Gresham Smith



LADOTD | Livingston Parish | July 19, 2022

Genuine Ingenuity

10000 Perkins Rowe Suite 280 Baton Rouge, LA 70810

225.757.5849 GreshamSmith.com

July 19 2022

Mr. Michael Gorbaty Consultant Contract Services Administrator Department of Transportation and Development 1201 Capitol Access Road, Room 405-E Baton Rouge, LA 70802

Re: Advertisement for Engineering and Related Services Contract No. 4400024641 Contract For LA 447 Corridor State Project No. H.005734, F.A.P. NO. H005734 LA 447, Livingston Parish

Dear Mr. Gorbaty:

At Gresham Smith, we have been honored to partner with LADOTD and numerous public agencies on a variety of projects. From our Baton Rouge office, and also at the corporate level, we share in the stake that the LADOTD holds in carrying out its responsibilities in the most effective manner possible. Our key local staff all have experience successfully completing road, bridge, complete street, and traffic projects individually for LADOTD and we look forward to the opportunity to partner with LADOTD to provide the design services for the LA 447 corridor.

For the past 55 years Gresham Smith has partnered with our Transportation clients as a trusted advisor to help them deliver their transportation programs, our local office is supported by key staff and national experts in our other 25 offices throughout the southeastern US. We deliver an unparalleled diversity and depth of RESOURCES rivaling those of much larger national firms, but we retain the dedicated, personalized service and RESPONSIVENESS of a local firm. Gresham Smith looks forward to continuing our great working relationship with DOTD staff on this program.

Our primary proposed staff members for this program have been honored to build their careers with DOTD. Gaining experience with similar types of projects while instilling that required attitude that puts the needs of the communities and safety of the traveling public first. The following key staff members will be leading the effort on these projects and have their career foundation with DOTD.

Gresham Smith

• Richard Savoie, PE, Project Manager, will oversee day-to-day project tasks. Richard's 40-year career includes 34 years with the LADOTD in increasing roles culminating as the LADOTD Chief Engineer. In his four years as Chief

Engineer, Richard provided guidance to staff, while promoting innovation, continuous improvement and efficient use of resources. He was responsible for establishing engineering standards, policies and procedures that guide program and project delivery, construction, and preservation of all transportation-related projects and systems. In addition, he was accountable for the on-time and on-budget delivery of the DOTD Highway Priority Program.

- Brennon Hughes, P.E., Deputy Project Manager and Lead Design Engineer, will assist with the overall
 project management of this contract and lead our road design tasks. Brennon's experience as a former
 LADOTD road design engineer and as a construction project engineer, make him a prime candidate to
 lead this design. While at LADOTD, he worked on multi-million-dollar projects with multiple stakeholders
 including the design of the multi-lane roundabout at the intersection of LA 22 at LA 70.
- Herbert "Bert" Moore II, P.E., PLS, PTOE, Project Executive and Gresham Smith's Louisiana Transportation Leader, is
 experienced with safety, traffic management, and maintaining the state's facilities. In his 20 years of experience as
 both as a consultant and as LADOTD's District Traffic Operations Engineer for District 61, Bert has demonstrated
 his knowledge of DOTD requirements and preferences, and proven adept at getting things done efficiently. As
 the Project Executive, Bert will ensure the team has the expertise and resources necessary for LADOTD's
 successful completion of this project and ensuring that the project is completed on-time and under budget.
- Ronnie Robinson, P.E., Senior Transportation Engineer, will assist with the evaluation of all pavement preservation
 projects and lead the team on establishing design criteria and generating solutions. Ronnie has 33 years of experience
 with Louisiana DOTD including 11 years in construction, 8 years as Manager of the Design & permits section, and 9 years
 as Administrator of the design (including pavement preservation), water resources, permit, and materials testing sections.
- Our team will be supported by T. Baker Smith, Crescent Engineering and Mapping and La Terre Engineering.
 T. Baker Smith is experienced with roadway widening for LADOTD, having just completed the widening of I-12 for LADOTD, Crescent Engineering and Mapping will lead the plans for the replacement of the bridge on LA 447 and La Terre, a local DBE firm, will develop existing and proposed drainage plans.

The Gresham Smith team is eager, enthusiastic and available to start work immediately on this project. We respectfully ask for your consideration and appreciate the opportunity to present this proposal. Please feel free to contact me with any questions at 225.282.2101 or by email at bert.moore@greshamsmith.com or our proposed project manager, Richard Savoie at 225.960.5483 or by email at richard.savoie@greshamsmith.com.

Sincerely,

Herbert "Bert" Moore II, P.E., PLS, PTOE State Transportation Leader - Louisiana

Gresham Smith

DOTD FORM: 24-102

PROPOSAL TO PROVIDE CONSULTANT SERVICES

Prime consultant shall complete the DOTD Form 24-102 without altering the Form's text; however, the instruction and/or guidance for Sections 12 through 23 can be removed but do not remove Section title and number. ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE. Prime consultant should enter the firm name in the footer at the bottom of this page. (It will carry over to subsequent pages.)

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| 1. Contract title as shown in the advertisement | Contract for LA 447 Corridor |
|---|--|
| 2. Contract number(s) as shown in the advertisement | 4400024641 |
| 3. State Project Number(s), if shown in the advertisement | H.005734 |
| 4. Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law) | Gresham Smith |
| 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.0003429 DUNS number: 059153676 |
| 6. Prime consultant mailing address | 10000 Perkins Rowe, Suite 280, Baton Rouge, LA 70810 |
| 7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria) | 10000 Perkins Rowe, Suite 280, Baton Rouge, LA 70810 |
| 8. Name, title, phone number, and email address of prime consultant's contract point of contact | Richard Savoie, P.E. Senior Transportation Engineer 225.960.5483 / richard.savoie@greshamsmith.com |
| 9. Name, title, phone number, and email address of the official with signing authority for this proposal | Herbert "Bert" Moore, II, P.E., PLS, PTOE State Transportation Leader - Louisiana 225.757.5849 / bert.moore@greshamsmith.com |

| 10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response. | Signature (shall be the same person as #9): When the same person as #9): Date: July 19, 2022 |
|--|--|
| 11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage. | Firm(s): La Terre Engineering Firm(s)' %: 4% |

12. Past Performance Evaluation Discipline Table:

| Past Performance Rating Categories | % of Overall Contract | Gresham Smith (Prime) | T. Baker Smith (Sub) | Crescent Engineering and Mapping (Sub) | La Terre Engineering (DBE) (Sub) | |
|---------------------------------------|--------------------------|---------------------------------|---|--|-------------------------------------|--|
| Road (Roadway Design and Drainage) | 88% | 56% | 40% | 0% | 4% | |
| Bridge | 10% | 20% | 0% | 80% | 0% | |
| Traffic* | 2% | 100% | 100% 0% | | 0% | |
| | Identify the perc | entage of work for the <u>o</u> | verall contract to be pe sub-consultant. | erformed by the prime c | onsultant and each | |
| Percent of Contract | 100% | 53% | 35% | 8% | 4% | |

*If necessary

| 13 | 8. F | irm | Size: | |
|----|------|-----|-------|--|
|----|------|-----|-------|--|

| Firm Name | DOTD Job Classification | Number of personnel committed to this contract | Total number of personnel available in this DOTD Job Classification (if needed) |
|-------------------------------------|-------------------------|---|---|
| Gresham Smith | Principal | 1 | 2 |
| Gresham Smith | Supervisor-Engineer | 2 | 12 |
| Gresham Smith | Supervisor-Other | 1 | 5 |
| Gresham Smith | Engineer | 4 | 14 |
| Gresham Smith | Engineer-Other | 1 | 4 |
| Gresham Smith | Professional | 1 | 3 |
| Gresham Smith | Engineer Intern | 4 | 8 |
| Gresham Smith | Senior Technician | 2 | 3 |
| Gresham Smith | GIS Analyst | 0 | 1 |
| Gresham Smith | CADD-Operator | 0 | 2 |
| Gresham Smith | Clerical | 1 | 1 |
| T. Baker Smith | Supervisor ENG | 1 | 5 |
| T. Baker Smith | Engineer | 5 | 12 |
| T. Baker Smith | Engineer Intern | 3 | 8 |
| T. Baker Smith | Senior Technician | 2 | 5 |
| T. Baker Smith | CADD Technician | 2 | 10 |
| T. Baker Smith | Designer | 1 | 2 |
| T. Baker Smith | Administrative | 2 | 8 |
| Crescent Engineering & Mapping, LLC | Supervisor - Engineer | 1 | 1 |
| Crescent Engineering & Mapping, LLC | Engineer | 1 | 2 |
| Crescent Engineering & Mapping, LLC | Technician | 1 | 2 |
| La Terre Engineering, LLC | Engineer | 1 | 1 |
| La Terre Engineering, LLC | Engineer Intern | 1 | 1 |
| La Terre Engineering, LLC | Cadd Drafter | 1 | 1 |

14. Organizational Chart:



15. Minimum Personnel Requirements:

| MPR (Do not insert wording from ad) | Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement) | Firm employed by | Type of license / certification required | State of license | License / certification expiration date |
|--|--|----------------------|---|---------------------|---|
| 1. | Herbert "Bert" Moore, II, P.E., PLS, PTOE | Gresham Smith | P.E. (Civil) | Louisiana | P.E., LA 31065 Exp. 9/30/2023 |
| | | | PLS | Louisiana | PLS LA 5043 Exp. 9/30/2023 |
| | | | PTOE | International | PTOE 2728 Exp. 9/30/2024 |
| 2. | Herbert "Bert" Moore, II, P.E., PLS, PTOE | Gresham Smith | P.E. (Civil) | Louisiana | P.E., LA 31065 Exp. 9/30/2023 |
| | | | PLS | Louisiana | PLS LA 5043 Exp. 9/30/2023 |
| | | | PTOE | International | PTOE 2728 Exp. 9/30/2024 |
| 3. | Richard Savoie, P.E. | Gresham Smith | P.E. (Civil) | Louisiana | P.E., LA 20936 Exp 9/30/2022 |
| | Ronnie Robinson, P.E. | Gresham Smith | P.E. (Civil) | Louisiana | P.E., LA 24040 Exp. 3/31/2024 |
| 4. | John Weres, P.E. | Gresham Smith | P.E. (Civil) | Louisiana | P.E., LA 36429 Exp 9/30/2023 |
| | Dennis Hymel, P.E. | Crescent Engineering | P.E. (Civil) | Louisiana | P.E., LA 38172 Exp. 9/30/2023 |

(Add rows as needed)

| Herbert "Bert" Moore, II, P.E., PLS, PTOE | | | Years of experience with this firm/employer | 7 | |
|--|--|---|--|---|-----------------|
| Proje | ect Executive | | | Years of experience with other firm(s)/employer(s) | 16 |
| Degree(s) / Ye | ars / Specialization | Bachelor of Scie | nce / 1999 / Civil Ei | ngineering, Louisiana State University | |
| | gistration number / ate / expiration date | | A / Exp. 9/30/22 P | TOE 2728 / Exp. 9/30/24 PLS 5043 / LA / Exp. 9/30/22 | |
| | Year registered | 2004(PE); 2009(PTOE); 2010(PLS) | Discipline | P.E./Civil, PLS, PTOE | |
| Contract role(s) / bri | ef description of res | ponsibilities | | / Bert will provide overall contract management and direction the team with traffic-related tasks as needed. | 1 for |
| Experience dates (mm/yy–mm/yy) | | | | ed contract; <i>i.e.</i> , "designed drainage", "designed girders d cover the time specified in the applicable MPR(s). | ", |
| Career | and transportation er was responsible for t over 600 traffic signa warrants, traffic signa traffic control for work | ngineering. He prev he daily maintenan Is in the Departme al timing and design < zones, Transport | viously spent six yea lice and operation of nt's Baton Rouge dis n, safety studies, the ation Management F | xperience designing and managing projects in the fields of traffi rs as the district traffic operations engineer for LADOTD where I signs, striping and traffic equipment for 2,000 miles of roadway strict. His experience is in traffic operations, traffic control, signa implementation of access management principles, temporary Plans (TMP), and addressing bicycle and pedestrian needs withi fic Analysis Process and Report Training. | he and al |
| 04/20 – Ongoing | City of Central (LA), Hooper Road (LA 408) at Sullivan Road (LA 3034) Roundabout Design Senior Transportation Engineer. Gresham Smith was tasked with the full roundabout design to be in accordance with LADOTD's Roadway Design Manual geometric requirements and LADOTD's Complete Streets Policy to accommodate both pedestrians and bicycles through this intersection. Bert has assisted the team with roundabout analysis, temporary traffic control and sequencing of construction. | | | | |
| 07/18 – 12/21 | LADOTD, LA 37: Sullivan Road to Liberty Road Stage 0 Feasibility Study, Baton Rouge, LA <i>Project Executive</i> . Collected and reviewed over 580 crash reports over a span of three years from the state highway crash database and collected ADT data on 21 segments of LA 37 and intersecting streets, peak hour turning movement counts at 12 significant intersections and 15-minute counts along 38 driveways and insignificant side streets. The reports were reviewed and evaluated using the safety triage safety tool box. Traffic analysis will be performed using HCS and Synchro and other software tools as needed. We reviewed historic traffic volume counts and TransCAD models and performed count analyses to develop regional growth rates for the study area. Bert was responsible for the review of traffic counts and traffic and safety analyses. | | | | |
| 06/19 – Ongoing | LADOTD, Complex Bridge Inspections, Task Orders 1, 3, and 4, Statewide LA <i>Project Executive</i>. Bert serves as the Project Executive responsible for ensuring that all aspects of the work are performed in accordance with contract requirements. Bert also serves as the lead Traffic Engineer responsible for development of the traffic control plans and coordination with DOTD District Traffic Engineers. | | | | |

| 10/17 – 04/18 | LADOTD, US 90 Bridge Maintenance over I-10 Ramps, Transportation Management Plan (TMP), Lake Charles, LA <i>Project Executive.</i> Gresham Smith was selected to develop a TMP for the replacement of the bridge deck of the US 90 overpass over I-10 in Lake Charles, LA. The project included working with the design engineers to determine the required lane closures for the construction, data collection and queue and safety analyses. Bert was responsible for the overall study including overseeing the data collection review, conducting the queue and safety analysis, implementing the proper traffic control plans and development of the TMP report. |
|------------------------------------|---|
| 04/18 – 05/19 | LADOTD, I-10 TMP West of LA 108 to I-210 Interchange TMP, Lake Charles, LA <i>Project Executive.</i> Gresham Smith developed a TMP for the Rubbelization and Overlay on I-10 between I-210 and the LA 108 Interchange in Lake Charles, LA. This project included the mill and overlay of I-10, widening two flat deck bridges on I-10 to add a lane, and replacing all of the concrete panels on I-10 through the LA 108 interchange. In order to replace the concrete panels on I-10, traffic was moved to a C/D road within the interchange and cloverleaf ramps were closed during construction. Two temporary traffic signals were designed to facilitate traffic at this interchange. This project included data collection and queue and safety analyses and traffic signal design. Bert was responsible for the overall study including overseeing the data collection review, conducting the queue and safety analysis, implementing the proper traffic control plans, development of the TMP report, the design of two temporary traffic signals and QA/QC. |
| 05/17 – 03/19 | LADOTD, I-210 at LA 1138-2 (Nelson Road) Interchange Modification Re-Evaluation Study, Lake Charles, LA Project Executive. Gresham Smith was selected to develop a calibrated VISSIM model to model existing conditions and the future proposed diverging diamond interchange at I-210 at Nelson Road in order to evaluate the proposed interchange design. The project included data collection, development of growth rates, lead the Road Safety Assessment, developing and calibrating an existing VISSIM model and evaluation of the proposed alternative. Bert was responsible for the overall study, overseeing data collection, conducting safety analysis, development of VISSIM models, development of alternatives and the report. |
| 04/20 – 09/20 | LADOTD, Complex Bridge Inspections, Statewide, LA Task Order 2 - Emergency Bridge Repairs, US 71 in Downtown Shreveport, LA <i>Project Executive</i> . In April 2020, a train derailment damaged Bent 3 of the Spring Street Bridge forcing the roadway closure. Gresham Smith was selected to perform the bridge repairs to open the bridge. Working with the selected contractor, helical piles were designed to support the new column foundations and crash wall. Bert served as Project Executive (Principal) and assisted with DOTD coordination. |
| 11/08 – 11/14 | LADOTD, Baton Rouge, LA <i>District Traffic Operations Engineer</i> . While at LADOTD, Bert was responsible for reviewing, approving and developing temporary traffic control plans for all construction and maintenance work on the state highway system, which included the yearly inspections of all the on system bridges each year by district forces and consultants. These bridges included all of the I-10 bridges through the Baton Rouge region and over the Mississippi River. Bert was also responsible for Transportation Management Plans (TMPs) required for construction projects on these bridges. |
| Certifications (See section 20) | DOTD Traffic Engineering Analysis Process & Report – Modules 1, 2 and 3 U.S. Department of Transportation Federal Highway Administration – DPFA Certification LADOTD – Highway Safety Manual Workshop NCHRP 17-38 Louisiana Local Technical Assistance Program – Regional Crash Data Workshop American Traffic Safety Services Association –Traffic Control Supervisor, LA State Specific |

| 16. Staff Experience | : | | | | |
|--|--|---------------------------|--|---|-----|
| Ric | Gresham Smith Richard Savoie, P.E. Project Manager | | Years of experience with this firm/employer | 3.5 | |
| | | | | Years of experience with other firm(s)/employer(s) | 40 |
| Degree(s) / Ye | ears / Specialization | Bachelor o | of Science / 1978 / Civil Er | gineering, McNeese State University | |
| | gistration number / ate / expiration date | | 936 / LA / 9/30/22 | | |
| | Year registered | 1983 (LA) | Discipline | P.E./Civil | |
| Contract role(s) / bri responsibilities | ef description of | | Project Manager / Richa subconsultants and QC | rd will serve as project manager, coordinate with the on all deliverables. | |
| 04/20 – Ongoing | 20 – Ongoing City of Central (LA), Hooper Road (LA 408) at Sullivan Road (LA 3034) Roundabout Design Senior Engineer. Gresham Sm was tasked with the full roundabout design to be in accordance with LADOTD's Roadway Design Manual geometric requirements a LADOTD's Complete Streets Policy to accommodate both pedestrians and bicycles through this intersection. Richard is responsible for overall Quality Control on the project and is mentoring the engineering staff on the field evaluation requirements, reviewing all potential improvements, and is responsible for QC reviews on the preliminary and final design plan. | | | | |
| 09/18 – 12/20 | LADOTD, SRTS/LRSP Task Order 6 and 21: Endom Bridge Preliminary and Final Design, West Monroe, LA Senior Engineer. The project consisted of roadway realignment at the bridge approach to improve roadway geometry and safety. Right-of- | | | | |
| 06/21 – 02/22 | Plank Road Corridor Enhancement Segment 2 (Dawson Drive to Harding Boulevard) C-P Project No.: 20-EN-HC-0033 Baton Rouge, LA Project Manager. Gresham Smith was selected to perform the corridor enhancement of Plank Road between Dawson | | | | on |
| 02/09 — 03/14 | LADOTD, Project and Program Delivery <i>Project Manager.</i> Richard was the Project Manager for the I-49 North project in Caddo Parish, from I-220 to the Arkansas State Line. The project started with the Corridor Selection Study and progressed to the Environmental Impact Study. Once the alignment was selected plan development began and thence project delivery for this \$670 million project. As the Deputy Chief and Chief Engineer, participated in many partnering sessions for the Huey P. Long Bridge widening, John James Audubon Bridge and the cable replacement for the I-310 Luling Bridge with contractors and designers. He was the first Director of Value Engineering when the department started their Value Engineering program in 1998. He participated in multiple Value Engineering sessions and led the Value Engineering study for the pavement replacement for I-10 thru Lake Charles. | | | | |
| 03/21 – Ongoing | staffing, scheduling, a estimates. He worked | nd budgeting closely with | for this project. He also led Airport officials along with th | Yay Design. Richard was responsible for planning and coordinating the design and the preparation of preliminary and final plans and cordinate consultant for the adjacent design-build. project to coordinate the s scheduled for letting this Spring. | ost |

| 6. Staff Experience: | | | | | |
|--|---|---|---|--|-------|
| Gresham Smith Brennon Hughes, P.E. Lead Roadway Design Engineer / Deputy Project Manager | | | Years of experience with this firm/employer | 5 | |
| | | | | Years of experience with other firm(s)/employer(s) | 6 |
| Degree(s) / Years | / Specialization | Bachelor of Sci | ence / 2011 / Civil E | Engineering, Louisiana State University | |
| • | tration number / / expiration date | P.E.0039985 / | LA / 3/31/24 | | |
| | Year registered | 2015 | Discipline | P.E./Civil | |
| Contract role(s) / brie | f description of resp | oonsibilities | - | Design Engineer / Brennon will lead the development of the development of bid packages. | |
| Experience dates (mm/yy–mm/yy) | "designed inters | ection", etc. Expe | rience dates shoul | ed contract; <i>i.e.</i> , "designed drainage", "designed girders", d cover the time specified in the applicable MPR(s). | |
| 04/20 – Ongoing | Roadway/Rounda with LADOTD's Ro both pedestrians a | about Design Eng badway Design Ma and bicycles throug | jineer. Gresham Sm mual geometric requ h this intersection. E | n Road (LA 3034) Roundabout Design Lead ith was tasked with the full roundabout design to be in accordar irements and LADOTD's Complete Streets Policy to accommod grennon led the design and preparation of preliminary plans and e adjustments for final design. | date |
| 03/21 – Ongoing | cost estimates. This project is currently undergoing scope adjustments for final design. MSY Airport: Entrance Road Capacity Design Lead Roadway Design. Brennon was responsible for planning and coordinating staffing, scheduling, and budgeting for this project. He also led the design and the preparation of preliminary and final plans and cost estimates. He worked closely with Airport officials along with the consultant for the adjacent design build project to coordinate the widening of the entrance road to the MSY Airport. This project is scheduled for letting Summer 2022. | | | | |
| 10/15 – 08/17 | Parish, LA Lead of LA 22 and LA 7 at LA 22 and LA 7 Brennon's role wa | l Roadway Desigr 0 in Ascension Par 0 with a slip lane, a s to lead the desig | n. This was a widenir rish to north of I-10. along with two J-Turi | A 22 Geometric Improvements near I-10, Ascension ng and intersection improvement project located at the intersect This project included widening of LA 22, a double lane roundabe ns north of I-10 and two J-Turns south of I-10 along LA 22. n of preliminary and final plans and cost estimates. He developed ns. | out |
| 08/17 – 12/20 | LADOTD, SRTS/LRSP Task Order 6 and 21: Endom Bridge Preliminary and Final Design, West Monroe, LA Lead Roadway Design Engineer. Brennon led the design and the preparation of preliminary and final plans and cost estimates This project involved safety and operations improvements for the intersection realignment, curb and gutter drainage design sidewalks, truck islands and turnouts. | | | es. | |
| 09/11 – 07/17 | LADOTD Roadwa | ay Group. <i>Projec</i> s a designer on va | t Engineer. Prior to | joining Gresham Smith, Brennon served with the LADOTD cts including a new roundabout, widening projects, overlay proje | ects, |
| Certifications (See section 20) | | | | tersections Designed for Safety Control Supervisor, LA State Specific | |

