VII – QA REVIEW OF PLAN PACKAGE

7.0 Plan Package Review

A total package review shall be conducted by the Project Manager (EOR) for overall completeness and constructability prior to handing over to the Quality Manager for Quality Assurance review.

- Review shall include an assessment of completeness of the plan set in communicating design requirements, limitations of construction, required sequencing and critical instructions.
- Constructability review will be conducted to determine whether the project is buildable as designed and detailed using standard construction practices and materials; plan clarity has been achieved; and, plan details will result in a maintainable project.

- A complete set of half-size REVIEW PLANS, and other disciplines as needed for reference, shall be provided by the Project Manager (EOR) to the Quality Manager.
 - a) A four-color system is used, each color being used exclusively by the person whose initials are signed with that color. (Except for corrections made which may be signed off in red.)
 - a) REVIEWER – Red. Quality Manager or his representative shall provide comments in red.
 - b) DESIGNER – Blue. Comments by the REVIEWER will be reviewed by the DESIGNER and checked off in blue or discussed with the Project Manager (EOR) if disagreement occurs. At that point, any changes agreed upon by the REVIEWER and DESIGNER will be shown in blue.
 - c) CORRECTIONS MADE – Yellow. Comments shall be incorporated into the plans and yellowed by the person making the revisions to signify completion of each comment.
 - d) CORRECTIONS CHECKED – Green. Every number and figure circled and corrected shall be checked off in green by the Project Manager (EOR) to signify that the correction has been made properly.
 - e) Upon completion of this process the REVIEW PLANS are considered a finished document.
- Design QC/QA Plan Checklists completed during the QC review will be verified for completeness and effectiveness for each QA phase submittal. These checklists indicate typical items that should be included in the submittal and can serve as a guide to the QA Review. If checklists are found to be incomplete or ineffective, the Quality Manager will address with the Michael Baker Team and make edits to the QC/QA Plan and checklists if necessary.

7.1 LA DOTD Reviews

The Project Manager (EOR) will submit to the LA DOTD each Phase Review after sufficient quality verification has been performed by the Quality Team for each phase submittal. Design Documents to be reviewed will be provided to LA DOTD for review.

The Project Manager (EOR) will provide LA DOTD's comments to the Designers for incorporation and/or further explanation. The Designer will respond to each comment and return the updated plans to the Project Manager (EOR). The Quality Manager will initial each comment to ensure that all comments have been addressed. If significant changes have been made to the plans since the previous independent review or if additional calculations are provided, the Quality Manager will conduct a second independent review of the phase submittal following the Procedures for Phase Reviews given above.

Once all reviews are complete and comments addressed, the Project Manager (EOR) will then forward a certification that the reviews have been completed to the LA DOTD. The Quality Manager will report any non-conformities/non-compliance. LA DOTD will then conduct another review with involvement of stakeholders at the discretion of LA DOTD. When all comments have been addressed to LA DOTD's satisfaction, the Project Manager (EOR) will finalize the phase submittal plans for construction.

7.2 Certification of Design Reviews

All design phase submittals shall be thoroughly reviewed by the Project Manager (EOR) as outlined in this Design QC/QA Plan. Further, the Quality Manager shall assure and certify that the Design QC/QA Plan has been adhered to before any submission to LA DOTD.

SECTION VIII – PROJECT DOCUMENT CONTROL

The **Project Document Control** will be used to house all quality records for the project. Quality records will be maintained to demonstrate conformance to the project requirements and to ensure that the Design QC/QA Plan has been implemented and followed.

Document Control Procedures for identification, collection, indexing, access, filing, storage, maintenance, and disposition of the quality records are as follows:

- Quality records will be identified with the stage of review. Quality records include the review plan set, specification or design calculation that is being submitted tabulating the review comments. Any calculations or other documentation of checking will also be included in the quality records. The quality records will be preserved as submitted by preparing a .pdf copy of the design review documentation including the marked-up plan set. These records will be saved to the project files.
- The Quality Manager is responsible for collecting all Phase Review comments from the design review team and LA DOTD. The Quality Manager is responsible for collecting these comments and ensuring incorporation to the construction plans or a resolution derived.
- The Quality Manager will index reviews received. This index will note the Phase Review, the designer's name, the independent checker's name and date of review, the date of submission to LA DOTD for review, and the date the certified review was sent on to the Quality Control Manager.
- The Quality Manager will determine who will have access to the quality records in the Project Document Control.
- All quality records will be filed as described in the Project Document Control. A back-up system will also be maintained to ensure that this documentation is not lost.
- The duration of the storage of the quality records is 4 years.
- The Quality Manager or staff directly under his/her supervision will be responsible for the maintenance of the quality records in the Project Document Control.
- The Quality Manager or staff directly under his/her supervision will be responsible for the disposition, distribution and notification of quality records to the Michael Baker Team.

22. Sub-consultant information:

If one or more sub-consultants will be used, provide the name, address, point of contact and phone number for each. Otherwise, leave this section blank.

Firm Name (Name must match <u>exactly</u> 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
HDR Engineering, Inc.	8545 United Plaza Blvd, Suite 379, Baton Rouge, LA 70809-2479	Wesley Jacobs, PE Wesley.Jacobs@hdrinc.com	225-465-6361
Terracon Consultants, Inc.	2822 O'Neal LN, Bldg B Baton Rouge, LA 70816	Lynne Roussel, PE lynne.roussel@terracon.com	225-239-2632
NTB Associates, Inc.	525 Louisiana Ave. Shreveport, LA 71101	Michael J. King mking@ntbainc.com	225-751-4002
Vectura Consulting Services, LLC	PO Box 14269 Baton Rouge, LA 70898	Brin Ferlito, PE, PTOE bferlito@vecturacs.com	225-223-6685
Marrero, Couvillon & Associates, L.L.C.	2644 S. Sherwood Forest Drive, Suite 200 Baton Rouge, LA 70816	M. Kimball Schlafly, PE kschlaflly@mca-llc.com	504-834-3448
CDM Smith Inc.	1555 Poydras Street, Suite 1750 New Orleans, LA 70112	Carleen Flynn flynnm@cdmsmith.com	407-660-6423

23. Location:

*If location is an evaluation criterion for this advertisement (see page 2) and the prime consultant intends to establish a local presence, describe the plan for doing so. **Otherwise, leave this section blank. Any information included in this section will be redacted if not required by the Evaluation Criteria section of the advertisement.***

Michael Baker
I N T E R N A T I O N A L

We Make a Difference

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