| 16. Staff Experience: | | | | | |
|--|--|--|--|--|------------|
| Gresham Smith Ronnie Robinson, P.E. Senior Transportation Engineer | | | Years of experience with this firm/employer Years of experience with other firm(s)/employer(s) | 6 33 | |
| a s | | | | rears of experience with other him(s)/employer(s) | 33 |
| Degree(s) / Years | - | Bachelor of Scie | ence / 1982 / Civil E | ngineering, Louisiana State University | |
| | tration number / / expiration date | P.E.0024040 / L | A / 3/31/24 | | |
| | Year registered | 1988 | Discipline | P.E./Civil | |
| Contract role(s) / brief | f description of resp | oonsibilities | Senior Transportation preliminary and fination of the second seco | on Engineer / Ronnie will assist with the road design tasks for th al plans. | ıe |
| Experience dates (mm/yy–mm/yy) | | | | ed contract; <i>i.e.</i> , "designed drainage", "designed girders", d cover the time specified in the applicable MPR(s). | |
| 04/20 – Ongoing | Transportation I LADOTD's Road both pedestrians phase, participate design plans. | Engineer. Gresha way Design Manu and bicycles throu ed in the plan-in-h | am Smith was taske al geometric require ugh this intersectior and meeting, and w | van Road (LA 3034) Roundabout Design Senior d with the full roundabout design to be in accordance with ements and LADOTD's Complete Streets Policy to accommod n. Ronnie provided quality control for the preliminary design vill provide design assistance for the development of the final | |
| 02/17 – 12/20 | Senior Transpor final plans and co | rtation Engineer. | Ronnie's responsit | n Bridge Preliminary and Final Design, West Monroe, LA pilities included assisting in the development of preliminary an included coordination of the contaminated waste investigatio design. | nd |
| 03/16 – 10/17 | was selected to p both state and loc of existing and pr | erform a formal tr cal routes. The pro oposed conditions | affic study of all the oject included data s and benefit/cost a | Study, Farmerville, LA Senior Engineer. Gresham Smith intersections (57) within and around the City of Farmerville of collection, safety/crash review, developing alternatives, analy nalysis. Ronnie assisted with the development of alternatives estimates for various alternatives. | on ⁄sis |
| 07/17 – 06/19 | LADOTD, SRTS/LRSP Task Order 7: McMillan at Blanchard Intersection Improvements Design, West Monroe LA Senior Engineer. Ronnie's responsibilities included conducting field traffic observations and collecting field dar for the study portion. For the design portion, his responsibilities included developing conceptual designs, preliminary and final plans and construction cost estimates. | | | ata | |
| Career | of his 16 years in | construction as a | i project engineer, e | Department of Transportation and Development. He worked ight years as manager of the design and permit sections and urces, permit and materials testing sections. | |

16. Staff Experience: **Gresham Smith Payton Nickles** Years of experience with this employer 1 Professional Years of experience with other employer(s) 0 Degree(s) / Years / Specialization Bachelor of Science / 2021 / Civil Engineering, Louisiana State University Active registration number / N/A state / expiration date Discipline Year registered Civil N/A Contract role(s) / brief description of responsibilities Professional / Payton will support the roadway design and traffic teams. Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", **Experience dates** (mm/yy–mm/yy) "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s). LADOTD, Complex Bridge Inspections Task Order 3, Statewide, LA | Professional. Payton assisted in the development of the traffic control plans for various bridge inspection projects. The traffic control plans included single lane closures with alternating traffic with flaggers for projects in urbanized areas. Projects included the Charenton Truss Swing 03/21 - Ongoing Bridge in St. Mary's Parish and the Jeanerette Truss Swing Bridge in Iberia Parish. Payton worked closely with the bridge inspection team to develop the parameters for the lane closures to ensure that adequate protection was provided to the field inspection team while meeting requirements from LA DOTD's traffic control standards. Edinburg Regional Medical Center, Traffic Impact Analysis, Edinburg, TX | Professional. Payton assisted in the development of the traffic impact letter by performing analysis and preparing figures to support the traffic impact analysis for 03/21 - 04/21roadway expansion associated with the buildout of a regional medical center. Payton worked under the supervision of the lead traffic engineer to develop roadway capacity analysis and documentation of existing conditions to support the proposed roadway build outs. LADOTD, Present LADOTD, LRSP Task Order #1: Vernon and Sabine Signing & Striping, LA | Professional. This project includes preliminary and final design for proposed signing and striping improvements throughout several routes 06/21 - Ongoing within Sabine and Vernon Parish. Payton is responsible for preparing the line diagrams for each of the routes. She is also responsible for importing aerial images and developing intersection detail sheets. EBR DTD, MovEBR-Plank Road Corridor Enhancement, Baton Rouge, LA | Professional. This project is a design study along a portion of the Plank Road corridor between Dawson Drive and Harding Blvd. Payton's responsibilities include 06/21 - Ongoing assisting the design engineer with the development of Typical Sections and Plan and Profile Sheets. She is also responsible for addressing general markups in MicroStation. LADOTD, Complex Bridge Inspections Task Orders 4, 5 and 6, Statewide, LA | Professional. Payton assisted in the development of the traffic control plans for various bridge inspection projects. The traffic control plans included single lane 06/21-Ongoing closures with alternating traffic with flaggers for projects in urbanized areas. Payton worked closely with the bridge inspection team to develop the parameters for the lane closures to ensure that adequate protection was provided to the

field inspection team while meeting requirements from LA DOTD's traffic control standards.

16. Staff Experience: Gresham Smith



Zillah Zoleta, E.I. Engineer Intern

Years of experience with this employer <1

Years of experience with other employer(s) 0

| Degree(s) | Degree(s) / Years / Specialization | | ence / Expected Gra | duation Spring 2022 / Louisiana State University | | |
|--|---|--|---------------------|--|--|--|
| Activ | e registration number / state / expiration date | N/A | | | | |
| | Year registered | 2022 | Discipline | Civil | | |
| Contract role(s) / k | orief description of respo | onsibilities | Engineer Intern / Z | illah will support the Roadway Team. | | |
| Experience dates [Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girde (mm/yy–mm/yy) "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s). | | | | | | |
| 05/21 – Ongoing | MOVEBR, Nicholson Drive Segment 2 Engineer Intern. Gresham Smith is performing a traffic study for capacity improvements along Nicholson Drive in Baton Bouge, I.A. The project includes data collection, safety analysis, and existing | | | | | |
| 05/21 – Ongoing | MOVEBR, Sherwood Forest Boulevard Multi-Use Path Engineer Intern. Gresham Smith is performing a traffic study for | | | | | |
| 05/21 – Ongoing | LADOTD, FOMM-Lafayette/US 190/Alexandria <i>Engineer Intern.</i> In support of GIS services, Gresham Smith was selected by LADOTD to assist inputting field data into the ITS Field Asset Management System. Tasks include collecting data from LADOTD's fiber and communications system and field site equipment; recording data into the system; and mapping of the fiber system. Zillah has assisted on this project by inputting data into the NexusWorx system and performing | | | | | |
| 06/21– Ongoing | development of the traff closures with alternating team to develop the part | QA/QC on the data collected in the field. LADOTD, Complex Bridge Inspections Task Orders 4, 5 and 6, Statewide, LA Engineer Intern. Zillah assisted in the development of the traffic control plans for various bridge inspection projects. The traffic control plans included single lane closures with alternating traffic with flaggers for projects in urbanized areas. Zillah worked closely with the bridge inspection team to develop the parameters for the lane closures to ensure that adequate protection was provided to the field inspection team while meeting requirements from LA DOTD's traffic control standards. | | | | |

| | atthew Williams, nior Roadway Engineer | | | Years of experience with this employer | 11 |
|-----------------------------------|--|---|--|--|-----|
| Se Se | | | | Years of experience with other employer(s) | 14 |
| Degree(s) | / Years / Specialization | Bachelor of Scie | ence / 1996 / Civil Ei | ngineering | |
| Activ | e registration number / state / expiration date | PE.38683 / LA / | Exp. 9/30/2022 PE | E. 24120 / AL / Exp. 12/31/2023 | |
| | Year registered | 2014 (LA) 2001 (AL) | Discipline | P.E./Civil | |
| Contract role(s) / b | rief description of respo | onsibilities | | Assistance / Matthew will provide technical assistance when erform the off team QC on deliverables. | n |
| Experience dates (mm/yy–mm/yy) | | | | contract; <i>i.e.</i> , "designed drainage", "designed girders", over the time specified in the applicable MPR(s). | |
| 01/14 – 06/17 | MDOT, I-55 from County Line Road to Old Agency Road (Phase A), Madison County, MS <i>Project Manager.</i> Responsibilities included the preparation of conceptual plans for the realignment of the I-55 and I-220 interchange as well as various side ramp connections in Jackson, Mississippi. Matt was responsible for ensuring design met required criteria, and ensuring ramp adjustments and urban drainage design along County Line Road were constructible. | | | | |
| 04/10 – 08/15 | MDOT, I-55 Interchange at Gluckstadt, Madison County, MS <i>Transportation Engineer.</i> Matt was responsible for design of roadway geometrics, rural and urban drainage, cross-sections, erosion control, and miscellaneous plan details and quantities; determination of right-of-way limits; and cost estimating. | | | s | |
| 04/11 – 03/13 | | or design of roadv | vay geometrics, rura | of SR 4, Tippah County, MS <i>Transportation Engineer</i> . I and urban drainage design, cross-sections, traffic control, s; and cost estimating. | |
| 01/16 - 06/20 | responsible for develop owners, ability to meet | ing alternatives a design criteria, ar sible for ensuring | long existing East P nd constructability. 1 | th County, MS <i>Project Engineer/Project Manager</i> . Matt almer Street which compared impacts to adjacent property this project was subsequently changed to include SR2 on ne esign criteria and that roadway, bridge and bridge hydraulic | iew |
| 11/14 – Ongoing | MDOT, 2014 RWD WA responsible oversight o | | alia Creek BR, Mar | shall County, MS Transportation Engineer. Matt was | |
| 10/16 – 01/20 | | | | 51 Yalobusha County, MS <i>Project Manager</i>. Matt was d that roadway, bridge and bridge hydraulic efforts are all | |

| 16. Staff Experience Gresham Smith | : | | | | |
|--|--|---|--|---|--------------------------|
| Sh | awn Reese, P. | | | Years of experience with this firm/employer | 4 |
| | | | | Years of experience with other firm(s)/employer(s) | 40 |
| Degree(s) / Ye | ears / Specialization | Bachelor of | Science / 1992 / Constr | uction Technology, Eastern Kentucky University | |
| | egistration number / ate / expiration date | P.E.036255 | 5 / GA / 12/31/22 | | |
| | Year registered | 2011 (GA) | Discipline | | |
| Contract role(s) / bri responsibilities | ief description of | | | stance / Shawn will provide technical assistance when neede team QC on deliverables. |)d |
| 09/18 – 09/20 | studies, environment Roswell Road (SR 9) interchange. This por roadway and lacks ac lane in each direction Glenridge Drive. It wi | al planning, p to Glenridge tion of Hamm dequate facilit along Hamm Il also stream | ublic outreach and conce Drive, connecting to plan fond Drive currently carrie ties for people walking, bil fond Drive and provide ad line turning movements, n | Springs, GA <i>Project Manager.</i> Gresham Smith provided trace total engineering design for the Hammond Drive corridor, from aned improvements by GDOT at the Hammond Drive/Georgia 40 s a volume of traffic which is higher than the capacity of a two-liking and taking transit. To improve mobility, the project will add ditional turn lanes at the intersections with Roswell Road and we making it easier to turn from side streets while limiting neighborh we, through the use of cul-de-sacs and roundabouts. | 00 ane one vith |
| 03/17 – 04/19 | design and construct | ability review | | n King Road, Marietta, GA <i>Quality Engineer</i> . Shawn provid uded the development of a roundabout or signalized intersectio of new sidewalks. | |
| 05/07 – 01/08 | Shawn was responsil corridor including hor | ble for manag izontal and ve | ing the design for the safe ertical improvements to co | ational Improvements, Cobb County, GA <i>Project Manager</i> ety and operational improvements along the 4.2 mile project omply with sight distance requirements, adding curb, gutter and kisting bridge over Mudd Creek with a bottomless arch culvert. | |
| 02/17 – 03/19 | Project Manager. Th | nis project inv | olves the design and prep | afety and Operational Improvements, Cherokee County, GA aration of construction documents for CR 107/Howell Bridge Ro 00 feet of approach roadway at each end. | |
| 03/21 – Ongoing | reconstruction and re | configuration | of the ramps to and from | Principal Roadway Engineer . This project involves the I-285 to improve vehicular flow. Responsible for developing nge with a Tight Urban Diamond or Diverging Diamond | |
| 02/05 – 07/06 | Counties, GA Depu | ıty Design M | anager, Lead Roadway I | Corridor PPP Design-Build Project, Cobb and Cherokee Engineer, Right of Way Lead. This \$1 billion project placed 29 ide of the existing I-75 southbound lanes and within the existing | |

| Gresham Smith | hn Weres, P.E. | | | | |
|-----------------------------------|--|---|---|--|--------------------|
| | nior Bridge Engineer | | | Years of experience with this employer | 4 |
| | 0 0 | | | Years of experience with other employer(s) | 37 |
| Degree(s) / | Years / Specialization | Bachelor of Science / | 1980 / Civil Er | ngineering, University of Pittsburgh | |
| | registration number / state / expiration date | PE.0036429 / LA / Exp | o. 9/30/2023 | | |
| | Year registered | 2011 (LA) 1985 (PA) | Discipline | P.E./Civil | |
| Contract role(s) / br | ief description of resp | onsibilities | • | Engineer. John will lead bridge design and provide quality coordination of the bridge design teams. | |
| Experience dates (mm/yy–mm/yy) | | | | contract; <i>i.e.</i> , "designed drainage", "designed girders" cover the time specified in the applicable MPR(s). | ', |
| 11/17 – 06/20 | Design Engineer for the Mississippi. These was details such as jointles | ne final design of a 2-cel ter crossings improved t ss bridges. | l box culvert a the hydraulic o | , MS Lead Structure Engineer. John served as the Lead and two prestressed concrete girder structures in northern conditions at the sites and incorporated low-maintenance | |
| 07/18 – 06/21 | with MDOT for Phase Gresham Smith is des | B (Final Design) for the igning the two longer st | reconstructio ructures (Brid | MS Lead Structure Engineer. Gresham Smith is partner n of S.R. 149 near D'Lo, Simpson County, Mississippi. ge 128.2 and Bridge 128.6). This is the first instance of par ease of construction and as an accelerated (ABC) time | - |
| 04/15 – 03/17 | LADOTD, I-49 Lafaye Structural Design Eng concepts included pos coordinated the efforts | ineer for the concept de t-tensioned concrete U- of the individual design | sign for a 4-m girders, span teams for ea | uty Lead Structural Design Engineer. Served as Deputy lile long elevated structure through an urban area. Structure by-span segmental boxes, and steel trapezoidal boxes. Jo ch structure type and served as the public coordination lea plan on developing the proposed structure type for this \$80 | re ohn ad fo |
| 06/15 – 03/17 | LADOTD, State Proje Lead Structures Eng Earhart Expressway to development of design | <i>ineer.</i> Preliminary and f Airline Highway Conne criteria, development o | inal design fo ector project. I of bridge typic | sway Connector, Metairie, LA Deputy Project Manage r a 7,000-foot urban expressway structure as part of the Preliminary design activities included survey, SUE, al sections and development of proposed span arrangemen ge piers within the railroad right-of-way. | |
| 2015 – 2016 | Structure Engineer. NCDOT Low Impact E includes one, two, and | John served as lead stru ridge Replacement guid I three-span structures u with hydrology evaluatio | ucture enginee delines for Sul utilizing stand | 9 Group J Bridge Replacements, Various, NC Lead er for the replacement of six stream crossing structures utili p-Regional Tier structures. Plan development for final desig ard cored-slab design plans. Span arrangement development mental agency oversight. Foundation details include both | gn ient |

| 16. Staff Experie | nce: | | | | |
|------------------------------------|--|---|--|---|-----------------------|
| | ebecca Murray, F affic Engineer | P.E., PTOE, | RSP1 | Years of experience with this employer | 7 |
| | | | | Years of experience with other employer(s) | 0 |
| Degree(s) | / Years / Specialization | Bachelor of Scie | ence / 2015 / Civil Ei | ngineering, Louisiana State University | |
| Activ | e registration number / state / expiration date | | A / Exp. 03/31/24 | PTOE 4861 / Exp. 3/26/23 RSP1 611 / Exp. 4/5/24 | |
| | Year registered | 2019 (LA) 2020 (PTOE) 2021 (RSP1) | Discipline | P.E./Civil; PTOE; RSP1 | |
| | prief description of respo | | tasks as needed. | Rebecca will support the team with traffic engineering relate | əd |
| Experience dates (mm/yy–mm/yy) | | | | ontract; <i>i.e.</i> , "designed drainage", "designed girders", over the time specified in the applicable MPR(s). | |
| 05/17 – 03/19 | 3/19 LADOTD, I-210 at LA 1138-2 (Nelson Road) Interchange Modification Re-Evaluation Study, Lake Charles, LA Engineer Intern. Gresham Smith was selected to develop a calibrated VISSIM model to model existing conditions and the future proposed diverging diamond interchange at I-210 at Nelson Road in order to evaluate the proposed interchange design. The project included data collection, development of growth rates, conduct a road safety audit, developing and calibrating an existing VISSIM model and evaluation of the proposed alternative. Rebecca conducted the safety analysis, performed the traffic analysis, development of VISSIM models, development of alternatives and development of the report. | | | sed | |
| 07/18 – Ongoing | collected and reviewed or ADT data on 21 segment and 15-minute counts alc LADOTD safety triage an software tools as needed | ver 580 crash repo s of LA 37 and inte ong 38 driveways a d the safety tool bo . We reviewed hist onal growth rates fo | orts over a span of th ersecting streets, pea and insignificant side ox. Traffic analysis w toric traffic volumes o or the study area. Re | sibility Study, Baton Rouge, LA <i>Engineer.</i> Gresham Smith ree years from the state highway crash database and collecte ak hour turning movement counts at 12 significant intersection streets. Crash reports were reviewed and evaluated using the vill be performed using mainly HCS and Synchro and other counts and Trans CAD models and performed an extensive co becca assisted with review of the count data, development of d future traffic analysis. | ed is e ount |
| 10/17 – 04/18 | LADOTD, I-10 at US 90 I Professional. LADOTD of 10 Eastbound. This bridg Off Ramp and Eastbound strategies to address the | Lockmoor Bridge oversaw the design e crosses over ma I On Ramp to/from se challenges in or | Transportation Ma of planned bridge n inline I-10 for both th PPG drive. We were der to minimize the | nagement Plan (TMP), H.013076.5-1, Lake Charles, LA <i>Pi</i> naintenance of the US 90 bridge that operates as an on ramp ne Eastbound and Westbound directions as well as the Westbourd e selected to develop the TMP to identify the challenges and traffic delays associated with the lane closures, demand volum ith the traffic and crash analysis and the TMP documentation. | to I- ound |
| Certifications (See section 20) | Traffic Engineering Ar American Traffic Safe Supervisor, LA State | ty Services Associ | • | 2 and 3 ol Technician, LA State Specific; Certified Flagger; Traffic Con | Itrol |

16. Staff Experience: Baker Smith, LLC Paul Olivier, P.E. Years of experience with this employer 12 Lead Professional, Transportation Years of experience with other employer(s) 0 Degree(s) / Years / Specialization Bachelor of Science / 2010 / Civil Engineering Active registration number / state / P.E.39967 / LA / Exp. 3/31/24 expiration date Year registered | 2015 P.E./Civil Discipline Contract role(s) / brief description of responsibilities Paul will provide roadway design services. Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed **Experience dates** girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable (mm/yy–mm/yy) MPR(s). Paul Olivier serves as the Lead Professional for all Transportation related services provided by T. Baker Smith. He also serves as a Project Manager and Supervising Engineer over a team of Professional Engineers, Engineer Interns and Project Technicians responsible for the design and development of plans, specifications and cost estimates for several roadway and bridge projects including interstate widening, roadway widening, bridge replacements, roundabouts and roadway reconstruction. Paul served as a Project Manager for six years prior to becoming the Career Transportation Lead Professional and has experience in project scoping, manhour estimate and contract negotiations. He has played an integral role in the design and plan production aspects of TBS' LADOTD projects since 2010 and is experienced in Microstation and InRoads. Paul is also experienced in the NEPA process and has assisted in several Environmental Assessment and Categorical Exclusion Documents and assisted in multiple Public Meetings for major projects such as I-12 to Bush, I-10 at Loyola, and US 190 @ Northshore Roundabout. S.P. No. H.011152, I-12 Widening (US 190 to LA 59), LADOTD, St. Tammany Parish, LA – Project Engineer/Project Manager. Lead roadway design engineer, responsible for developing roadway geometrics including H&V alignment, cross sectional elements, drainage design and analysis, Level 4 Traffic Management Plans and construction phasing, oversaw Inroads modeling and quantity calculations, interfaced with bridge design for alignment 09/16 - Ongoingand layout, and prepared plans for the four-mile widening and reconstruction of Interstate 12 in Covington, LA. Responsible for the design and plan preparation of 54" Concrete Pier Protection units along US 190 and the ramps at the interchange of US 190 and I-12. Also responsible for oversight of Construction Support Services including reviewing and responding to Contractor RFI's and Submittals. The design was completed under an accelerated schedule, and is currently set to complete construction prior to the end of 2022. S.P. No. H.001344, US 190: LA 437 to US 190 BUS (Ph. 1), LADOTD, St. Tammany Parish, LA - Project Manager/Engineer of Record, Lead Design engineer responsible for the widening of 0.9 miles of US 190 from LA 437 to US 190 (Bus.). Oversaw the design of elements including H&V alignments, superelevation design, roadway geometrics, Pier Protection and striping and signing of a 5 lane, raised, divided median, urban arterial roadway in 09/18 - 03/22Covington, LA. Provided Quality Control of the Bridge Plans, Hydraulic Design, project pay items, quantity take-offs, and cost estimates. Responsible for the design and plan preparation a 36" single slope, concrete roadway barrier on

| | concrete footing, steel sheet pile wall and wrote the Level 4 TMP Document including the analysis and justification for |
|-----------------|---|
| | the temporary closure of LA 21 at the Bridge crossing at US 190. |
| 02/20 – Ongoing | S.P. H.012812 US 190 at Northshore and Camp Villere, LADOTD, St. Tammany Parish, LA – Project Manager. Supervising Engineer of the design and plan preparation of a multi lane roundabout at the intersection of US 190 and Northshore Blvd and a single lane roundabout at the intersection of US 190 and Camp Villere Rd. Provided quality control of several design elements including H&V alignments, drainage design, striping/signing, sequence of construction, roadway geometrics, autoturn movements, typical sections and all inroads modeling and required r/w takings. Provided environmental support by creation of documents and exhibits to be utilized for Public Meetings. Provided all supporting project documentation including Cost Estimates and Design Report Forms. |
| 01/14 – Ongoing | S.P. H.004113, I-12 to Bush: LA 3241 (LA 435 to LA 40/41), LADOTD, St. Tammany Parish, LA – Project Engineer/Project Manager. Lead roadway design engineer, responsible for developing roadway geometrics including H&V alignment, cross sectional elements, R-Cut and Median U-Turn design and construction phasing for a new 5.5 mile, four lane, divided median Rural Arterial Roadway from LA 435 to Bush, LA. Provided supervision and quality control of Drainage Analysis and Design of all roadside ditches, side drain pipes and major cross drain pipes including 4 reinforced concrete box culvert crossing locations. Also responsible for oversight of Construction Support Services including reviewing and responding to Contractor RFI's and Submittals. |
| 08/17 – Ongoing | S.P. No. H.013116, LA 20 Widening: LA 307 to S. Vacherie, LADOTD, St. James & Lafourche Parishes, LA – Project Manager/Engineer of Record. Lead roadway design engineer for the asymmetrical widening of 2.7 miles of LA 20 to add 8' shoulders near Vacherie, LA. Responsible for H&V geometry, drainage design, cross sectional roadway elements, utility coordination and conflict matrices, and oversight of the inroads modeling and plan production. Performed Quality Control of the design and plans of a five-span structure using split phased construction sequencing. Responsible for coordination with LADOTD in ensuring a property tie in to an ongoing State Project along the same route. Also responsible for quality control of all project pay items, quantity take-offs and cost estimation. |
| 03/16 – 03/19 | S.P. No. H.011670, I-10/Loyola Interchange Improvements, Jefferson Parish, LA (LADOTD) – Project Engineer. Assisted in the development of the Line and Grade portion of the Environmental Assessment (EA) document. Performed the geometrical design and layout of a four-level stack interchange at I-10 and Loyola Drive and responsible for preliminary plan sheets including Typical Sections and Plan & Profile Sheets. Also assisted in the preparation of cost estimates and public meeting exhibits, and attended all Public Meetings held for this project. |
| 07/20 – Ongoing | Contract No. 4400017598, Rural Bridge Replacement Initiative (Phase 1), LADOTD, Districts 04, 05, 08, and 58 – Project Manager. Managed and oversaw the design and plan preparation of 47 bridge replacements (15 State Projects) throughout Central and North Louisiana. Provided Quality Control of all Preliminary and Final Design and Plan Elements, Cost Estimates, Design Report Forms, Design Waivers and Design Exceptions for all bridges. Coordinated with Surveyors, Environmental Support and Geotechnical Engineers to ensure satisfactory topographic surveys, R/W Maps, CE Documents, Wetland Reports, SOV Packages and Geotechnical Reports were provided to LADOTD to meet tight deadlines for project delivery. |
| 12/14 – 03/18 | S.P. H.004932, I-49 South @ LA 318 Interchange, LADOTD, St. Mary Parish, LA – Project Engineer. Assisted with D-B Proposal preparation and Value Engineering assessment, roadway design including geometrics, H&V alignment, hydraulic design including SDP, SD, CDP and open ditches, intersection layout and design, striping/signing, TMP coordination for the new interchange including nearly three miles of Rural Collector classification frontage roads on new alignment. |

16. Staff Experience: Baker Smith, LLC Daniel Binet, P.E. Years of experience with this employer 9 **Project Engineer** Years of experience with other employer(s) 0 Degree(s) / Years / Specialization Bachelor of Science / 2014 / Civil Engineering Active registration number / state / P.E.42997 / LA / Exp. 3/31/23 expiration date Year registered | 2018 P.E./Civil Discipline Contract role(s) / brief description of responsibilities Daniel will serve as a project engineer on the bridge design team. Experience and gualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed **Experience dates** girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable (mm/yy–mm/yy) MPR(s). Daniel Binet serves as the lead structural engineer and has experience in designing several structural related project components such as concrete slab span bridges, AASHTO Type II & IV prestressed girders, TL-4 median barriers on concrete footings, and concrete Pier Protection units. He also serves as a project engineer for several projects including roadway and hydraulic design such as new high-speed rural corridors, interstate widenings, roadway Career widening and roadway reconstruction. Daniel also serves in a Project Management role for several bridge inspection and load rating projects. He is experienced with AASHTO geometric and roadside design guidelines, LADOTD Minimum Design Guidelines, LRFR bridge rating using AASHTO BrR 6.8, STAAD Pro V8i, LEAP CONSPAN structural analysis software, Risa 3D, Microstation, Inroads and CADConform. S.P. No. H.011152, I-12 Widening (US 190 to LA 59), LADOTD, St. Tammany Parish, LA - Engineering Support. Assisted in roadway design elements including mainline and ramp geometrics and grading and median barrier design. Responsible for all non-standard median design elements such as barrier transitions, lighting and sign mounts and bi-09/16 - Ongoing directional guardrail layouts. Engineering support for bridge design including the widening of Pontchitalawa Creek and Tammany Trace bridges utilizing AASHTO Type III prestressed girders with varying skew spans, bridge design using LEAP CONSPAN, STAAD and Virtis for LRFR. Produced plans and details for widening including partial bridge demolition, foundation plans, widened bents, deck and superstructure. S.P. No. H.001344, US 190: LA 437 to US 190 BUS (Ph.1), St. Tammany Parish, LA (LADOTD) - Project Engineer. Performed bridge design tasks including Bridge Alternative study, development of type, size and location (TS&L) plans for prestressed concrete (LG) girder spans and curved steel plate spans. Developed preliminary and final bridge plans for a 1,400' long bridge including LG-36 and LG-54 prestressed concrete girders, foundation plans, typical sections 09/18 - 01/22and general plan & elevation sheets for the replacement structure over the Bogue Falaya River in Covington, LA. Also reviewed the design of a 36" single slope roadway barrier on concrete footing and the steel sheet pile wall that was designed for safety and constructability purposed between the existing and proposed bridge structures. Also assisted in the design and plan preparation of a 36" single slope roadway barrier on concrete footing and a steel sheet pile wall adjacent to the existing and proposed bridges.

| 06/13 – 08/14 | 07-EXT-22, Bayou Gardens Blvd. Extension: LA 660 to LA 316, Terrebonne Parish, LA (Terrebonne Parish Consolidated Government) – Engineering Support. Performed topographic surveying, assisted with roadway design including drainage, geometrics, Maintenance of Traffic, utility relocation, and plan production. Performed complex bridge design and LRFR Bridge Load Rating for 7-span structure with pile supported approach slabs, design QC for special/curved spans for the 1.6-mile, four- lane roadway extension urban arterial including signal upgrades and turn lanes on state routes LA 660 and LA 316. |
|-----------------|--|
| 01/14 – 06/21 | S.P. H.004113, I-12 to Bush: LA 3241 (LA 435 to LA 40/41), LADOTD, St. Tammany Parish, LA – Engineering Support. Assisted with roadway geometrics, performed hydraulic design, prepared bridge design criteria, structural alternatives and TS&L for bridge sites, assisted with bridge design QA/QC and plan production for the new 5.5-mile, four-lane, Rural Arterial roadway from LA 435 to Bush, LA. Daniel also assisted in performing quantity calculations and reviewed cost estimates. |
| 07/20 – Ongoing | Contract No. 4400017598, Rural Bridge Replacement Initiative (Phase 1), LADOTD, Districts 04, 05, 08, and 58 – Engineer of Record. Lead Engineer for the design and plan production of 8 bridge replacements (3 state projects) throughout Central and North Louisiana. Prior to design, conducted project site visits, compiled survey field packs and survey request forms, and reviewed topographic survey deliverables. Responsible for the development of all road and bridge design elements including H&V alignments, bridge hydraulic design, roadway cross sectional elements, guardrail calculations, geometrical layouts, summary sheets and cost estimates. Delineated the drainage basins for several sites, determined the peak discharge at each bridge site utilizing HYDR1130, and ran the hydraulics model through GEO-HECRAS to determine design water surface elevations, velocities, backwater, and flow area. Produced Final Hydraulic Reports and Scour Memorandum for several sites. Reviewed and assisted in the submission of all Environmental and Right-of-Way related deliverables including Wetland Delineations, SOV Packages, Categorical Exlusion Documents, Permit applications and Preliminary and Final R/W Maps. Daniel also provided quality control and plan reviews for all 47 bridge sites in this package, as well as the review of Load Rating Calculations and Reports for any non-standard bridge elements. Also responsible for the development of all additional project documentation including Design Report Forms, Bridge and Hydraulic Design Criteria, Design Exceptions and Design Waivers. |
| 05/21 – Ongoing | Contract No. 4400019336, Rural Bridge Replacement Initiative (Phase 2), LADOTD, Districts 04 and 05 – Project Engineer. Responsible for quality control of the design and plan preparation of all 40 bridge sites in this package. Reviewed all design elements including H&V alignments, guardrail calculations, superelevation design and bridge design. Also reviewed all preliminary and final plan submittals and cost estimates prior to delivering to LADOTD. Coordinated with geotechnical subconsultants and provided pile length request letters, and reviewed geotechnical exploration logs and geotechnical reports. |
| 08/17 – Ongoing | S.P. No. H.013116, LA 20 Widening: LA 307 to S. Vacherie, LADOTD, St. James & Lafourche Parishes, LA – Project Engineer. Performed bridge design tasks including Bridge Alternative study, develop Type, Size and Location (TS&L) plans for a five-span reinforced concrete bridge replacement, develop special design elements for split-phase bridge construction, foundation plans, typical sections, bridge general plan/ elevation for the replacement structure on LA 20 as part of a Rural Arterial widening project. Provided coordination between roadway and bridge design specific to the split phase portion of construction to ensure proper sequencing. Also performed quality control of hydraulic design, analysis and report of the replacement structure. |

16. Staff Experience: T. Baker Smith, LLC Kelly Radecker, P.E. Years of experience with this employer 3 **Project Engineer** Years of experience with other employer(s) 5 Bachelor of Science / 2014 / Civil Engineering Degree(s) / Years / Specialization Active registration number / state / P.E.43919 / LA / Exp. 3/31/24 expiration date 2019 P.E./Civil Year registered Discipline Contract role(s) / brief description of responsibilities Kelly will serve as a project engineer on the engineering roadway design team. Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed **Experience dates** girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable (mm/yy–mm/yy) MPR(s). Kelly Radecker serves as project engineer for projects that include roadway design, structural analysis, hydrologic and hydraulic analysis. She assists in these aspects for a variety of TBS' LADOTD projects including, new high-speed rural corridors, roadway widening, reconstruction, roundabouts and off-system bridges. She is experienced with AASHTO Career geometric and roadside design guides, LADOTD plan production, SignCAD, AutoCAD, Microstation, InRoads, Torus, AutoTURN, and CADConform. Kelly is currently the lead design engineer and Engineer of Record of several ongoing project with LADOTD including several bridge replacement projects and two roundabouts along US 190 in Slidell, LA. S.P. H.012812 US 190 at Northshore and Camp Villere, LADOTD, St. Tammany Parish, LA – Project Engineer. Lead roadway engineer for the design and plan preparation of a multi-lane roundabout at the intersection of US 190 and Northshore Blvd. and a single lane roundabout at the intersection of US 190 and Camp Villere. Responsible for the design of several roadway elements including the H&V alignments, roundabout geometrics, autotracking movements, typical sections, sequence of construction, pay item compilation and quantity take-offs. Created design 06/19 – Ongoing report forms and cost estimates as well as assisted in coordinating the environmental process including the creation of exhibits to be utilized at Public Meetings. Also coordinated with subconsultants and provided guality control of design elements performed by the subconsultant including temporary traffic signal design and roadway striping and signing sheets. S.P. No. H.011152, I-12 Widening (US 190 to LA 59), LADOTD, St. Tammany Parish, LA - Engineering Support. Assisted with roadway design plan production. Developed highway signing design plans including ground mounted Sign Support locations, guardrail locations, and overhead sign support footing locations. Developed sign shop drawings using 06/19 - Ongoing SignCAD, clearance diagrams for overhead signs, and Engineering Record of Decision documents. Kelly provides construction support in the form of reviewing Contractor Submittals and RFI's, specifically as they pertain to roadside and overhead signage.

| 05/19 – 06/21 | S.P. H.004113, I-12 to Bush: LA 3241 (LA 435 to LA 40/41), LADOTD, St. Tammany Parish, LA – Engineering Support. Assisted in roadway design and plan production. Performed quality control of inroads modeling and assisted in quantity take-off calculations. Reviewed roadway design plan sheets including Typical Section, Plan & Profile Sheets, and Geometric Layout Sheets. Also performed quality control of R/W Maps to ensure concurrence with Construction Plans. |
|------------------------------------|---|
| 09/17 – 05/19 Previous Employer | S.P. No. H.012393, LA 98: Roundabout at Mills Street – Engineering Support. Assisted in the design and plan preparation of a single lane roundabout at the intersection of LA 98 and Mills St. in Lafayette Parish. Responsible for the design of H&V alignments, roundabout geometrics, autoturn movements, typical pavement sections, construction sequencing and quantity take-offs. Also assisted in the creation of plan sheets and design documentation. |

16. Staff Experience: T. Baker Smith, LLC Samuel Mestayer, P.E. Years of experience with this employer 3 **Project Engineer** Years of experience with other employer(s) 3 Degree(s) / Years / Specialization Bachelor of Science / 2016 / Civil Engineering Active registration number / state / P.E.45933 / LA / Exp. 3/31/24 expiration date P.E./Civil Year registered Discipline 2021 Contract role(s) / brief description of responsibilities Samuel will serve as a project engineer on the engineering roadway design team. Experience and gualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed **Experience dates** girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable (mm/yy–mm/yy) MPR(s). Sam Mestayer began his career at the Louisiana Department of Transportation and Development where he served as a road designer and designed/developed roadway plans along state and federal routes for projects including bridge replacements, safety projects, and interstate ramps. He also developed typical sections, summary of quantities, designed plan and profiles (including drainage structures), geometric details/graphical grades, pavement marking/signing sheets, sequencing of construction/diversion bridges, and cross sections. Sam also spent several Career months providing CE&I inspection for Ascension Parish's Roddy Road Widening project. He has also coordinated utility conflict tasks where he identified all conflicts and created conflict matrices, performed analyses, and coordinated utility relocation. Sam is now the lead design engineer and Engineer of Record of several ongoing projects through LADOTD. S.P. No. H.013116, LA 20 Widening: LA 307 to S. Vacherie, LADOTD, St. James & Lafourche Parishes, LA -Project Engineer. Assisted in the development of project design criteria and report forms and performed guality control of all inroads modeling and cross sections for the asymmetrical widening of 2.7 miles of a two-lane, rural roadway in 05/19 – Ongoing Vacherie, LA. Also provided coordination between roadway and bridge design elements and plans for the split phased construction sequencing of a new, 40' wide bridge within the project limits. Also assisted in the preparation of project guantities and cost estimates. S.P. No. H.011152, I-12 Widening (US 190 to LA 59), LADOTD, St. Tammany Parish, LA - Project Engineer. Assisted with roadway vertical and horizontal alignment development, roadway cross sectional element design. drainage analysis and design, intersection geometric design and roadway plan production including Traffic 05/19 - 08/19Management Plans for the widening and reconstruction of four miles of Interstate 12 in Covington, LA. Also responsible for median barrier design, pier protection design, guardrail design, temporary interstate ramp sequencing of construction. S.P. H.001344, US 190: LA 437 to US 190 BUS (Ph. 1), LADOTD, St. Tammany Parish, LA - Project Engineer. Assisted with the design of roadway elements including traffic management plans, preparation and plan production of 05/19 - 03/22preliminary roadway plans, roadway barrier design, sheetpile wall design, embankment widening and guardrail design, pier protection. Assisted with utility conflict matrix, analysis and utility relocation coordination.

| | MA-18-07, Braud Rd. & Germany Rd. Roundabout, Ascension Parish Government, Ascension Parish, LA – |
|---------------|---|
| | Project Engineer. Assisted with the design and plan preparation for the roundabout at the intersection of Braud Rd. |
| 09/18 – 01/20 | and Germany Rd. in Gonzales, LA. Responsible for the quality control of all inroads modeling, cross sectional |
| 09/18 - 01/20 | elements, and limits of construction determination of the project. Assisted in the creation and review of the Right-of- |
| | Way Maps in conjunction with the Construction Plans. Also assisted in quantity take-offs, summary sheets and cost |
| | estimates. |

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16. Staff Experience: **Baker Smith, LLC Brady Smith, P.E.** Years of experience with this employer <1 **Project Engineer** Years of experience with other employer(s) 6 Degree(s) / Years / Specialization Bachelor of Science / 2016 / Civil Engineering Active registration number / state / P.E.45362 / LA / Exp. 9/30/23 expiration date P.E./Civil Year registered 2021 Discipline Contract role(s) / brief description of responsibilities Brady will serve as a project engineer on the engineering roadway design team. Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed **Experience dates** girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable (mm/yy–mm/yy) MPR(s). Brady Smith serves as a project engineer for projects that include roadway design, spot bridge replacements and hydrologic and hydraulic analysis. He has experience in a wide variety of DOTD projects including roundabouts, interstate ramps, bridge replacements, roadway widening projects. Brady is experienced in AASHTO and LADOTD's Career Geometric Design Guidelines as well as Bentley Inroads, Microstation and LADOTD's HYDRWIN programs. He also has experience serving as a Project Engineer for several CE&I projects awarded by LADOTD. Contract No. 4400019336, Rural Bridge Replacement Initiative (Phase 2), LADOTD, Districts 04 and 05 – Engineer of Record. Lead Engineer for the design and plan production of 10 bridge replacements (4 state projects) throughout North Louisiana. Responsible for the development of all road and bridge design elements including H&V alignments, bridge hydraulic design, roadway cross sectional elements, guardrail calculations, geometrical layouts, summary sheets and cost estimates. Delineated the drainage basins for several sites, determined the peak discharge at 02/22 - Ongoingeach bridge site utilizing HYDR1130, and ran the hydraulics model through GEO-HECRAS to determine design water surface elevations, velocities, backwater, and flow area. Produced Final Hydraulic Reports and Scour Memorandum for several sites. Reviewed and assisted in the submission of all Environmental and Right-of-Way related deliverables including Wetland Delineations, SOV Packages, Categorical Exlusion Documents, Permit applications and Preliminary and Final R/W Maps. Also responsible for the development of all additional project documentation including Design Report Forms, Bridge and Hydraulic Design Criteria, Design Exceptions and Design Waivers. S.P. No. H.010124, LA-16: Roundabout @ LA-447, LADOTD, Livingston Parish, LA - Project Engineer. Responsible for roadway full-sized plan preparation, subsurface drainage design, curb and gutter drainage design, roundabout geometric design, construction phasing, temporary traffic control, required right of way determination and 04/17-02/19 cost estimation. Scope includes replacing a 3-way stop intersection with a single-lane roundabout, which includes a Previous Employer bypass lane from westbound LA-16 to northbound LA-447. Also coordinated with the Environmental section and prepared permit drawings to be used to obtain project clearance. 03/17-02/19 I-20 WB Off Ramp @ LA-617. LADOTD. Ouachita Parish. LA - Project Engineer. Responsible for roadway lettersized plan preparation, ramp geometric design, construction phasing, temporary traffic control and cost estimation. Previous Scope includes replacing a single yield-controlled right turn lane with two signal-controlled right turn lanes. Employer

Page 26 of 74 Prime consultant firm: Gresham Smith

| | S.P. No. H.008312, LA-1042 Bridges Near Greensburg, LADOTD, St. Helena Parish, LA – Project Engineer. |
|-----------------------------------|---|
| 08/17- 02/19 Previous Employer | Responsible for roadway full- sized plan preparation, bridge approach geometric design, diversion road geometric |
| | design, construction phasing, temporary traffic control, required right of way determination and cost estimation. Scope |
| | includes replacing three treated timber trestle bridges along LA-1042 with two reinforced concrete box culverts and one |
| | slab span bridge. Diversion roads are required at all three sites for traffic maintenance during construction. |

| 16. Staff Experience: T. Baker Smith, LLC | | | | | |
|--|--|--|---|---|--------------|
| Lisa O | sborne | | | Years of experience with this employer | 8 |
| Senior Pr | oject Designer | | | Years of experience with other employer(s) | 33 |
| Degree(s) / Year | s / Specialization | Coursework for | Civil Engineering St | udies/1980 | |
| Active registration | n number / state / expiration date | N/A | | | |
| | Year registered | N/A | Discipline | N/A | |
| Contract role(s) / brief | | - | | the project designer on the engineering roadway design tean | n. |
| Experience dates (mm/yy–mm/yy) | Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s). | | | | |
| Career | Lisa Osborne is a senior project designer at TBS with over 41 years of CAD experience in civil, transportation, structural, and mechanical engineering. She has extensive experience using MicroStation and Autocad for civil, roadway, and structural projects. Lisa is experienced in using InRoads for developing horizontal and vertical alignments including generating templates to develop roadway sections and earthwork quantities. She utilizes InSurvey for importing survey features into the design model and to develop the existing surface. She has prepared complete set of drawings for construction on numerous civil and structural projects. Lisa has completed the CAD conform training provided by LADOTD and is proficient in LADOTD's standards of roadway plan preparation. She is skilled in all current versions of Microstation and Autocad and has completed a 40-hour program for ArcGis through Penn State Online Courses. | | | S | |
| 09/16 – 08/19 | Designer. Assiste modeling includin cross sectional ro Traffic Managem four-mile widenin | ed with roadway g g complete corrid adway elements, o ent Plans, prepare g and reconstruct | eometric design inc or modeling using N open ditches and int ed roadway plans us ion of Interstate 12 i | | all /el 4 |
| 01/14 – 06/21 | four-mile widening and reconstruction of Interstate 12 in Covington, LA.SP H.004113, I-12 to Bush: LA 3241 (LA 435 to LA 40/41), LADOTD, St. Tammany Parish, LA – Senior Project Designer. Performed topographic survey data processing and deliverable preparation, roadway designer activities including roadway corridor modeling of roadway surface, open ditches, median cross overs and intersections utilizing Inroads and roadway plan production for the new 5.5-mile, four-lane rural arterial roadway from LA 435 to Bush, LA. Also derived earthwork quantities from the corridor model and created several plan sheets including Typical Sections, Plan & Profile Sheets, Graphical Grades and several others. | | | ۹. | |

| 02/20 – Ongoing | S.P. H.012812 US 190 at Northshore and Camp Villere, LADOTD, St. Tammany Parish, LA – Senior Project Designer. Created roadway templates and developed corridor model for the roundabouts at the intersections of US 190 and Northshore Blvd. and US 190 and Camp Villere Rd. Merged the roadway surface from the H&V alignments to the graphical grading sheets to derive accurate cross sections and earthwork quantities. Also responsible for the creation of several plan sheets including Plan & Profile Sheets, Typical Sections, Geometric Layouts, and Cross Sections. Assisted in the determination of several quantities including earthwork, asphalt, concrete curb and gutter and PCC pavement. |
|-----------------|---|
| 09/98 — 02/00 | S.P. No. 700-26-0227 - Interstate 10 Improvements: Clearview Pkwy. To Causeway Blvd., Jefferson Parish, LA (LADOTD) – Project Designer, Responsible for the development of horizontal and vertical alignments, typical sections sheets, geometric layout sheets and several other plan sheets. Also created the Inroads model and cross sections for the widening of Interstate 10 between Clearview Pkwy. And Causeway Blvd. in Metarie, LA. The project included the addition of 2 lanes in each direction, an inside lane with a median barrier, and an outside auxiliary lane. |

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16. Staff Experience: T. Baker Smith, LLC Luke Bourg Years of experience with this employer 14 Senior Project Technician Years of experience with other employer(s) 0 Degree(s) / Years / Specialization N/A Active registration number / state / N/A expiration date Discipline N/A Year registered N/A Luke will serve as the senior project technician on the engineering roadway design Contract role(s) / brief description of responsibilities team. Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed **Experience dates** girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable (mm/yy–mm/yy) MPR(s). Luke Bourg serves as a Senior Project Technician in TBS' transportation group for both engineering and environmental services. His experience in design drawings and environmental permit sketches provides for a seamless transition from detailed drawings to permit sketches. He is thoroughly experienced using Microstation and ArcGIS platforms to produce environmental permit drawings for various project types including bridge replacements, roadway widenings, new roadway corridors and interchange improvements. He has provided permit sketches for many Career of TBS' LADOTD bridge replacement projects, I-12 to Bush, I-10/Loyola Interchange and has served in similar capacity for the last 14 years in providing drawings for permits including USACE Section 404 & 10, LDWF Scenic Streams, LADNR CUP and various Parishes and Levee Districts. Luke also has experience in template creation and corridor modeling through Microstation Inroads and is responsible for the model, cross sections and earthwork quantities of multiple ongoing DOTD projects. S.P. No. H.011152, I-12 Widening (US 190 to LA 59), LADOTD, St. Tammany Parish, LA - Project Technician. Responsible for roadway plan development, Microstation drafting and technician tasks including typical sections, plan 09/16 - 08 - 19and profile sheets, geometric layout, cross sections, drainage plan/profile and miscellaneous details. Served as a bridge project technician for the development of superstructure and substructure details, foundation layouts, GPE's and bridge typical sections for the reconstruction and widening of 4 miles of rural Interstate 12 in Covington, LA. SP No. H.011670, I-10/Loyola Interchange Improvement, LADOTD, Jefferson Parish, LA – Project Technician. Prepared permit drawings for the selected alternation (4-level stack, directional interchange) including vicinity maps, 08/18 - 12/18plan and profiles, cross sections, calculated material quantities for USACE, Levee Board, FAA and LADNR permitting. Assisted in the development of plans to be used for the line and grade portion of the Environmental Assessment including roadway and bridge typical sections and roadway and bridge plan & profile sheets.

| 07/20 – Ongoing | Contract No. 4400017598, Rural Bridge Replacement Initiative (Phase 1), LADOTD, Districts 04, 05, 08, and 58 – Senior Project Technician. Responsible for roadway and bridge plan development, Microstation drafting and technician tasks including typical sections, plan and profile sheets, geometric layout, cross sections, drainage plan/profile, general bridge plan, foundation layout, pile data elevation, bridge typical section and structural detailing and miscellaneous details. Also responsible with creation of templates, corridor modeling and limits of construction of several of the 47 bridge sites included in this project. Assisted in determination of earthwork quantities for most of the sites in this contract. Also responsible for the creation of all environmental exhibits to be used for SOV Packages, Wetland Delineations Reports, CE Documents and Permit Applications. |
|-----------------|--|
| 08/17 – Ongoing | S.P. No. H.013116, LA 20 Widening: LA 307 to S. Vacherie, LADOTD, St. James & Lafourche Parishes, LA – Project Technician. Prepared permit sketches utilizing Microstation and ArcGIS for the 2.5-mile roadway widening project including overlays on aerial imagery and USACE approved JD. Also assists in the plan production of several sheets including Plan & Profile Sheets, Geometric Layouts, Drainage Maps, and Summary Sheets. |

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| Dennis Hymel, Jr., P.E. | | | | Years of experience with this employer | 1 | |
|---|---|--|------------|---|----|--|
| Enginee | ring Manager | | | Years of experience with other employer(s) | 17 | |
| Degree(s) / Years / Specialization | | Bachelor of Science / 2009 / Civil Engineering | | | | |
| Active registration number / state / expiration date | | P.E. 38172 / LA / 09/30/2023 | | | | |
| | Year registered | 2013 | Discipline | P.E./Civil | | |
| Contract role(s) / brief | - | Bridge Design Lead/EOR / Dennis will lead the bridge design effort, oversee bridge plan production and serve as the bridge EOR. Dennis fulfils MPR #4 for a registered PE with a minimum of 5 years' experience in responsible charge of bridge design. | | а | | |
| Experience dates (mm/yy–mm/yy) | | | | osed contract; <i>i.e.</i> , "designed drainage", "designed dates should cover the time specified in the applicable | | |
| 09/16 – 08/21 (previous employer) | SP No. H.011152, I-12 Widening (US 190 to LA 59), St. Tammany Parish, LA (LADOTD) – Project Manager/Engineer of Record. Responsible for all roadway design including H&V geometrics and drainage, prepared Level 4 TMP and construction phasing plans. Designed single slope TL-4 median barriers on concrete footings, special median barrier transitions for lighting; Quality Control & bridge design engineer for the widening of Pontchatolawa Creek and Tammany Trace bridges including AASHTO Type III prestressed girders with varying skewed, bobtail spans and LRFR. Quality Assurance engineer for widening of US 190 bridges including AASHTO Type II & IV prestressed girders. Performed Construction Support Services. Design completed under an accelerated project schedule. | | | | | |
| 03/14 – 08/21 (previous employer) | SP H.004113, I-12 to Bush: LA 3241 (LA 435 to LA 40/41), St. Tammany Parish, LA (LADOTD) – Project Manager/ Engineer of Record. Lead design engineer responsible for roadway design including hydraulics, roadway H&V geometrics, superelevation, intersection design, R-CUT intersections, prepared Level 3 Traffic Management Plans and oversaw roadway plan production, performed plan QA/QC of five-span, AASHTO Type III girder bridge for the new 5.5- mile, four-lane rural roadway from LA 435 to Bush. | | | | | |
| 09/18 – 08/21 (previous employer) | SP No. H.001344, US 190: LA 437 to US 190 BUS (Ph. 1), St. Tammany Parish (LADOTD) – Quality Control Manager. QC/QA of roadway design elements including horizontal and vertical geometry, intersection design, oversight of roadway plan production for one mile of 5 lane urban roadway reconstruction. Responsible for bridge design report, QC of bridge plan development for a horizontally curved, superelevated, 1400-foot-long bridge over the Bouge Falaya River using LG 36 and LG 54 prestressed concrete girders, 30' rectangular column bents, low water pier foundations. Coordinated utility conflicts and relocations, prepared cost estimates. | | | | | |

| 03/22 – Ongoing | Tangipahoa Parish Off-System Bridge Replacement (4 Sites), Tangipahoa Parish (Tangipahoa Parish Government) – Project Manager/Lead Engineer. Responsible for all roadway horizontal/vertical alignments, roadway and bridge hydraulic analysis, retaining wall design, LRFD bridge design, oversight of plan preparation, coordination/oversight of geotechnical for the replacement of four (4) bridge RC Slab Span sites throughout Tangipahoa Parish on E. Lewiston Rd., Easley Rd. and Old Genessee Rd. (2) sites. Optimized Residue (1) Project Manager/Lead Engineer. West Design Order Resident of plan preparation, coordination/oversight of geotechnical for the replacement of four (4) bridge RC Slab Span sites throughout Tangipahoa Parish on E. Lewiston Rd., Easley Rd. and Old Genessee Rd. (2) sites. | | | |
|--------------------------------------|--|--|--|--|
| 05/15 — 04/18 (previous employer) | SP H.011788, Oak St. Bridge/Poydras Bayou, West Baton Rouge Parish, LA (LADOTD) – Project Manager & Engineer of Record. Responsible for topographic surveys, roadway and bridge design, special LRFD bent and span design to accommodate hydraulic conditions, 25' slab spans, LRFR, hydraulic analyses, steel bulkhead design and detailing, preliminary and final plans for the 3-span continuous Off-System bridge. | | | |
| 05/20 – 08/21 (previous employer) | Contract 44-17598 – Rural Bridge Replacement Initiative Phase I (47 bridge structures), Districts 04, 05, 08, 58 (LADOTD) – Project Manager/Engineer of Record. Led contract negotiations, performed QC review of topographic surveys, served as the EOR for roadway, geometrics, and bridge design elements including hydraulics analysis, scour, horizontal/vertical alignments, Level 1/2 TMP's, bridge design & LRFR (non-standard structures) including RC Slab Span and LG-25 girders, oversight of geotechnical services and environmental permitting, Environmental checklists, SOV's, CE document preparation and permit applications for the spot replacement of 47 bridge structures in northern Louisiana containing Fifteen (15) State Project Numbers. | | | |
| 03/16 – 02/19 (previous employer) | SP H.011670, I-10/Loyola Interchange Improvements, Jefferson Parish, LA (LADOTD) – Project Manager/Lead Engineer. Lead design team for Line and Grade studies and the Environmental Assessment (EA), assisted in preparation of the EA document, critical geometry, interchange modification and alternative screening, lead engineer for the design of a four-level stacked, directional interchange (\$150 MM) including roadway and bridge, curved steel plate and prestressed concrete girder bridges, urban roadway sections, major utility conflict assessments, cost estimates, public meetings and quality control for a diverging diamond interchange (DDI) for the new interchange on I-10 at Loyola Dr. for the new airport terminal at Louis Armstrong Int'l Airport (MSY). | | | |
| 03/18 – 04/21 (previous employer) | S.P. H.013080, McLemore Road/Bee Bayou, Richland Parish, LA (LADOTD) – Project Manager/Engineer of Record – Responsible for all roadway and bridge design including geometrics, bridge TS&L, hydraulics, foundation layout, and bridge plan production for the 7-span bridge replacement near Rayville, LA. | | | |
| 01/12 – 08/15 (previous employer) | S.P. 713-29-0103, Tiger Drive Bridge over Bayou Lafourche, Lafourche Parish, LA (LADOTD) – Staff Engineer. Performed roadway and bridge design including special 23' spans for the three-lane, 210' long bridge over Bayou Lafourche, LRFR of special bents and spans, prepared bridge plans and details. | | | |
| 02/10 – 01/12 (previous employer) | SP 450-10-0159, I-10 Widening (Siegen Lane to Highland Rd.), East Baton Rouge Parish, LA (LADOTD) – Staff Engineer. Prepared roadway design plans including development of H&V geometry, drainage design, DB team coordination, construction support, structural design of cantilevered concrete retaining walls, barriers and footings, barrier mounted light poles & signage, cost estimation for the widening of I-10 in Baton Rouge, LA. | | | |

16. Staff Experience:

| Crescent Engineering | and Mapping | | | | | | | |
|--|--|--|--|---|----|--|--|--|
| Abbey Falcon, P.E. Project Engineer | | | Years of experience with this employer | | | | | |
| | | | | Years of experience with other employer(s) | 5 | | | |
| Degree(s) / Year | s / Specialization | Bachelor of Scie | ence / 2017 / Civil E | ngineering | | | | |
| Active registration | n number / state / expiration date | P.E.46035 / LA / | / 03/31/2024 | | | | | |
| | Year registered | 2021 | Discipline | P.E./Civil | | | | |
| Contract role(s) / brief | - | - | plan preparation a | | ge | | | |
| Experience dates (mm/yy–mm/yy) | girders", "desig MPR(s). | ned intersection | ", etc. Experience | osed contract; <i>i.e.</i> , "designed drainage", "designed dates should cover the time specified in the applicable | | | | |
| 04/20 – 04/22 | | .P. H.013953, McManus Road Bridge/Cypress Creek, Richland Parish, LA (LADOTD) – Lead/Engineer of ecord. Responsible for all roadway and bridge design, bridge hydraulics & scour analysis, developed roadway and | | | | | | |
| (previous employer) | bridge H&V align | nents, drainage design, prepared bridge TS&L, prepared roadway and bridge plans, design report eria for the eight (8) span bridge replacement. | | | | | | |
| 04/20 – 05/22 | S.P. H.013955, LA 507, 514, Local: Bayou and Cr BRs, Red River Parish, LA (LADOTD) – Lead/Engineer of | | | | | | | |
| (previous employer) | Record. Responsible for all roadway and bridge design, bridge hydraulics & scour analysis, developed roadway and bridge H&V alignments, drainage design, bridge TS&L, curved bridge sites, prepared roadway and bridge plans, design criteria for the replacement of seven (7) LADOTD On-System bridges . | | | | | | | |
| 04/20 - 04/22 | S.P. H.013987, L | S.P. H.013987, LA 521: Bridges Near Dykesville, Claiborne Parish, LA (LADOTD) – Lead/Engineer of Record. | | | | | | |
| (previous employer) | Responsible for all roadway and bridge design, bridge hydraulics & scour analysis, developed roadway and bridge H&V alignments, superelevation, drainage, bridge TS&L, prepared roadway and bridge plans, design report & criteria forms for the replacement of three (3) LADOTD On-System bridges . | | | | | | | |
| 06/18 – 04/21 (previous employer) | roadway and brid | ge design includir | ng Inroads modeling | nd Parish, LA (LADOTD) – Project Engineer – Assisted with g, geometrics, bridge TS&L, hydraulics, foundation layout, and ent near leng LA | | | | |
| 04/20 – 02/22 (previous employer) | bridge plan production for the 7-span bridge replacement near Jena, LA. S.P. H.013954, Pleasant Ridge/Rabbit Branch, LaSalle Parish, LA (LADOTD) – Lead/Engineer of Record. Responsible for all roadway and bridge design, bridge hydraulics & scour analysis, developed roadway and bridge H&V alignments, drainage design, prepared bridge TS&L, prepared roadway and bridge plans, design report forms, design criteria for the 3-span span bridge replacement. | | | | | | | |
| 05/17 – 08/21 (previous employer) | SP H.011152, I-12 Widening (US 190 to LA 59), St. Tammany Parish, LA (LADOTD) – Project Engineer. Assisted with all roadway design elements on the 4-mile Interstate widening project including geometrics, Level 4 TMP and drainage. Prepared quantities, Inroads roadway modeling, summary sheets, typical sections, detailing, Sequence of Construction sheets, prepared preliminary and final roadway plans. Accelerated project schedule. | | | | | | | |

| 04/18 - 10/21 (previous employer) | SP H.001344, US 190: LA 437 to US 190 BUS (Ph. 1), St. Tammany Parish (LADOTD) – Project Engineer. Assisted with all roadway design elements on the 1-mile Urban, multi-lane roadway widening project including geometrics and drainage. Prepared quantities, performed Inroads roadway modeling, prepared summary sheets, typical sections, detailing, assisted with the preparation of preliminary and final roadway plans. |
|--------------------------------------|--|
| | SP H.014233, LA 160: Cypress Bayou and Relief Bridges, Bossier Parish, LA (LADOTD)– Lead/Engineer of |
| 03/21 – 07/22 | Record. Responsible for all roadway and bridge design, bridge hydraulics & scour analysis, developed roadway and |
| (previous employer) | bridge H&V alignments, drainage design, bridge TS&L, prepared roadway and bridge plans up to 60% Final Plans, |
| | design criteria for the replacement of two (2) LADOTD On-System bridges. Old Genessee Rd. Bridges/Creeks, Tangipahoa Parish, LA (Tangipahoa Parish) – Lead Engineer – Responsible |
| 07/22-Ongoing | for roadway and bridge design including TS&L, bridge hydraulics and plan production for the replacement of two (2), 3- |
| or, 22 origoing | span Off-System timber bridges near Tickfaw, LA |
| | S.P. H.004113, I-12 to Bush: LA 3241 (LA 435 to LA 40/41), St. Tammany Parish, LA (LADOTD) – Project |
| 05/17 – 08/21 | Engineer. Assisted with all roadway design elements on the 5.5 rural, 4-lane corridor project including geometrics and |
| (previous employer) | drainage design. Prepared quantities, performed Inroads roadway modeling, prepared summary sheets, typical |
| | sections, detailing, Sequence of Construction sheets, prepared preliminary and final roadway plans. |
| | SP H.014217, LA 537: Bridges Near Plain Dealing, Bossier Parish, LA (LADOTD)– Lead/Engineer of Record. |
| 03/21 – 07/22 | Responsible for all roadway and bridge design, bridge hydraulics & scour analysis, developed roadway and bridge |
| (previous employer) | H&V alignments, drainage design, bridge TS&L, prepared roadway and bridge plans up to 60% Final Plans, design criteria for the replacement of three (3) LADOTD On-System bridges . |
| | SP H.014231, LA 153: Topy Creek Relief & Drain Bridges, Bienville Parish, LA (LADOTD)- Lead/Engineer of |
| 03/21 – 07/22 | Record. Responsible for all roadway and bridge design, bridge hydraulics & scour, developed roadway and bridge |
| (previous employer) | H&V alignments, drainage design, bridge TS&L, prepared roadway and bridge plans up to 60% Prelim Plans for the |
| | replacement of four (4) LADOTD On-System bridges. |
| | S.P. H.013116, LA 20 Widening (LA 307 to S. Vacherie), St. James & Lafourche Parishes (LADOTD) – Project |
| 07/17 – 06/21 | Engineer. Assisted with H&V geometrics, roadway drainage design, roadway and bridge plan production, Inroads |
| (previous employer) | modeling, quantity calculations for the 2.7 mile rural safety widening project including split phased bridge construction |
| | of the RC slab span bridge over unnamed Bayou. |

| 16. Staff Experience: Crescent Engineering | and Mapping | | | | | |
|---|---|---|-----------------------|---|----|--|
| James | Ledet, P.E., ontrol Engineer | F. ACEC | | Years of experience with this employer | <1 | |
| | | | | Years of experience with other employer(s) | 44 | |
| Degree(s) / Year | s / Specialization | Bachelor of Scie | ence / 1982 / Civil E | ngineering | | |
| Active registration | n number / state / expiration date | P.E.22428 / LA / | / 03/31/2024 | | | |
| | Year registered | 1986 | Discipline | P.E./Civil | | |
| Contract role(s) / brief | • | - | engineer | ntrol Engineer / Jimmy will serve as the bridge Quality Contro | ว่ | |
| Experience dates (mm/yy–mm/yy) | | | | osed contract; <i>i.e.</i> , "designed drainage", "designed dates should cover the time specified in the applicable | | |
| 05/15 – 08/17 (previous employer) | SP H.004113, I-12 to Bush: LA 3241 (LA 435 to LA 40/41), St. Tammany Parish, LA (LADOTD) – Senior Supervising Engineer. Supervision and oversight of roadway design including QC of hydraulic analysis, geometrics and supervision of plan production for the new 5.5-mile, four-lane RA-3 roadway from LA 435 to Bush, LA. | | | | | |
| 11/10 – 06/14 (previous employer) | Record. Respons and drainage, and | ible for topograph d bridge design in | nic surveying, roadv | fourche, Lafourche Parish, LA (LADOTD) – Engineer of /ay design including approaches, utility relocations, bulkhead n lengths, curved spans, special bents and rail elements, view for the 183' long bridge replacement. | S | |
| 11/13 – 11/18 (previous employer) | SP H.010557, La Professional/QA/ | jaunie Road/Late QC. Supervision of | eral 1 Bayou St. C | air, Lafayette Parish, LA (LADOTD) – Senior eying and engineering design including roadway and bridge uperelevated, curved structure including roadway upgrades to | C | |
| 03/10 – 05/14 (previous employer) | SP 713-04-0002, LA 400 Bridge over Cancienne Canal, Assumption Parish, LA (LADOTD) – Engineer of Record. Responsible for topographic surveying, roadway design including approaches, and bridge design, supervised roadway and bridge plan production including bridge details, roadway details for the 7-span off-system bridge replacement. | | | | | |
| 10/09 – 11/17 (previous employer) | 07-EXT-22, Bayou Gardens Blvd. Extension: LA 660 to LA 316, Terrebonne Parish, LA (Terrebonne Parish Consolidated Government) – Engineer of Record (Ph. I)/Supervising Engineer (Ph. II). Responsible for topographic surveying, oversight of roadway design including drainage and geometrics, and oversight of RC Slab Span bridge design including special/curved spans for 1.6-mile, four-lane roadway extension (UA-2) including signal upgrades and turn lanes on state routes. | | | | | |
| 1997-2011 (previous employer) | SP 713-55-0100, Responsible for to | state routes. SP 713-55-0100, St. Ann Bridge Replacement, Terrebonne Parish, LA (LADOTD) – Engineer of Record. Responsible for topographic surveying and all roadway design aspects, bridge design and approaches for the noveable bridge replacement with a single-leaf, bascule span bridge. | | | | |

| 02/05 – 05/08 (previous employer) | SP 246-01-0054, Route LA 57: Grand Caillou Road, Terrebonne Parish, LA (LADOTD) – Engineer of Record. Responsible for all roadway design aspects including and subsurface drainage design; construction support and topographic survey for two-mile long UA-2, five-lane widening project. |
|--------------------------------------|--|
| 11/99 – 01/01 (previous employer) | SP 742-07-0019, Bayou Gardens Blvd. Widening: LA 659 to Alma St., Terrebonne Parish, LA (LADOTD) – Engineer of Record/Project Manager. Responsible for topographic surveying, roadway design including geometrics and intersection improvements and subsurface drainage design for the one-mile UA-2 widening project. |
| 1994 – 1997 (previous employer) | SP 413-01-0011, Hollywood Rd./LA 311 Intersection Improvements/Bridge Replacement, Terrebonne Parish, LA (LADOTD) – Engineer of Record/Project Manager. Responsible for design of roadway, hydraulics, utility relocations, drainage improvements, bulkheads and bridge design services for intersection improvement and bridge replacement project. |
| 1993 - 1997 (previous employer) | SP 065-91-0011; S.P. 855-04-0052; S.P. 855-08-00340, Howard Avenue Bridge and Approaches, Terrebonne Parish, LA (LADOTD) – Engineer of Record. Responsible for roadway design including subsurface drainage, geometrics, and bridge design of steel lift span bridge replacement (using towers from Pinhook Rd. bridge) for preliminary and final plans. |
| 1985 - 1991 (previous employer) | SP 700-26-100, Off-System Bridge Replacement Program, Lafourche Parish, LA (LADOTD) – Engineer of Record/ Project Manager. Responsible for engineering design services for the replacement of four (4) bridges and associates roadway approaches: S.P. 713-46-98, Parish Road 16 (Choctaw Road) over St. James Canal; S.P. 713-53-93, Parish Road 18 (60 Arpent Road) over Bayou Boudreaux; S.P. 713-53-94, Parish Road 11 (Lepine Rd. #1) over unnamed canal; and S.P. 713-53-92 Parish Road 579 (Hamilton Road) over 40 Arpent Canal. |
| 1994 - 1995 (previous employer) | SP 742-05-0042, Combon Bridge and Approaches, Terrebonne Parish, LA (LADOTD) – Project Manager. Responsible for EIS document and design of new 100 Ft. vertical lift span across Grand Caillou including roadway approaches and shop drawing reviews during construction. |
| 1984 - 1986 (previous employer) | SP 855-14-08 & 65-90-23, LA 3087: Bridge over Bayou Terrebonne at East Street, Terrebonne Parish, LA (LADOTD) – Project Manager. Responsible for the roadway and bridge design services to retrofit the existing Prospect Street bridge to be relocated to construct a vertical lift bridge at East Street, and associated intersection improvements at LA 24 and LA 659. |

16. Staff Experience:

Crescent Engineering and Mapping

Kelly Jones Sr. Technician

Years of experience with this employer <1

Years of experience with other employer(s) 3

| Degree(s) / Years / Specialization | | Bachelor of Arts / 2012 / Mathematics & English | | | | |
|---|---|--|---|---|--|--|
| Active registration | n number / state / expiration date | N/A | | | | |
| | Year registered | N/A | Discipline | N/A | | |
| Contract role(s) / brief description of res | | ponsibilities | Sr. Technician / Br plans and details. | idge Design. Kelly will assist with the preparation of bridge | | |
| Experience dates (mm/yy–mm/yy) | | | | used contract; <i>i.e.</i> , "designed drainage", "designed dates should cover the time specified in the applicable | | |
| 02/19 – 04/20 (previous employer) | SP No. H.011152, I-12 Widening (US 190 to LA 59), St. Tammany Parish, LA (LADOTD) – Project Technician. Assisted with the preparation of roadway and bridge plans, temporary erosion control plans, summary of estimated quantities, quantity summary sheets, bridge quantity calculations, cost estimate preparation, title sheet and typical sections and details. Design completed under an accelerated project schedule . | | | | | |
| 01/19 – 11/19 (previous employer) | Technician. Assis summary of estim | SP H.004113, I-12 to Bush: LA 3241 (LA 435 to LA 40/41), St. Tammany Parish, LA (LADOTD) – Project Technician. Assisted with the preparation of roadway plans including typical sections, cross sections, detail sheets, summary of estimated quantities, quantity summary sheets, title sheet and performing advanced plan checks including Right of Way maps for the new 5.5-mile, four-lane rural roadway from LA 435 to Bush. | | | | |
| 11/19 – 09/20 (previous employer) | SP No. H.001344, US 190: LA 437 to US 190 BUS (Ph. 1), St. Tammany Parish (LADOTD) – Project Technician. Assisted with the preparation of roadway plans including utility relocation plans, detail sheets, summary of estimated quantities, quantity summary sheets, calculating roadway quantities, performing advanced plan checks of roadway plans vs. bridge plans, assisted with preparing cost estimates. | | | | | |
| 01/22 – 03/22 (previous employer) | SP No. H.014238, LA 818: Barnet Springs & Creek Bridges, Lincoln Parish (LADOTD) - Project Technician. Assisted with the preparation of roadway and bridge plans including typical sections, plan/profiles, detail sheets, summary of estimated quantities, title sheet for the replacement of two (2) on-system bridges in Lincoln Parish. | | | | | |
| 12/21 – 03/22 (previous employer) | SP No. H.014218 Assisted with the | SP No. H.014218, LA 2A: Thorny Branch & Indian Creek BRs, Webster Parish (LADOTD) - Project Technician. Assisted with the preparation of roadway plans including typical sections, plan/profiles, detail sheets, summary of estimated quantities, title sheet for the replacement of two (2) on-system bridge reaplcements in Webster Parish. | | | | |
| 1997-2011 (previous employer) | SP 713-55-0100, Responsible for to | St. Ann Bridge F opographic survey | Replacement, Terro | bonne Parish, LA (LADOTD) – Engineer of Record. design aspects, bridge design and approaches for the | | |

| 16. Staff Experience | | | | | | |
|-----------------------------------|--|---|--|------------------------|---|--|
| La Terre Engineer | ring, LLC | | | | | |
| Lyle Tynes, E | Ξ.Ι. | | | | Years of experience with this firm/employer 1 | |
| Engineer Intern | | | | | Years of experience with other firm(s)/employer(s) < | |
| Degree(s) / Ye | ars / Specialization | Bachelor of Scie | ence / 2020 / Civil Er | igine | ering | |
| | gistration number / ate / expiration date | E.I. 35128 / LA / | 9/30/2022 | | | |
| | Year registered | 2022 | Discipline | E.I. | / Civil | |
| Contract role(s) / b | orief description of re | esponsibilities | Drainage Design a | nd F | Roadway Design support. | |
| Experience dates (mm/yy–mm/yy) | Experience and qu "designed intersec | | ant to the propose | d co | ontract; <i>i.e.</i> , "designed drainage", "designed girders", | |
| 06/22-Ongoing | Sharp Road (Florida Blvd To Old Hammond Hwy) Baton Rouge, LA. Mr. Tynes is providing roadway design services including existing and proposed drainage maps, subsurface drainage design and preparation of preliminary and final plans, including typical sections and plan and profile sheets. | | | | | |
| 02/22-Ongoing | | is responsibilities | include construction | adn | cension, LA. Mr. Tynes is part of the grant administration tean ninistration assistance, site inspections, review of contractor pject. | |
| 03/22-Ongoing | Ward Creek at Sieg construction docume | gen Lane Channe ents for channel ir | el Improvements E | Bato rd C | n Rouge, LA. Mr. Tynes is assisting in the preparation of reek in Baton Rouge, Louisiana. His responsibilities also and permit figures for DOTD approval. | |
| 08/21-Ongoing | MoveBR Capacity | Management Pro | ogram Baton Roug | je, L | A. Mr. Tynes is currently providing drafting and permit drawing part of the capacity management program for the City of Bator | |
| 01/22-Ongoing | Louisiana Watershed Initiative Town of Maringouin Improvements Maringouin, LA. Mr. Tynes is responsible for the preparation of preliminary and final construction documents for roadside drainage improvements for the Town of Maringouin Drainage Improvements project. His responsibilities include preparation of construction documents for roadside open channel and subsurface drainage systems, cost estimates, bidding and construction documents. | | | | | |
| 08/21-Ongoing | Entergy Louisiana support as required preparing temporary | - Diamond D Ind for multiple project traffic control pla for laydown yards | ustries Calcasieu cts for Diamond D In ns and permits throu | Paris dusti igho | sh, LA. Mr. Tynes is providing engineering and construction ries on behalf of Entergy Louisiana. This support includes ut the state of Louisiana to DOTD for road and lane closures rn analysis using WB67 vehicle configuration and access roads | |

| 16. Staff Experience | ce: | | | | | |
|--------------------------------------|---|---|--|-------------------------------|---|----------|
| La Terre Engineer | ring, LLC | | | | | |
| Seneca Tous Civil Engineer | sant, P.E. | | | | Years of experience with this firm/employer Years of experience with other firm(s)/employer(s) | 2 |
| Degree(s) / Ye | ars / Specialization | Bachelor of Scie | ence / 1999 / Biologi | cal E | | 10 |
| | gistration number / ate / expiration date | P.E. 36080 / LA | / 9/30/2023 | | | |
| | Year registered | 2011 | Discipline | P.E | . / Civil | |
| Contract role(s) / b | orief description of re | esponsibilities | Drainage Design a | ind F | Roadway Design support. | |
| Experience dates (mm/yy–mm/yy) | Experience and qu "designed intersec | | ant to the propose | d co | ontract; <i>i.e.</i> , "designed drainage", "designed girders", | |
| Career | and varied range of design studies and r stages, through desi | projects. His expension hydrologic and hyd gn, to project coo | erience includes roa draulic studies. Mr. rdination and constr | dway Fous ructic | ntly with over 20 years of consulting experience for an exte and drainage design, preparation of planning documents, sant has been involved in projects from the initial planning on inspection through final acceptance. He is registered as ct experience includes: | , |
| 06/222-Ongoing | | d proposed drain | age maps, subsurfa | | Rouge, LA. Mr. Toussant is providing roadway design ser rainage design and preparation of preliminary and final pla | |
| 03/22-Ongoing | Ward Creek at Sieg | gen Lane Channe ents for channel ir | el Improvements mprovements for Wa | ard C | n Rouge, LA. Mr. Tynes is assisting in the preparation of creek in Baton Rouge, Louisiana. His responsibilities also and permit figures for DOTD approval. | |
| 08/21-Ongoing | MoveBR Capacity contracts for the Mo include environment | Management Pro veBR Capacity pr al services, geote | ogram Baton Rou ogram managemen echnical services, su | ge, L t tea rvey | A. Mr. Toussant serves as project manager for specialty m. He is responsible for the specialty contracts program w ing, lighting design and landscaping services. His respons t negotiations, submittal coordination and submittal reviews | ibilitie |
| 03/20-06/20 | S.P. No H.012339, I documents for ADA | La 24 Sidewalks compliant sidewa | Rehab Houma, LA | . Mr LA 2 | . Toussant was responsible for the preparation of construc 24 from Barataria Avenue to New Orleans Boulevard in Ho , cost estimates, and design reports. | tion |
| 03/20-06/20 | City of New Orlean for the preparation of Project. He prepared | s: RR119 Marlyv of preliminary plan d typical sections | ille-Fontainebleau is for Colapissa Stre and plan and profile | Gro et ar she | up D (FRC) New Orleans, LA. Mr. Toussant was responed and Nelson Street for the Marlyville-Fontainebleau Group D ets for the roadway reconstruction, which included upgrade E LADOTD Hydraulics Manual. | |

| 03/20-06/20 | City of New Orleans: RR119 Marlyville-Fontainebleau Group F (FRC) New Orleans, LA. Mr. Toussant was responsible for the preparation of preliminary plans for Vincennes Place for the Marlyville-Fontainebleau Group F Project. He prepared typical sections and plan and profile sheets for the roadway reconstruction, which included upgrades to existing subsurface drainage and inlets in accordance with the LADOTD Hydraulics Manual. |
|---------------|--|
| 07/20 – 9/20 | Church Street Culvert Replacement Maringouin, LA. Mr. Toussant was project engineer and construction manager for the Church Street Culvert Replacement project which included preparing construction documents required for the replacement of 2-60" CMP Cross Drain pipes with 72" RCPA pipes on Church Street in Maringouin LA in Iberville Parish. Mr. Toussant duties included conducting a preconstruction meeting, biweekly site visits, review of pay applications, submittals and RFI's, progress meeting between contractor and owner, reviewed and monitored all required field testing, project final acceptance and project closeout. |
| 02/20 – 08/20 | Coastal Protection and Restoration Authority: Grand Isle State Park Improvement Phase I Grand Isle, Louisiana. Mr. Toussant was the lead civil engineer and project manager for the roadway and drainage improvement project at Grand Isle State Park. He was responsible for preparation of construction documents for 3 miles of asphalt roadway repairs, overlay and asphalt parking areas in accordance with LADOTD specifications, standards, and guidelines, including ADA accessible parking and access. Mr. Toussant provided construction administration including the review of pay applications, submittals and RFI's, conducted progress meeting between contractor, owner and CPRA, performed site visits, reviewed and monitored all required field testing, final acceptance and project closeout. |
| 02/18 – 09/18 | S.P. No. H.010768.6 Multi-Use Trails (West Baton Rouge) Addis, Louisiana. Mr. Toussant provided Construction Administration and CE&I services for the West Baton Rouge Multi Use Trail project on top of the Mississppi River Levee in West Baton Rouge Parish. Mr. Toussant was responsible for engineering and inspection services including conducting the pre-construction meeting, maintaining field records and project diaries on LADOTD SiteManager, coordinating testing and sampling for Quality Assurance in accordance with the LADOTD Sampling and Testing Manual, review and approval of contractor submittals, final acceptance and project closeout. |
| 2016 | LA 3127 Extension Corridor Study Ascension Parish, LA. Mr. Toussant provided QA/QC for a feasibility study for the extension of LA 3127 from its current terminus at LA 70 in Ascension Parish to the intersection of LA 943 and US Hwy 1 including a proposed Bayou Lafourche bridge crossing at Hwy 1 and LA 308. |
| 03/17 - 08/17 | Falgout Canal Road Repaving Project Terrebonne Parish, LA. Mr. Toussant was the lead civil engineer and project manager for the roadway project. He was responsible for preparation of construction documents for roadway repairs, elevation adjustments and overlay in accordance with LADOTD specifications, standards, and guidelines. Mr. Toussant performed construction administration including biweekly site visits, the of review of pay applications, submittals and RFI's, progress meeting between contractor and owner, reviewed and monitored all required field testing, project final acceptance and project closeout. |
| 12/15 - 08/16 | Intersection Improvements and Roadway Realignments Calcasieu Parish, LA. Mr. Toussant was the project manager and lead design engineer responsible for the design and preparation of construction documents and cost estimates for 11 roadway intersection improvements required to mitigate traffic impacts along state and parish roadways for the proposed Axiall Plant Expansion in Calcasieu Parish, LA. He prepared and reviewed plans, including demolition, geometric drawings, signing plans, associated drainage improvements and was responsible for ROW acquisitions, coordinating existing utility relocations. |
| 02/07 – 06/08 | S.P. No. 817-41-0014, CP Project No. 06-CS-HC-0029: South Harrell's Ferry Road Improvements, GLP East Baton Rouge Parish Baton Rouge, LA. Mr. Toussant was responsible for the horizontal and vertical alignments designs for portions of the project and the subsurface drainage design which was completed utilizing the LADOTD hydraulics software. |

17. Firm Experience: Gresham Smith

Project number

Hooper Road at Sullivan Road Roundabout Design

H 002320

| i roject number | 11.002320 | Owner 3 hame | | | | |
|-------------------------------|---|--|---|-------------------------|-------------|--|
| Project location | Central, Louisiana | Owner's Projec | t Manager | Toby Picard, P.E., Proj | ect Manager | |
| Owner's address, phone, email | 13421 Hooper Road, Suit | e 8, Central, LA / 225.379.1302 / toby.picard@la.gov | | | | |
| Services commenc | Services commenced by this firm (mm/yy) | | Total consultant contract cost (\$1,000's) | | \$195 | |
| Services completed | Services completed by this firm (mm/yy) | | Cost of consultant services provided by this firm | | \$195 | |

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

(\$1.000's)

Past Performance Evaluation Discipline(s)*

Owner's name City of Central (LA)

Road

Firm responsibility (prime or sub?)

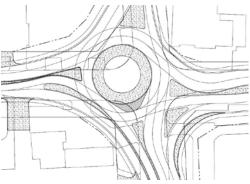
This project was originally designed as an intersection improvement project to add left and right turn lanes at the intersection of Hooper Road (LA 408) at Sullivan Road (LA 3034). Due to the anticipated future traffic volumes, it was determined that a multi-lane roundabout would be more efficient and have a longer service life than the planned traditional signalized intersection. Gresham Smith was selected to design the multilane roundabout at the intersection of Hooper Road at Sullivan Road.

The intersection contains some major constraints which include a historic building in the Northeast quadrant of the intersection and a gas station in the Southwest guadrant of the intersection. The roundabout must accommodate both pedestrians and bicyclists as well as multiple approach lanes and free flow right turn lanes at select approach legs as required by LADOTD's conceptual traffic design to accommodate future projected traffic volumes.

Gresham Smith is tasked with the full roundabout design to be in accordance with LADOTD's Roadway Design Manual geometric requirements and LADOTD's Complete Streets Policy to accommodate both pedestrians and bicycles through this intersection. Determining the location of the roundabout is critical in balancing a good geometric design with minimal right-of-way impacts and utility conflicts. Gresham Smith is also tasked with the drainage design at the roundabout and approach legs and is responsible for developing typical sections, plan and profile sheets, cross sections, quantities and construction cost estimates. This project includes a conceptual design phase as well as both preliminary and final plan design.

Currently, the roundabout has been through several geometric reviews by DOTD, including a plan-in-hand meeting. The 100% preliminary plans are complete. However, the project is now undergoing scope adjustments for the final intersection design.

Nature of firm's responsibility: Sub Consultant; Responsible for Developing Preliminary and Final Roundabout Design Plans. Firm members involved: Brennon Hughes, Bert Moore, Richard Savoie and Ronnie Robinson.



Sub

| Gresham Smith | | Past Performance | e Eva | luation Disciplin | e(s)* Road | | | |
|---|--|------------------|--|------------------------------------|-----------------|-----------------------------|---------|--|
| MSY - Task 4: Entrance Road Capacity | | | | | Firm respons | Prime | | |
| Project number | N/A Owner's name | | | New Orleans Airport (MSY) | | | | |
| Project location | Kenner, LA | | | Owner's Project Manager Kenny Boyd | | Kenny Boyd | | |
| Owner's address, phone, email | 1 Terminal Dr, Kenner, LA 70062 / 303.641.9729 / ksboyd@burnsmcd.com | | | | | | | |
| Services commenced by this firm (mm/yy) 03/21 | | | Total consultant contract cost (\$1,000's) | | | \$180.5 | | |
| Services completed by this firm (mm/yy) Ongoing | | | Cos | st of consultant s | services provid | led by this firm (\$1,000's | \$180.5 | |

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

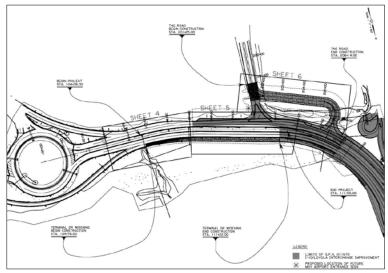
Executed under a general engineering contract, Gresham Smith is currently providing design and project management for the City of New Orleans to widen the main exit road at Louis Armstrong New Orleans International Airport (MSY) from 2 lanes to 3 lanes. The project includes widening of approximately 1/4-mile of roadway, extending the roundabout slip lane exit from the roundabout and tying into the design-build flyover project currently under construction (S.P. H.011670). The completed widened road will connect the I-10 at Loyola Interchange Design-Build project that is currently under construction for LADOTD, improving the flow of traffic from MSY.

Additionally, Gresham Smith is tasked with the design of the new Transportation Network Companies (TNC) Uber lane roadway. This is a new alignment design which will realign the existing TNC Lane to a tie in point west of the existing location, tying into a turnout being constructed under the I-10 at Loyola Interchange Design-Build project. The completed new alignment roadway will provide access to a dedicated parking lot for ride-share vehicles approaching the airport and awaiting arrivals.

From the start, this project involved constant communication with both MSY Airport representatives along with coordination with the consultant for the I-10 at Loyola Interchange Design-Build project. A key aspect of this project was coordinating with the I-10 at Loyola Interchange Design-Build project which is currently under construction in order to facilitate a smooth transition for the widening of the roadway. This project was signed and sealed recently and is scheduled for letting Summer 2022.

Nature of firm's responsibility: Prime

Firm members involved include: Bert Moore, Brennon Hughes, Ronnie Robinson and Richard Savoie.



| 17. Firm Experier | nce: | | | | | | |
|----------------------------------|--|--|----------------------|--------------------|-------------------------|-------|--|
| Gresham Smith | | Past Performance Evaluation Discipline(s)* Road | | | | | |
| Sandy Spring | gs TS193 Hammon | d Drive Corrie | dor Design | Firm respons | ibility (prime or sub?) | Prime | |
| Project number | N/A | Owner's name | City of Sandy Spring | IS | | | |
| Project location | Sandy Springs, GA | Owner's Project Manager Allen Johnson, P.E., PMP, TSF Program Manager | | | P, TSPLOST | | |
| Owner's address, phone, email | 1 Galambos Way, Sandy Springs, GA 30328 / 770.206.2013 / ajohnson@sandyspringsga.gov | | | | | | |
| Services commend | ced by this firm (mm/yy) | 09/18 | Total consultant co | ontract cost (\$1, | 000's) | \$247 | |

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

The purpose of this project is to improve safety and mobility and to improve bicycle/pedestrian access along Hammond Drive from Roswell Road (State Route 9) to Glenridge Drive in the north metro Atlanta city of Sandy Springs. This portion of Hammond Drive currently carries a volume of traffic which is higher than its two lane capacity and experiences severe congestion and queuing of traffic, especially during peak commuting hours. In its current configuration, this street also lacks adequate facilities for people walking, biking, and taking transit. Gresham Smith is tasked with developing a concept that addresses city mobility and safety concerns as well as numerous stakeholder and community input. Our scope includes public involvement, concept development, traffic analysis, roadway design, bridge design, hydraulic analysis, and preliminary, right of way, and final design development construction plans.

09/20



\$247

Cost of consultant services provided by this firm (\$1,000's)

Public Involvement

Services completed by this firm (mm/yy)

While the public involvement process is ongoing, Gresham Smith staff attended a Sandy Springs "Neighborhood Input Session" that sought input from neighborhood residents about their hopes and concerns for the project. Five key themes emerged from this session that were incorporated into the design concept and will be presented at a public meeting early next year:

- Safety: Concerns that a redesigned Hammond Drive would make it more difficult to walk or ride a bike along or across the road.
- Quality of life: Hopes that a redesigned Hammond Drive would include "wow me" green spaces; attractive and effective screening for nearby homes; new parks or pools; and perhaps the burying of utilities underground.
- Neighborhood cohesion: The desire that there would be an innovative way to easily cross Hammond, such as a pedestrian/cyclist bridge or tunnel.
- Access: Concerns that a redesigned Hammond Drive would open the door for more cut-through traffic while making it harder for residents of Glenridge Hammond to enter and leave their neighborhood and hope that the project would find new ways of limiting cut-through traffic.

• Neighborhood appeal: In general, many worried that a redesigned Hammond Drive would damage the appeal of the neighborhood (and reduce property values). The hopes were that by making some of the improvements listed above, the neighborhood might become even more appealing—and that property values would appreciate.

Services: Traffic Analysis, Conceptual Alternatives Evaluation, Multimodal Concept Design, Visualization, Public Engagement Nature of firm's responsibility: Prime Firm members involved include: Shawn Reese

| phone, email | 1890 County Services Parkway, Marietta, GA 30008 / 770.420.6658 / james.hudgins@cobbcounty.org | | | | | | | |
|---|--|--|--|------------------------------|---------|--|--|--|
| Services commenced by this firm (mm/yy) | | 05/07 | Total consultant contrac | t cost (\$1,000's) | \$9,396 | | | |
| Services complete | d by this firm (mm/yy) | 05/11 | 05/11 Cost of consultant services provided by this firm (\$1, | | | | | |
| Describe the project | t including the firm's role | and members inv | olved. (Highlight members to | o be used in this proposal.) | | | | |
| Department of Transproadway improvement Our scope consisted of service, crash histor the assessment, reco well as traffic signal of improvements, the ac | portation tasked Gresham S its to a nearly 3-mile section of evaluating existing traffic ory, peak-hour traffic observ mmendations were made re perations. Other design ele | mith with the design of Lower Roswell operations at 13 in ations and sight-d egarding turn-lane ments included ho nd gutters, draina | Road in Marietta, Georgia. htersections—including levels istance analysis. Following requirements and length, as rizontal and vertical geometric ge improvements, 4-foot bike | | | | | |

Owner's name

We managed a number of key challenges throughout the project, including community concerns. As a result, the design footprint was reduced while adhering to the design standards. The team also prepared water system improvements and worked closely with Cobb County DOT to reduce impacts, preserve the existing adjacent green space and produce a context-sensitive design. Benefiting motorists, pedestrians and bicyclists alike, roadway corridor enhancements made to the 3-mile stretch have garnered positive community response, offering residents a vastly improved, safe and inviting new streetscape.

Nature of firm's responsibility: Prime Firm members involved include: Shawn Reese

Lower Roswell Road Safety and Operational Improvements

N/A

Marietta, GA

Past Performance Evaluation Discipline(s)* Road

Cobb County DOT

Owner's Project Manager

Firm responsibility (prime or sub?)

James Hudgins

Prime



17. Firm Experience: Gresham Smith

Project number

Project location Owner's address

| 17. Firm Experier | nce: | | | | | | | | | | |
|---|--|--|--|-------------------------------------|------------------------------|-------|--|--|--|--|--|
| Gresham Smith | | | | Past Performance Eval | uation Discipline(s)* | Road | | | | | |
| WDOT, SR 302 (Goodman Road) Safety mprovements near the I-55 InterchangeProject numberN/AOwner's nameProject locationDeSoto County, MSOwner's address, ohone, email401 North West Street, Jackson, MS 39201 / 0Services commenced by this firm (mm/yy)11/16Services completed by this firm (mm/yy)09/17escribe the project including the firm's role and members involution on the asibility study, MDOT contracted with Gresham Smith to proprio our feasibility study, MDOT contracted with Gresham Smith to proprio adway, Phase B roadway, traffic signalization, and lighting service at would be compatible with the larger subsequent project. Gresham cope of work included typical sections, plan-profiles, urban roadway affic control plans, erosion control plans, permanent and directional | | Firm responsibility (pri | me or sub?) | Prime | | | | | | | |
| Project number | N/A | Owner's name | Mississipp | sippi Department of Transportation | | | | | | | |
| Project location | DeSoto County, MS | | Ow | ner's Project Manager | Richard Pittman | | | | | | |
| Owner's address, phone, email | 401 North West Street, Jac | ckson, MS 39201 / 60 |)1.359.7250 | / rpittman@mdot.ms.gov | | | | | | | |
| Gresham SmithMDOT, SR 302 (Goodman Road) SafetyImprovements near the I-55 InterchangeProject numberN/AOwner's nameProject locationDeSoto County, MSOwner's address, phone, email401 North West Street, Jackson, MS 39201 / 6Services commenced by this firm (mm/yy)11/16 | Total cons | sultant contract cost (\$1, | ,000's) | \$246 | | | | | | | |
| Services complete | d by this firm (mm/yy) | 09/17 | Cost of co | onsultant services provid | led by this firm (\$1,000's) | \$246 | | | | | |
| Gresham Smith deve on our feasibility stud roadway, Phase B ro that would be compa scope of work include traffic control plans, e | eloped a feasibility study pric ly, MDOT contracted with G adway, traffic signalization, tible with the larger subsequed typical sections, plan-pro- erosion control plans, perma | r to this design projec resham Smith to prov and lighting services ent project. Gresham files, urban roadway h | ct for MDOT ride Phase A for a modifie Smith's Pha nydraulic des | Based d design ase B sign, | in this proposal.) | | | | | | |

Phase B Roadway improvements for the interim project were along Goodman Road at the I-55 interchange from Interstate Boulevard to Southcrest Parkway and included

reconfiguration of both ramp intersections to improve traffic flow. Overhead signs and slotted curb were utilized to separate traffic prior to entering this heavily congested area thereby reducing the weaving movements. To reduce future reconstruction and traffic control phasing in the ultimate project, Gresham Smith identified trenched slotted curbs for areas where the slotted curb would remain as well as doweled slotted curbs in areas where slotted to be removed in the ultimate project.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. **Firm members involved include:** Bert Moore and Matt Williams

Project Highlights

SR 302 / I-55 Interchange Concept

- Urban Roadway Hydraulic Design
- Phases A & B Roadway
 Design
- Traffic Signalization
- Lighting Design

| 17. Firm Experier | ice: | | | | | | | | |
|---------------------------|--------------|-------------------|-----------------|------------|---------------|----------------------|------------------|----------------|--|
| T. Baker Smith, L | LC | | | Past Perf | ormance Eva | aluation Discipli | ne(s)* Road | | |
| US 190: LA | 437 to L | IS 190 BUS (| Ph. 1) | | | Firm responsil sub?) | bility (prime or | Prime | |
| Project number | H.001344 | | Owner's name | Louisiar | na DOTD | | | | |
| Project location | St. Tamma | ny Parish, LA | | | Owner's Pr | oject Manager | Corey Landry, F | P.E. | |
| Owner's address, email | , phone, | 1201 Capitol Acce | ess Rd., Bator | n Rouge, L | A 70802 / 22 | 5.379.1889 / cor | ey.landry@la.go\ | / | |
| Services commer | nced by this | s firm (mm/yy) | 10/18 T | Total cons | ultant contra | act cost (\$1,000 | 's) | \$1,722 | |
| 0 | | ······ | 04/00 | Cost of co | nsultant ser | vices provided | by this firm | ф4 00 Г | |

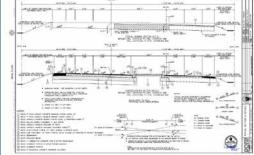
Services completed by this firm (mm/yy)

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

(\$1.000's)

Phase 1 of the US 190 widening from LA 437 to US 190 BUS involves asymmetrical urban roadway widening and the design of a new 1,400' long bridge over the Bogue Falaya River increase the capacity of US 190 from two lanes to four lanes beginning at LA 437 (N. Lee Rd.) and ending at US 190 BUS on the south side of the Bogue Falaya River in Covington, LA. Currently, US 190 transitions from four lanes to two lanes to cross the Bogue Falaya River just north of US 190 BUS. The roadway is classified as an Urban Arterial with right of way access and is in a heavily commercial use corridor. Phase 1 design also accommodates future Phases 2, 2a and 3 of the project which includes up to 10 multi-lane roundabouts along the corridor to replace existing signalized intersections. The Phase 1 bridge over the Bogue Falaya River will accommodate future ramps from the LA 21 & US 190 BUS roundabouts onto US 190 westbound. In Phase 3, the existing steel W-beam girder bridge will be replaced with a bridge similar to Phase 1.

01/22



\$1,095

The Phase 1 bridge over the Bogue Falaya River is being designed with a clear width of 54 feet (3-12' lanes, 8' and 10' shoulders) and a total length of 1,400 feet. The bridge utilizes LG-36 and LG 54 girders on column bents and incorporates all current BDEM Rev. 8 requirements for deck link slabs (floating spans). The new Phase 1 bridge spans LA 21, the Tammany Trace bike trail and the Bogue Falaya River. The bridge includes both horizontal and vertical curvature and is superelevated near 4%. The roadway widening occurs to the east side of US 190 and is in superelevation for the majority of the project. Raised concrete splitter and channelization islands are designed throughout the project including directional U-turns in the median and at left turn lanes at the signalized intersections of Village Walk and LA 437. Roadway widening design includes varying width roadway sections, varying height PGL's from eastbound to westbound sides due to horizontal curvature and superelevation swapping.

Additional design elements include subsurface storm sewer network design, site specific commercial drives and grading, traffic management plans, nonstandard pier protection design, permanent steel retaining wall, and utility conflict matrix development and utility management. Geotechnical exploration logs were taken in the Bogue Falaya River and along the alignment of the roadway widening and settlement plate monitoring was required due to the embankment build up. TBS has signed and delivered the 100% Final Plans in January 2022 and was responsible for all preliminary and final roadway and bridge design and plans, LRFR Load Rating, Traffic Management Plans, Utility Conflict Matrices, 36 single slope roadway barrier design on concrete footing, and Project Management. TBS assisted the DOTD Project Manager during the Bidding Process and is currently serving in a Construction Support Role upon awarding the Project.

Firm members involved include: Paul Olivier, PE; Daniel Binet, PE; Sam Mestayer, PE; Luke Bourg; Lisa Osborne

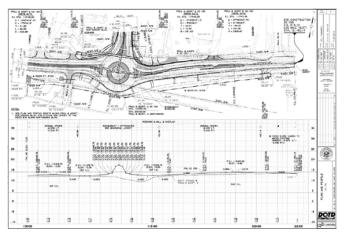
Page 47 of 74 Prime consultant firm: Gresham Smith

| 17. Firm Experier | ICE: | | | | | | | | | | |
|---------------------------|--------------|-------------------|-----------------|---|----------------|------------------------|-------------------|-------|--|--|--|
| T. Baker Smith, Ll | LC | | | Past Performance Evaluation Discipline(s)* Road | | | | | | | |
| US 190 at No | orthsho | re and Camp | Villere | | | Firm responsi sub?) | bility (prime or | Prime | | | |
| Project number | H.012812 | | Owner's name | Louisiar | na DOTD | | | | | | |
| Project location | St. Tamma | ny Parish, LA | | | Owner's Pr | oject Manager | Jacob Fuselier, | P.E. | | | |
| Owner's address, email | phone, | 1201 Capitol Acce | ss Rd., Bato | on Rouge, L | A 70802 / 22 | 5.379.1185 / jaco | ob.fusilier@la.go | V | | | |
| Services commen | ced by this | s firm (mm/yy) | 02/20 | Total cons | sultant contra | act cost (\$1,000 | 's) | \$541 | | | |
| Services complete | ed by this f | irm (mm/yy) | Chaolad | Cost of consultant services provided by this firm \$498 | | | | | | | |

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

The US 190 at Northshore and Camp Villere project involves upgrading existing signalized intersections at US 190 and Northshore Blvd (Airport Road) and US 190 at Camp Villere with roundabouts to improve efficiency and safety along this corridor near Slidell, LA. Within the project area, Northshore Blvd is a 4-lane divided urban corridor which intersects with US 190, a 3-lane urban arterial. A three-legged, multi lane roundabout is being designed as the replacement of the existing signalized intersection at this location. Avoidance of adjacent commercial properties and the nearby Tammany Trace is held paramount during design. Included within the project, the nearby stop controlled intersection of US 190 and Camp Villere Rd. is being replaced with a three-legged single lane roundabout. All roundabouts are being designed to accommodate pedestrian movements with sidewalks and splitter island accessibility. In addition to eliminating any R/W takings from the St. Tammany Trace Bike Path, careful consideration was taking in accommodating a major subsurface drainage network including multiple 54" side and cross drain pipes running alongside US 190.

T. Baker Smith is serving as the Prime Consultant on the project and is providing all roadway design, hydraulic design and analysis, preliminary and final plan development, traffic management plans, and a specialized and detailed written construction phasing plan. TBS is also coordinating and performing quality control of all work performed by the subconsultant including temporary traffic signal design, pavement marking layout, and permanent signing layout. Hydraulic design elements included inlet spacing calculations, storm sewer drainage design, and major cross drain calculations, including 3 - 5' x 5' Reinforced Concrete Box Culverts. All turning movements were performed in AutoTurn, and were provided for both permanent construction and temporary traffic sequencing. A Final Design Review Meeting for this project will be held in June 2022, with 100% Final Plans expected to be delivered in August 2022. This project is set for letting at the end of 2022.



Firm members involved include: Paul Olivier, PE; Kelly Radecker, PE; Lisa Osborne; Luke Bourg

| T. Baker Smith, Ll | LC | | Past Performance Eva | aluation Discipline(s)* | Road | |
|--------------------|----------------------|---------|----------------------|------------------------------------|-------|-------|
| I-12 Widenin | ig (US 190 to LA 59) | | | Firm responsibility (prin sub?) | me or | Prime |
| | | Owner's | | | | |

| Project number | H.011152 | | name | Louisia | na DOTD | | | |
|---------------------------|--------------|-------------------|----------------|------------|---|-------------------|---------|--|
| Project location | St. Tamma | ny Parish, LA | | | P.E. | | | |
| Owner's address, email | phone, | 1201 Capitol Acce | ess Rd., Bator | n Rouge, L | A 70802 / 225.379.1185 / jaco | ob.fusilier@la.go | v | |
| Services commen | nced by this | s firm (mm/yy) | 09/16 T | otal cons | sultant contract cost (\$1,000 ³ | 's) | \$2,894 | |
| Services complete | ed by this f | irm (mm/yy) | Cindoind | Cost of co | onsultant services provided I | oy this firm | \$2,600 | |

Services completed by this firm (mm/yy)

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

(\$1.000's)

The I-12 Widening project consisted of approximately four miles of Interstate widening in St. Tammany Parish between US 190 and LA 59. The project included three lanes in both the Westbound and Eastbound directions, with associated bridge widening and remedial work at the interchange ramps. The project began West of the I-12/US 190 interchange and ended at the I-12/LA 59 interchange. Included within these limits were three bridge sites for a total of six structures including I-12 over US 190, I-12 over Pontchitolawa Creek, and I-12 over Tammany Trace/Ohio Railroad.

The widening occurred to the inside of the existing 4-lane interstate and included the removal of the inside shoulder and replacement with a full depth. asphalt pavement section, including an OGFC layer. The inside widening included a 12' travel lane and a 17' inside shoulder which spanned from the edge of the travel lane to the face of the 54" concrete median barrier. The median barrier included a variety of modified design and plan elements such as a single slope 54" concrete barrier on footing, transitions to bridge railing, roadway barriers at approach slabs, median barriers transitions for overhead signs and DMS, median barrier transition for light poles and adjusted barrier height for profile grade variance.

Additional roadway design considerations included superelevated roadway design and transitions, hydraulic analysis and design of multiple bridge and box culvert locations, retaining walls, modified pier protection design, graphical grading at entrance and exit ramps, and permanent marking and signing layouts. Major construction phasing was also required along mainline interstate as well as the interchanges at US 190 and LA 59 including temporary detour roads and construction access details. In addition to the above, multiple pavement design techniques were incorporated including mill and overlay, full reconstruction, and spot binder course replacement. The considerations were made in an attempt to improve the current vertical alignment, which had been severely modified since the original design due to years of asphalt overlays.

The project schedule was accelerated and Final Plans were completed in 5 months.

In addition to the road design elements mentioned above, this project included the widening of a 688' long AASHTO Type II and Type IV Prestressed Concrete Girder bridge at US 190, the widening of a 175' long (25' spans) slab span bridge over the Pontchitolawa Creek, and the widening of a 426' long AASHTO Type III Prestressed Girders founded on 30" PPC pile bents. All existing concrete barrier railing was removed and replaced with a 36" bridge railing.

Firm members involved include: Paul Olivier, PE; Daniel Binet, PE; Kelly Radecker, PE; Sam Mestayer, PE; Luke Bourg; Lisa Osborne TBS performed 100% of the project in Louisiana.

| Crescent Enginee | ring & Map | ping, LLC | | Past Perf | ormance Eva | Bridge | | | |
|-------------------------|--------------|--------------------|-----------------|--|-------------------|------------------|------------|-----------|---|
| E. Lewiston | Rd. Bri | dge over Wil | son Bra | nch | | ne or | Prime | | |
| Project number | | | Owner's name | Tangipa | hoa Parish G | overnment | | | |
| Project location | Kentwood, | LA | | | Owner's Pr | oject Manager | Misty Eva | ans, P.E. | |
| Owner's address, email | phone, | 206 E. Mulberry St | ., Amite, LA | 70422 / 98 | 5.244.6880 / | mevans@tangipa | ahoa.org | | |
| Services commen | ced by this | s firm (mm/yy) | 03/22 | Total consultant contract cost (\$1,000's) \$190 | | | | | |
| Services complete | ed by this f | irm (mm/yy) | | Cost of co (\$1,000's) | nsultant serv | vices provided b | y this fir | m \$13 | 1 |

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

The E. Lewiston Rd./Wilson Branch Bridge Replacement project involves the replacement of 4-span structurally deficient timber trestle bridge in Tangipahoa Parish near Kentwood, LA. The project includes topographic surveys, property surveys, bridge design, roadway design, geotechnical, environmental and contract management. Project scoping and design is per LADOTD requirements including plan production.

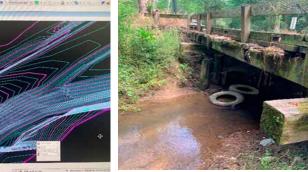
Crescent Engineering & Mapping, LLC is the prime consultant for the project and is responsible for the topographic surveys, hydraulic analyses and modeling, roadway design, bridge

design, utility surveys and roadway/bridge plan production. The project's topographic survey (140' x 1500' DTM) was conducted to LADOTD standards and processed in Bentley Microstation/Inroads. Hydraulic analysis was performed using HEC-RAS and HEC-HMS as well as LADOTD HYDRWIN programs for roadside drainage. LADOTD design criteria are being followed and design drawings are also being developed as traditional LADOTD plans using Bentley Microstation/Inroads due to anticipated federal funding.

Crescent has completed the topographic surveys and hydraulics report. Preliminary plans are currently underway along with environmental and geotechnical services.

Firm members involved include: Dennis M. Hymel Jr., PE, Kelly Jones







| Crescent Enginee | ring & Map | oping, LLC | | Past Performance Ev | | | |
|---------------------------|--------------|-------------------|-----------------|-----------------------------------|---------------------------------|-----------|-------|
| Old Genesse | e Rd. E | Bridges over | Creeks | (2 Sites) | Firm responsibility (prin sub?) | me or | Prime |
| Project number | | | Owner's name | Tangipahoa Parish | Government | | |
| Project location | Tickfaw, LA | 4 | | Owner's P | roject Manager Misty Ev | ans, P.E. | |
| Owner's address, email | phone, | 206 E. Mulberry S | t., Amite, LA | 70422 / 985.244.6880 | / mevans@tangipahoa.org | | |
| Services commen | ced by this | s firm (mm/yy) | 03/22 | Total consultant cont | \$29 | 96 | |
| Services complete | ed by this f | firm (mm/yy) | Ongoing | Cost of consultant se (\$1,000's) | ° m \$2 [^] | 17 | |

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

The Old Genessee Rd./Creeks Bridge Replacement project involves the replacement two (2) structurally deficient timber trestle bridges in Tangipahoa Parish near Tickfaw, LA. The project includes topographic surveys, property surveys, bridge design, roadway design, geotechnical, environmental and contract management. Project scoping and design is per LADOTD requirements including plan production.

Crescent Engineering & Mapping, LLC is the prime consultant for the project and is responsible for the

topographic surveys, hydraulic analyses and modeling, roadway design, bridge design, utility surveys and roadway/bridge plan production. The project's topographic survey (140' x 3200' DTM) was conducted to LADOTD standards and processed in Bentley Microstation/Inroads. Hydraulic analysis was performed using GEOHEC-RAS and HEC-HMS as well as LADOTD HYDRWIN programs for roadside drainage. LADOTD design criteria are being followed and design drawings are also being developed as traditional LADOTD plans using Bentley Microstation/Inroads due to anticipated federal funding.

Crescent has completed the topographic surveys. Preliminary plans and hydraulic analysis are currently underway along with environmental and geotechnical services.

Firm members involved include: Dennis M. Hymel Jr., PE, Abbey Falcon, P.E., Kelly Jones





| Crescent Enginee | ring & Map | ping, LLC | | Past Performance Eva | aluation Discipline(s)* | Bridge | | | | | |
|---|-------------|-------------------|-----------------|---|------------------------------------|---------------|-------|--|--|--|--|
| Easley Rd. E | Bridge o | over Sweetwa | ater Cree | ek | Firm responsibility (prin sub?) | me or | Prime | | | | |
| Project number | | | Owner's name | Tangipahoa Parish G | Tangipahoa Parish Government | | | | | | |
| Project location | Loranger, L | A | | Owner's Pr | oject Manager Misty Eva | ans, P.E. | | | | | |
| Owner's address, email | phone, | 206 E. Mulberry S | t., Amite, LA | 70422 / 985.244.6880 / | | | | | | | |
| Services commen | ced by this | s firm (mm/yy) | 03/22 | Total consultant contract cost (\$1,000's)\$187 | | | | | | | |
| Services completed by this firm (mm/yy) | | | | Cost of consultant serv (\$1,000's) | vices provided by this fir | m \$12 | 29 | | | | |

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

The Old Genessee Rd./Creeks Bridge Replacement project involves the replacement two (2) structurally deficient timber trestle bridges in Tangipahoa Parish near Tickfaw, LA. The project includes topographic surveys, property surveys, bridge design, roadway design, geotechnical, environmental and contract management. Project scoping and design is per LADOTD requirements including plan production.

Crescent Engineering & Mapping, LLC is the prime consultant for the project and is responsible for the topographic surveys,

hydraulic analyses and modeling, roadway design, bridge design, utility surveys and roadway/bridge plan production. The project's topographic survey (140' x 3200' DTM) was conducted to LADOTD standards and processed in Bentley Microstation/Inroads. Hydraulic analysis was performed using GEOHEC-RAS and HEC-HMS as well as LADOTD HYDRWIN programs for roadside drainage. LADOTD design criteria are being followed and design drawings are also being developed as traditional LADOTD plans using Bentley Microstation/Inroads due to anticipated federal funding.

Crescent has completed the topographic surveys. Preliminary plans and hydraulic analysis are currently underway along with environmental and geotechnical services.

Firm members involved include: Dennis M. Hymel Jr., PE, Abbey Falcon, P.E., Kelly Jones







| 17. Firm Experience: | | | | _ | | | | | | | | |
|-------------------------------|------------|-----------------|--------------|--|--|-----------------|-----------------|--|--|--|--|--|
| La Terre Engineering | | | | Past Performance Eval | luation Discipline | e(s)* Roadway | ' Design | | | | | |
| Sharp Road (Fl | orida | Blvd to Old | l Hamm | | Firm responsibil sub?) | ity (prime or | Sub | | | | | |
| Project number | 22-CP-I | HC-0025 | Owner's name | City of Baton Rouge P | City of Baton Rouge Parish of East Baton Rouge | | | | | | | |
| Project location Bate | on Rouge | , LA | | Owner's Pro | ject Manager P | rime Contact: D | rew Walsh, P.E. | | | | | |
| Owner's address, pho email | one, | Prime : 8383 Bl | uebonnet B | oulevard, Baton Rouge LA | A 70810 / 225.766. | .5358 / dwalsh@ | gotech-inc.com | | | | | |
| Services commenced | by this f | irm (mm/yy) | 06/22 | Total consultant contract cost (\$1,000's) \$800 (e) | | | | | | | | |
| Services completed b | y this fir | n (mm/yy) | Ongoing | Cost of consultant serv (\$1,000's) | ices provided by | this firm \$ | 100 (e) | | | | | |

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

La Terre Engineering, LLC (LTE) is part of the team selected by East Baton Rouge City Parish for the Sharp Rd Corridor Enhancement (Old Hammond Hwy to Florida Blvd) Project No. 20-CP-HC-0025.

This project will enhance both pedestrian and cyclist mobility along the Sharp Road corridor for approximately 8,500 L.F. Access to public facilities as well as addressing walkability / bikeability concerns in problematic areas by providing better crossing conditions are some of the main considerations to enhancing this corridor for pedestrian and bicycle users. Intersection, signalization, and turn lane improvements will also be considered at key locations.

LTE is providing preliminary and final plans for the project including development of existing and proposed drainage maps and subsurface drainage design in accordance with the DOTD Hydraulics Manual.

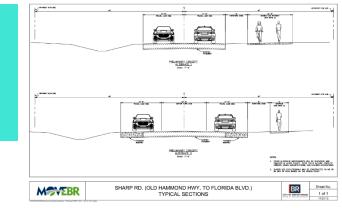
Firm members involved include: Seneca Toussant, P.E., Lyle Tynes

Project Highlights

- Road Design
 Services
- Drainage Design
- Preliminary & Final
- PlansCost Estimates
- Cost Estimates



Project: Sharp Rd. (Old Hammond Hwy. to Florida Blvd.)



| La Terre Engineering | | | | Past Performance Ev | aluation Discip | ine(s)* Roadway | / Design |
|-------------------------------|-------------|----------------|--------------|------------------------------------|-----------------------|-------------------|-----------------|
| Fountainebleau | Grou | рF | | | Firm respons sub?) | bility (prime or | Sub |
| Project number | RR119 | | Owner's name | City of New Orleans | | | |
| Project location New | Orleans, | LA | | Owner's P | roject Manager | Prime Contact: D | rew Walsh, P.E. |
| Owner's address, pho email | ne, | Prime : 8383 B | luebonnet l | oulevard, Baton Rouge I | _A 70810 / 225.7 | 66.5358 / dwalsh@ |)gotech-inc.com |
| Services commenced | by this fi | rm (mm/yy) | 03/20 | Total consultant cont | act cost (\$1,000 |)'s) \$ | 200 (e) |
| Services completed by | y this firm | n (mm/yy) | 06/20 | Cost of consultant set (\$1,000's) | vices provided | by this firm | 57 |

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

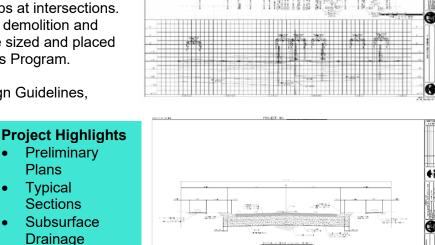
•

La Terre Engineering, LLC (LTE) and specifically, Mr. Seneca Toussant, P.E prepared preliminary plans for Marlyville-Fontainebleau Group F project as part of the FEMA Recovery Program as a subconsultant to GOTECH, Inc. LTE developed typical sections, prepared plan and profile sheets and cross section sheets for the reconstruction of Vincennes Place which included replacement of damaged underground water, sewer and drainage lines, repaying the roadway, replacement of damaged sidewalks and driveway aprons, and installing ADA compliant curb ramps at intersections. Rehabilitation included resizing and replacement of existing storm drainpipes and demolition and replacement of existing drain inlets. Storm drain pipe sizes and inlet spacing were sized and placed in accordance with the LADOTD Hydraulics Manual using the LADOTD Hydraulics Program.

LTE prepared preliminary plans in accordance with the City of New Orleans Design Guidelines, LADOTD Hydraulics Manual, 2017 LADOTD Minimum Design Guidelines and

2016 LADOTD Standard Specifications for Roads and Bridges.

Firm members involved include: Seneca Toussant, P.E.



| La Terre Engineering | | | | Past Performance Evaluation Discipline | | ay Design | | | | | |
|-------------------------------|--|----------------|----------------|--|----------------|-----------------------|--|--|--|--|--|
| La 24 Sidewalk | | bilitation | | Firm responsibilit | 1 | Sub | | | | | |
| Project number | H.0123 | | Owner's name | Louisiana Department of Transportation and Development | | | | | | | |
| Project location Hou | ima, LA | | | Owner's Project Manager Pri | me Contact: | Jacob M. Loeske, P.E. | | | | | |
| Owner's address, pho email | one, | Prime: 450 Lau | urel Street, S | uite 1500, Baton Rouge LA 70801 / 225.408. |)700 / jloeske | e@gisy.com | | | | | |
| Services commenced | l by this f | irm (mm/yy) | 04/21 | Total consultant contract cost (\$1,000's)\$92 | | | | | | | |
| Services completed b | ervices completed by this firm (mm/yy) | | | Cost of consultant services provided by t (\$1,000's) | \$4 | | | | | | |

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

This project consisted of the design of ADA compliant sidewalks on both sides of LA 24 from Barataria Avenue to New Orleans Boulevard in Houma, LA. The purpose of this project was to improve pedestrian access along the corridor. LTE supported the preliminary and prepared final design plans for the project which included:

1. Assembly and study of existing data, As-Built plans, improvement studies, boring information, traffic data, and field reconnaissance.

2. Design and preparation of preliminary plans in accordance with the requirements outlined in the latest AASHTO Standard Specifications for Highways and Bridges and in accordance with the Urban System Project Manager.

3. Preparation of specifications for the project in accordance with the latest edition of the Louisiana Standard Specifications for Roads and Bridges, and with the current practices of the DOTD.

4. Preparation of 100% Preliminary Plans QA/QC Checklist, and other pertinent documents.

5. Preparation of initial cost estimates based on the preliminary plans.

6. Preparation of all special specifications, specialty item descriptions, and details for the project.

7. Preparation and Engineer of Record for Final Construction Plans.

Firm members involved include: Seneca Toussant, P.E.

STATE OF LOUISIANA

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

PLANS OF PROPOSED

URBAN SYSTEMS PROJEC.

FEDERAL PROJECT NUMBER 11012339

INDEX TO SHEETS

THE SHEET

S COT NO

Project Highlights

- Corridor
 Enhancement
- ADA Improvements
- Preliminary and Final Plans
- Utility Coordination



18. Approach and Methodology:

The Gresham Smith Team

As this project will be a large undertaking and could potentially span four years for both initial services and potential additional services, we have put together a large, proven, experienced team. In order to expedite the project and streamline our efforts the local Gresham Smith team will be working with T. Baker Smith, Crescent Engineering and Mapping and La Terre Engineering to deliver the project to LADOTD. Gresham Smith will manage the project but the roadway work will be split between Gresham Smith and T. Baker Smith staff to expedite the design process. Crescent Engineering and Mapping will lead the bridge design for the bridge over the west branch of the Middle Colyell Creek and will be supported by Gresham Smith. La Terre Engineering will support the road design team by performing the existing and proposed drainage designs. Any supplemental work that may be required under this contract, such as traffic engineering/development of a TMP, will be performed in house by Gresham Smith staff. Gresham Smith will manage the entire project and perform off team QAQC reviews for the work performed by other team members in accordance with our QAQC plan attached to this proposal. Additionally, Gresham Smith will ensure that all team members follow the QAQC plan we have developed for this project.

Gresham Smith's local Baton Rouge office consists of a mix of senior engineers, engineers, and engineer interns who will be dedicated to the project. We are located less than 15 miles from the project site and are familiar with the area, having some of our staff live off of LA 447. In addition to our talented local staff, we are committing regional experts to support our team as needed as technical resources in both roundabout design and corridor widenings. Design work will mainly be performed by engineers, with QC and guidance from senior engineers and regional experts as needed. Detail work and plan development will mostly be performed by engineer interns, with QC and guidance from both engineers and senior engineers. The Gresham Smith Team plans to complete this design using DOTD's latest software and deliverable standards including MicroStation, Inroads, and DOTD's Road Design Manual and Design Guidelines. We are also acutely aware of DOTD's current transition to Open Roads Designer, and we are prepared to move forward through design in either software. Brennon Hughes will lead the roadway design effort. Richard Savoie and Ronnie Robinson provide design support, guidance and help with decision making. They provide on team QA/QC and have a depth of experience in both the design and construction of roadway projects throughout the state of Louisiana.

Project Background

The LA 447 (Walker South Road) Corridor project is located in Walker, Louisiana. The selected consultant shall provide engineering and related services to design roadway improvements along LA 447 between the I-12 Eastbound Ramps on the northern end of the project to Joe May Road on the southern end. Beginning at the southern leg of the LA 447 I-12 Eastbound Ramp roundabout, LA 447 is currently a concrete roadway with curb and gutter for approximately 600' to the south. The remainder of the existing corridor south of this location is a two-lane asphalt roadway with no paved shoulder and open ditches. The corridor is a winding road with mixed residential and commercial use, along with wooded areas.

The proposed corridor improvements will span approximately 2.4 miles, consisting of the widening of LA 447 from the I-12 East ramps to Buddy Ellis Road from two lanes to a four lane divided section. From Buddy Ellis Road to Joe May Road, LA 447 will be widened from two lanes to a three lane section. In addition to the above improvements, the project will consist of the design, and construction of roundabouts at the intersections of LA 447 at O'Donovan Boulevard and at Buddy Ellis Road. The project will also include the realignment of the intersection of LA 447 at Milton Lane/Miller Road. This realignment will restrict left turns and through movements, requiring those movements to be made at the roundabouts north or south of the Middle Colyell Creek just south of Landover Drive will be replaced while a southbound right turn lane will be added to LA 447 at the southern end of the project at Joe May Road.

Critical Issues

We have been tracking the LA 447 Corridor project for quite some time, and part of our interest is due to the opportunity to design two roundabouts. The design of roundabouts offer their own unique challenges, and this is especially the case for the proposed roundabout at O'Donovan Boulevard, which serves as the only entry and exit points for Our Lady of the Lake Livingston medical center. This proposed roundabout has several similarities to other roundabouts that our lead design engineer, Brennon Hughes has designed in the past, such as LA 22 at LA 70 multilane roundabout in Ascension Parish (S.P. H.011314) that has recently been completed. As an engineer working in the DOTD Road Design section, Brennon designed the majority of this project (thru 60% Final Plans) while working under the direction of Patrick Toney before joining Gresham Smith.

Some of the similarities between these two projects that we recognize are that both of these intersections are within a half mile of a nearby interstate, both are 3-legged intersections with two multi-lane approaches which will handle the majority of traffic, and most importantly, the sequence of construction plans will be critically important to maintain the flow of traffic in all directions.

Our Lady of the Lake Livingston is the only emergency department in Livingston Parish, offering 24 hours a day, seven days a week emergency service. Construction of the roundabout at this location will be the most critical portion of this overall project. We must be able to maintain and facilitate the free flow of traffic in all directions throughout construction. This will be a unique challenge, but we will lean on our previous design experience and roundabout experts to develop a quality design, and more importantly, develop a maintenance of traffic plan that keeps easy access to Our Lady of Lake Livingston at the forefront at all times.

The Roundabout Design Process

The Gresham Smith design team will ensure that all design services meet standard requirements of the many reference documents listed in this advertisement. Most notably, we will ensure that we are meeting DOTD's 2017 Minimum Design Guidelines while utilizing the Roundabout section in Chapter 6 of the DOTD Road Design Manual.

In our experience, the design of a roundabout is an iterative the process. We will use MicroStation, Autoturn, and Inroads to create a working design. We will generate alignments, linework, profiles, and cross sections which will be modified and adjusted throughout the process to provide the best possible design for the roundabout at O'Donovan Boulevard and at Buddy Ellis Road. A number of design considerations must be evaluated at the beginning of this design process. The LA 447 approaches at both locations currently have a posted speed of 45 mph while the side road approaches vary in posted speeds from 25 mph to 35 mph. The design speeds of these approaches will affect the horizontal and vertical geometry of the roadway approaches to the roundabout. The vertical geometry will affect the drainage design, if we are to use curb and gutter with sub-surface drainage, we must ensure that we maintain longitudinal grade requirements and/or ensure our vertical curves meet K-Value requirements as per the AASHTO Green Book.

We have already noted the critical issues we will face at the O'Donovan Boulevard. intersection, but the Buddy Ellis Road, intersection is not without its challenges as well. Residential property owners will be impacted, but we will take measures to mitigate these impacts. Our design will place the high points and low points along the turnouts at locations which minimize our limits of construction for our drainage design and to maintain a smooth circulating lane with no more than a 1.5% cross slope for the circulating lanes (as required by Ch. 6.9 of DOTD Road Design Manual). The initial design we envision to incorporate all of these items will be perfected through the iterative design process, resulting in the best possible design for LADOTD that will minimize construction and maintenance costs and benefit the traveling public.

The Corridor Widening Process

During our field visit to drive the corridor in preparation for this pursuit, a few things in particular stood out. One of those is that very rarely did overhead utilities exist along both sides of the roadway. We know from experience that right-of-way and utility impacts can be crucial to a construction budget. Ultimately our goal for the corridor widening will be to keep the existing

geometry of the roadway while smoothing out the curves, all within existing right-of-way. However, we do believe that in many instances, the widening will lead to right-of-way impacts. Whenever this is the case, we will look closely at widening to the side of the road where overhead utilities are not present, thereby potentially eliminating right-of-way and utility impacts on one side of the road completely. For the bridge replacement just south of Landover Drive, overhead utilities exist along the east side of LA 447. We will propose replacing the bridge at an offset alignment to the west, allowing us to fully maintain traffic on the existing structure during construction. While right-of-way may need to be acquired along the field and wooded area to the west, we will totally avoid overhead utility relocation and right-of-way acquisition on the east, which will be a far more cost effective and practical solution than symmetrical widening.

We plan to investigate each curve and segment of roadway with potential rightof-way and utility impacts in mind, all while ensuring that any design we come up with also conforms with AASHTO Green Book geometric requirements. We will be strategic in our mitigation of impacts. The most important factor for our design will be safety, and ensuring that we exceed all design requirements for the corridor in developing a smooth, easily drivable roadway which meets driver expectations.

Bridge Design

Bridge Recall No. 056780 is a narrow 2-lane structure that must be reconstructed to accommodate the widened roadway. Partial width construction will allow for maintaining traffic during construction while minimizing right-of-way impacts. We would propose constructing 2 new lanes of the structure to the west, moving traffic onto the partially completed structure, and then completing the widening portion of the structure within the existing roadway area. Scour and hydraulics do not appear to be an issue at this site. Our design team will work closely with the hydraulics analysis and the roadway team to establish the new bridge profile to accommodate any hydraulics related modifications; however, we do not foresee any major increase required for the vertical alignment of the bridge.

Transportation Management Plan

Transportation Management Plans (TMPs) are required with any significant construction or planned maintenance that will significantly impact traffic patterns in heavily traveled areas. Gresham Smith has been tasked with performing numerous TMPs for construction projects for LADOTD. Some of these TMPs include I-10 Twin Spans ITS Implementation, I-10 Rubblization and Overlay (I-210 to LA 108) and US 90 over I-10 at Lockmoor Bridge. The TMPs have been Level 2 or 4 with interstate lane closures varying from some short term, nighttime lane closures to full mainline lane closures that will extend for months.

The objective of this TMP is to identify the challenges and outline strategies that will be implemented to minimize impacts to the traveling public due to traffic delays associated with lane closures, demand volumes and incidents

during construction of this project. This TMP will also identify the roles and responsibilities of the project stakeholders prior to and during construction.

It is anticipated that this project will require a level 2 TMP, in accordance with LADOTD's EDSM on TMPs, and it is also anticipated that a single lane in each direction will be maintained through the project limits during construction with intermittent lane closures required for short durations in order to shift traffic. Through the traffic study and TMP process, potential lane closure times will be evaluated. Any closures will be analyzed, and potential mitigation will be developed to minimize the impact of the construction to the traveling public. Although it is not currently anticipated, if it is deemed necessary to divert traffic to other routes around the work zone, analysis will be performed to the best routes to divert traffic.

CADD Software

While we are expertly familiar with LADOTD's current software and deliverable standards for electronic plans (Bentley Inroads V8i and Inroads DGN graphics) and that InRoads SS4 and OpenRoads Designer (ORD) are not supported at this time. We are currently monitoring Bentley's upcoming transition from MicroStation and Inroads to ORD and have been in constant contact with LADOTD's CADD Design Group Manager in order to stay up to date on LADOTD's plan for transition to the Bentley's latest software.

As this project is expected to last four years in total, it is virtually guaranteed that some important decisions will need to be made during the design schedule regarding CADD software, and whether the project will be fully designed within the current CADD software or whether there will need to be a transition to the new software. The design of a roundabout already comes with its own unique issues and complexities as it is, and this software transition will enhance it all. This will be a major transition, and something which could have a large impact on both our project design quality and schedule.

Gresham Smith is dedicated to tackling this issue head on in order to prevent budget and schedule delays while maintaining the quality of our work. Brennon and his team have already completed ORD beginner and intermediate training courses. Gresham Smith has also created an ORD Technical Leadership Group within our practice which is comprised of a team experts in ORD. These experts are available to aid our design teams in each state while transitioning plans to ORD software and have done so for DOT projects we have completed in North Carolina, Kentucky and Alabama.

As this project may span four years in total, it is virtually guaranteed that some important decisions will need to be made regarding CADD software, and whether active task orders will be fully designed within the current CADD software or whether there will need to be a transition to the new software. This will be a major transition, and something which could have a large impact on both our project design quality and schedule.

Kickoff Meeting

Due to the complexity of this project, we will hold a pre-design kickoff meeting to discuss project scope and major discussion points. This meeting will consist of members of Gresham Smith's design team, along with representatives from both LADOTD and any local stakeholders.

Preliminary Design

The Preliminary Plan Design process is expected to be comprised of a 30%, 60%, 90%, and 100% submittal. Additionally, a Plan-in-Hand meeting will be held following the 90% Preliminary Plan submittal.

The 30% submittal will consist of the Title Sheet, Proposed Typical Section, and Plan Profile Sheets. Subgrade Soil survey information will be requested of and provided by DOTD at this time. The plans will undergo a geometric review.

The 60% submittal will consist of updated Typical Section and Plan Profile sheets, Drainage Plan Profile sheets along with hydraulic calculations. A design drainage map will be developed and included at this time. The plans will also include geometric details, cross sections, and summary tables. The plans will undergo a hydraulics review.

The 95% submittal will add suggested sequence of construction sheets and suggested temporary erosion control sheets to the plans. This is the first major plan submittal. A Plan-in-Hand meeting and site visit will be scheduled at least three weeks following the submittal. This meeting will be attended by the Gresham Smith Design Team, along with representatives from both LADOTD and any local stakeholders. Any design waivers or design exceptions needed for the project will be submitted at this time. Following the plan in hand, comments will be addressed, and the 100% Preliminary Plans will be completed.

Final Design

Should additional services be authorized by supplemental agreement, and the project receive environmental clearance, the Final Design process is expected to be comprised of a 60%, 95%, 98%, and 100% submittal. All Final Plan submissions will consist of the full plan set.

The 60% Final Plans will undergo a final geometric and drainage review.

The 95% Final Plans are the second major plan submittal of the design process. Gresham Smith will submit a completed Constructability Biddability Review form at this time. Also included is an updated Cost Estimate, Design Report Form, Storm Water Pollution Prevention Plan (SWPPP form), utility conflicts list, completed Contract Time Worksheet and responses to all comments received on previous plan submissions.

The 98% Final Plans will go to the DOTD Contracts & Specifications section for review. The Construction Proposal will be developed at this time. Included with this plan submittal is the updated cost estimate, any needed Design Waiver

request form (signed and sealed) and the Final QA/QC Form. Also, the plans will be sent to the DOTD Plan Quality Unit for a QA/QC Check. The Engineer's Construction Cost Estimate will be finalized at this point.

The 100% Final Plans submittal will consist of furnishing the Full-Size Plan Set. The Plans will be signed, sealed, and dated by the Engineer of Record.

Project Timeline

| Termini | LA 447 be | etween I- | -12 East I | Ramps a | nd Joe N | May Roa | ad | | | | | | | | | | | | | | | | | |
|--|------------|-----------|------------|----------|----------|----------|----------|------------|------------|----------|-----------|-------|----|----|----|----|----|----|----|----|----|----|----|-------|
| Location | Walker, L | A | | | | | | | | | | | _ | | | | | | | | | | | |
| Scope | Corridor \ | Widening | g, Rounda | about De | sign, Br | ridge Re | eplaceme | ent, Inter | section Re | ealignme | ent, Turn | Lanes | - | | | | | | | | | | | |
| Notice to Proceed | TBD | | | | | | | | | | | | - | | | | | | | | | | | |
| Kick-off Meeting | TBD | | | | | | | | | | | | - | | | | | | | | | | | |
| Due Date | TBD | | | | | | | | | | | | - | | | | | | | | | | | |
| Months | 1 | 2 | 3 | 4 | | 5 | 6 | 7 | 8 | 9 | | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22-48 |
| Project Management | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Kick-off / NTP | | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Reports / Schedule Updates | | • | • | • | • | | Ð | • | • | • | • | | | • | • | • | • | • | • | • | • | • | • | • |
| Design Services | | | | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design (30%) - 8 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design (60%) - 12 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design Review (60%) - 4 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design (90%) - 12 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Preliminary Design Review (90%) - 4 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Plan in Hand Inspection | | | | | | | | | | | | • | | | | | | | | | | | | |
| Preliminary Design (100%) - 6 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Final Design (60%) - 4 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Final Design Review (60%) - 4 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Final Design (95%) - 8 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Final Design Review (95%) - 4 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Final Design (98%) - 4 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Final Design Review (98%) - 4 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Final Design (100%) - 2 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Submit for Chief Engineer Review - 4 Weeks | | | | | | | | | | | | | | | | | | | | | | | | |
| Letting - 60 Days | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction Support 2.3 Years | | | | | | | | | | | | | | | | | | | | | | | | |
| Consultant | LADOT | TD Reviev | N | | Mileston | ne | • м | eeting | | | | | | | | | | | | | | | | |

19. Workload:

| Firm | Past Performance Evaluation Disciplines(s) * | State Project Number | Project Name and Location | Remaining unpaid balance** |
|---------------------|---|-------------------------|--|----------------------------------|
| Gresham Smith | Traffic | H.12018.5 | Lafayette Adaptive Traffic Signals | \$128,307 |
| Gresham Smith | CE&I/OV / Road | H.013271.5-2 | LRSP/SRTS Tangipahoa Striping and Signage | \$7,414 |
| Gresham Smith | CE&I/OV / Road | H.012279.5 | LRSP/SRTS Endom Bridge Construction Support Supplement | \$4,326 |
| Gresham Smith | CE&I/OV / ITS | H.011500.6 | Lake Charles ITS Phase 3 | \$4,758 |
| Gresham Smith | CE&I/OV / ITS | H.012381.6 | Fiber Optic Mapping and Management Services - Calcasieu, Jefferson, Orleans, Ouachita, Plaquemines and St. Charles | \$356,855 |
| Gresham Smith | Bridge | H.009730.5 | Complex Bridge Inspection TO#4 | \$154,243 |
| Gresham Smith | Bridge | H.009730.5 | Complex Bridge Inspection TO#5 | \$152,599 |
| Gresham Smith | Road | H.013720.5 | LRSP Signs and Stripping - Bonner Street Bridge Pedestrian Improvements | \$13,899 |
| Gresham Smith | Road | H.013767.5 | LRSP Signs and Stripping - St. Landry and St. Martin Parishes | \$50,674 |
| Gresham Smith | CE&I/OV / Road | H.012527.6 | LRSP/SRTS West Feliciana Signs, Striping and Guardrail Construction Support Supplement | \$3,721 |
| Gresham Smith | CE&I/OV | H.009308.6 | TO#1 New Orleans DPW SRTS Sidewalk Project | \$38,538 |
| T. Baker Smith, LLC | CE&I/OV | H.004113 | LA 3241: LA 435 to LA 40/41 | \$102,556 |
| T. Baker Smith, LLC | CE&I/OV | H.011152 | I-12: US 190 to LA 59 | \$70,805 |
| T. Baker Smith, LLC | Road | H.012812 | US 190 at Northshore and Camp Villere | \$50,200 |
| T. Baker Smith, LLC | Road | H.013988 | LA 534: Bridges (LA 2 to Haynesville) | \$14,175 |
| T. Baker Smith, LLC | Bridge | H.013988 | LA 534: Bridges (LA 2 to Haynesville) | \$6,370 |
| T. Baker Smith, LLC | Environmental | H.013988 | LA 534: Bridges (LA 2 to Haynesville) | \$3,488 |
| T. Baker Smith, LLC | Road | H.013986 | LA 155: Bridges Near Coushatta | \$13,629 |
| T. Baker Smith, LLC | Bridge | H.013986 | LA 155: Bridges Near Coushatta | \$9,452 |
| T. Baker Smith, LLC | Road | H.013995 | LA 507, LA 514, Local: Bayou and CR BRS | \$28,375 |
| T. Baker Smith, LLC | Bridge | H.013995 | LA 507, LA 514, Local: Bayou and CR BRS | \$9,906 |
| T. Baker Smith, LLC | Environmental | H.013995 | LA 507, LA 514, Local: Bayou and CR BRS | \$8,378 |
| T. Baker Smith, LLC | Road | H.013990 | LA 132: Bridges Near Mangham | \$22,552 |
| T. Baker Smith, LLC | Bridge | H.013990 | LA 132: Bridges Near Mangham | \$16,180 |
| T. Baker Smith, LLC | Environmental | H.013990 | LA 132: Bridges Near Mangham | \$3,010 |
| T. Baker Smith, LLC | Road | H.013992 | LA 151: Creek and Relief Bridges | \$9,406 |
| T. Baker Smith, LLC | Bridge | H.013992 | LA 151: Creek and Relief Bridges | \$3,873 |
| T. Baker Smith, LLC | Environmental | H.013992 | LA 151: Creek and Relief Bridges | \$2,026 |
| T. Baker Smith, LLC | Road | H.013199 | Country Estates Dr. Over St. Louis Bayou | \$750 |

| Disciplines(s) *T. Baker Smith, LLCBridgeH.013199Country Estates Dr. Over St. Louis BayouT. Baker Smith, LLCRoadH.014217LA 537: Bridges Near Plain DealingT. Baker Smith, LLCBridgeH.014217LA 537: Bridges Near Plain DealingT. Baker Smith, LLCBridgeH.014217LA 537: Bridges Near Plain DealingT. Baker Smith, LLCEnvironmentalH.014217LA 537: Bridges Near Plain DealingT. Baker Smith, LLCEnvironmentalH.014218LA 2A: Thorny Branch & Indian Creek BrsT. Baker Smith, LLCBridgeH.014218LA 2A: Thorny Branch & Indian Creek BrsT. Baker Smith, LLCEnvironmentalH.014218LA 2A: Thorny Branch & Indian Creek BrsT. Baker Smith, LLCEnvironmentalH.014219LA 507: Creek Bridges Near SimsboroT. Baker Smith, LLCRoadH.014219LA 507: Creek Bridges Near SimsboroT. Baker Smith, LLCBridgeH.014219LA 507: Creek Bridges Near SimsboroT. Baker Smith, LLCEnvironmentalH.014222LA 516: Poland Branch BridgeT. Baker Smith, LLCRoadH.014222LA 516: Poland Branch BridgeT. Baker Smith, LLCBridgeH.014225LA 528: Clark Bayou BridgeT. Baker Smith, LLCRoadH.014225LA 528: Clark Bayou BridgeT. Baker Smith, LLCBridgeH.014225LA 528: Clark Bayou BridgeT. Baker Smith, LLCBridgeH.014225LA 528: Clark Bayou Bridge | Remaining unpaid balance** |
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| T. Baker Smith, LLCRoadH.014222LA 516: Poland Branch BridgeT. Baker Smith, LLCBridgeH.014222LA 516: Poland Branch BridgeT. Baker Smith, LLCEnvironmentalH.014222LA 516: Poland Branch BridgeT. Baker Smith, LLCRoadH.014225LA 528: Clark Bayou BridgeT. Baker Smith, LLCBridgeH.014225LA 528: Clark Bayou BridgeT. Baker Smith, LLCBridgeH.014225LA 528: Clark Bayou Bridge | \$65,437 |
| T. Baker Smith, LLCBridgeH.014222LA 516: Poland Branch BridgeT. Baker Smith, LLCEnvironmentalH.014222LA 516: Poland Branch BridgeT. Baker Smith, LLCRoadH.014225LA 528: Clark Bayou BridgeT. Baker Smith, LLCBridgeH.014225LA 528: Clark Bayou Bridge | \$28,930 |
| T. Baker Smith, LLCEnvironmentalH.014222LA 516: Poland Branch BridgeT. Baker Smith, LLCRoadH.014225LA 528: Clark Bayou BridgeT. Baker Smith, LLCBridgeH.014225LA 528: Clark Bayou Bridge | \$36,253 |
| T. Baker Smith, LLCRoadH.014225LA 528: Clark Bayou BridgeT. Baker Smith, LLCBridgeH.014225LA 528: Clark Bayou Bridge | \$14,823 |
| T. Baker Smith, LLC Bridge H.014225 LA 528: Clark Bayou Bridge | \$8,416 |
| | \$39,003 |
| | \$36,726 |
| T. Baker Smith, LLC Survey H.014225 LA 528: Clark Bayou Bridge | \$5,798 |
| T. Baker Smith, LLC Environmental H.014225 LA 528: Clark Bayou Bridge | \$3,744 |
| T. Baker Smith, LLC Road H.014228 LA 159: Bridges Near Shongaloo | \$111,578 |
| T. Baker Smith, LLC Bridge H.014228 LA 159: Bridges Near Shongaloo | \$38,650 |
| T. Baker Smith, LLC Environmental H.014228 LA 159: Bridges Near Shongaloo | \$45,165 |
| T. Baker Smith, LLC Road H.014231 LA 153: Topy Creek Relief & Drain Brs | \$147,135 |
| T. Baker Smith, LLC Bridge H.014231 LA 153: Topy Creek Relief & Drain Brs | \$83,995 |
| T. Baker Smith, LLC Environmental H.014231 LA 153: Topy Creek Relief & Drain Brs | \$32,628 |
| T. Baker Smith, LLC Road H.014233 LA 160: Cypress Bayou and Relief Bridges | \$46,231 |
| T. Baker Smith, LLCBridgeH.014233LA 160: Cypress Bayou and Relief Bridges | \$36,352 |
| T. Baker Smith, LLCSurveyH.014233LA 160: Cypress Bayou and Relief Bridges | \$9,253 |
| T. Baker Smith, LLC Environmental H.014233 LA 160: Cypress Bayou and Relief Bridges | \$14,902 |
| T. Baker Smith, LLC Road H.014236 LA 3008: Bridges Near Cotton Valley | \$211,736 |
| T. Baker Smith, LLC Bridge H.014236 LA 3008: Bridges Near Cotton Valley | \$115,810 |
| T. Baker Smith, LLC Environmental H.014236 LA 3008: Bridges Near Cotton Valley | \$56,722 |
| T. Baker Smith, LLC Road H.014238 LA 818: Barnet Springs & Creek Bridges | \$85,686 |
| T. Baker Smith, LLC Bridge H.014238 LA 818: Barnet Springs & Creek Bridges | \$51,524 |
| T. Baker Smith, LLC Environmental H.014238 LA 818: Barnet Springs & Creek Bridges | \$22,714 |

| Firm | Past Performance Evaluation Disciplines(s) * | State Project Number | Project Name and Location | Remaining unpaid balance** |
|--|---|-------------------------|--|----------------------------------|
| T. Baker Smith, LLC | Road | H.014239 | LA 589: Lyon Bayou Bridge | \$63,115 |
| T. Baker Smith, LLC | Environmental | H.014239 | LA 589: Lyon Bayou Bridge | \$16,338 |
| T. Baker Smith, LLC | Road | H.014264 | LA 556: Bridges Near Choudrant | \$274,074 |
| T. Baker Smith, LLC | Bridge | H.014264 | LA 556: Bridges Near Choudrant | \$158,249 |
| T. Baker Smith, LLC | Environmental | H.014264 | LA 556: Bridges Near Choudrant | \$79,059 |
| T. Baker Smith, LLC | Other (SUE) | H.003931.5 | Calcasieu River Bridge | \$89,857 |
| T. Baker Smith, LLC | Other (SUE) | H.012541.5 | LA 594: Overpass I-20 | \$11,449 |
| T. Baker Smith, LLC | Other (SUE) | H.003931.5 | Calcasieu River Bridge Phase 2 | \$17,135 |
| T. Baker Smith, LLC | Other (SUE) | H.003931.5 | Calcasieu River Bridge Phase 3 | \$158,043 |
| T. Baker Smith, LLC | Other (SUE) | H.003931.5 | Calcasieu River Bridge UC and Test Holes | \$603,937 |
| T. Baker Smith, LLC | Other (SUE) | H.014554.5 | LA 3025: Coulee Mine Scour Repair | \$14,059 |
| T. Baker Smith, LLC | Survey | H.009892.5 | LDRR (New Iberia) US 90 FR | \$68,238 |
| Crescent Engineering and Mapping, LLC | N/A | N/A | N/A | N/A |
| La Terre Engineering | N/A | N/A | N/A | N/A |



Page 63 of 74 Prime consultant firm: Gresham Smith



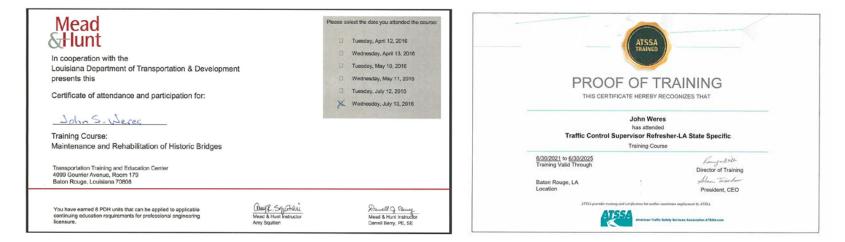


















Office of the Secretary PO Box 94245 | Baton Rouge, LA 70804-9245 PH: 225-379-1200 | FX: 225-379-1851 John Bel Edwards, Governor Shawn D. Wilson, Ph.D., Secretary

October 5, 2021

La Terre Engineering, LLC. ATTN: Seneca Toussant 343 Third Street, Suite 511B Baton Rouge, LA 70801

Dear Seneca Toussant:

We have received your firm's Disadvantaged Business Enterprise (DBE) and Small Business Element (SBE) annual affidavit. Based on the information which you provided we have concluded that your firm continues to meet the eligibility requirements of our program and remains certified for only the following specific work categories that fall under the listed NAICS codes:

> NC541330-Engineering Services NC541340-Drafting Services NC541620- Environmental Consulting Services C09- Civil Engineering C10- Management C11- Planning C21- Construction Inspections C22- Environmental Engineering C43- Computer Assisted Drafting

Please note that per the federal regulations, suppliers only receive 60% goal credit towards the materials they provide. Also note that A Louisiana Contractor's License is required by any contractor performing work in excess of \$50,000 with the exception of electrical, mechanical and plumbing which are required to have a license if work is in excess of \$10,000. You may contact the State Licensing Board for Contractors at (225) 765-2301 for more information. Your firm's certification will be recognized by all participants of the Louisiana Unified Certification Program. This includes all entities receiving federal transportation funding within the boundaries of our state.

You will be required to submit an annual affidavit with all supporting documents (Business taxes with all attachments, such as 1098, 1099, K-1's and/or W-2's) stating your firm continues to meet the eligibility requirements of the program. An email informing you to submit the necessary documentation will be forwarded to you approximately six (6) weeks prior to your anniversary date of September 30, 2022.

However, should you not receive notification from this office for your annual affidavit, it is your responsibility to contact us. Additionally, you must notify our office immediately regarding any changes which affect the social and economic disadvantage, size, ownership or control of your firm.

isiana Department of Transportation and Development | 1201 Capitol Access Road | Baton Rouge, LA 70802 | 225-379-1200 An Equal Opportunity Employer | A Drug-Free Workplace | Agency of Louisiana.gov | dotd.la.gov

10/14/2020 Print Lookup Details DOTD RTA 为 LOUISIANA UNIFIED CERTIFICATION PROGRAM The Louisiana Professional Engineering and Land Surveying Board has the following information on file: **Disadvantaged Business Enterprise Program (DBE) Small Business Element (SBE)** Name: Public Address: & under the State of Louisiana United Certification Program (LAUCP) Mr. Seneca Toussant La Terre Engineering, LLC. La Terre Engineering, 343 Third Street, Suite 511B Is a Certified Disadvantaged Business Enterprise (DBE) & Small Business Element (SBE) in the folio LLC Baton Rouge,LA 70801 NC541330, NC541340, NC541620 ward NAICS Codes. The online DBE Directory includes a complete list of approved codes Certificate Eligibility: September 2021 to September 2022 License/Certificate Information w/ Supervision is contribute in valid through the above date provided. This from mosts the congoing programmatic sh faction the annual update requirement to remain in good standing as a DBC. This contribution is sub a verification and suspension or revecting based open reasonable cause to before that the from it is Expiration First Issuance Rhonda Wallace License Supervisor(s) Status Date Date Rhonda Wallace, DBE/SBE Program Manager Mr. Seneca Darnell Toussant # PE.0036080 -EF.0006800 ACTIVE 03/19/2020 09/30/2022 Louisiana Department of Transportation & Deve Active

La Terre Engineering, LLC. October 5, 2021 Page 2

The Department has contracted with SJB Group, LLC to provide DBE Supportive Services to all our certified DBE's at no cost to you. This consultant can offer your firm assistance and guidance on areas such as marketing, estimating, bidding, financial preparations, etc. Please feel free to contact Jackie des Bordes or Kenyatta Sparks with the SJB Group, LLC at (225) 769-3400 for any assistance needed to grow your organization

We reserve the right to withdraw this certification, if at any time, it is determined that DBE and SBE certifications was knowingly obtained by the submission of false, misleading or incorrect data. We further reserve the right to request additional information and/or conduct an on-site visit at any time during your certification period.

If further assistance is needed, contact the DBE Certification Unit at (225) 379-1382.

Respectfully.





DBE/SBE Programs Manager



| | LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS) 9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com | |
|-----------------------------|---|-----------------|
| Mr. Seneca Darnell Toussant | | |
| License/Certific | ate Type - Number | Expiration Date |
| PE.0036080 09/30/2023 | | |
| Status: ACt | ive | |

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

Please find our Team's QA/QC Plan in the following pages.



DOTD Project No. 44-24641

LA 447 Corridor

State Project Number H.005734

Bridge Design QC/QA Plan

Meeting our Client's Needs and Expectations for TECHNICAL QUALITY, SERVICE EXCELLENCE, and CONSISTENT PERFORMANCE

July 2022



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| | Gresham Smith WIDP-71 Signing and Sealing Documents | |



1.0 INTRODUCTION TO THE BRIDGE DESIGN QC/QA PLAN

A QC/QA program is an essential component of a successful project. The process, when executed properly by a committed bridge team, will eliminate critical errors and conflicts in the ratings and design and improve plan accuracy and quality. Most importantly, the process promotes confidence in the owner and engineer that the rating, design and construction documents reduce liability and financial risk to them. The LA DOTD's Bridge Design and Evaluation Manual – Revision 9 (updated 8/8/2019) includes the Department's *Policy for Quality Control and Quality Assurance* which establishes the process for all bridge designs performed on LA DOTD projects. This QC/QA Plan has been developed with respect to both the LA DOTD and GRESHAM SMITH policies specifically for the LA 447 Corridor project.

1.1 Alignment of LA DOTD and GRESHAM SMITH'S QC/QA Policies

The LA DOTD policy is well aligned with GRESHAM SMITH's QC/QA program. One key difference in the two policies is that the LA DOTD Bridge QC/QA policy is specific to the design of bridges exclusively, while the GRESHAM SMITH Quality Management System (QMS) is applicable to all disciplines associated with a specific project.

GRESHAM SMITH's commitment to quality is rooted in our desire to meet our clients' needs and expectations for technical quality, service excellence and consistent performance. Quality is a pillar within our overall Practice Excellence model and includes a QMS that is built-in to our processes throughout a project life-cycle.

GRESHAM SMITH is a practice-led organization dedicated to the success of our clients and the development of our employees. Through our QMS, we strive for the continuous improvement of our work practices through the consistent application of established processes for the mutual success of GRESHAM SMITH's clients and the firm. The executive management team is fully committed to our QMS as a means to achieve firmwide operational goals. Our QMS is based on criteria found in the International Standard ISO-9001.

We are committed to accomplishing the following:

- Partnering with our clients to provide them with consistent quality in our deliverables, meeting their needs and expectations, and providing a service experience that results in repeat clients,
- Planning our work so that we deliver on our obligations,
- Providing the tools and processes to our employees to accomplish their work in a consistent and efficient manner,
- Training our employees to meet the requirements of the business and our clients,
- Promoting a practice that fosters collaboration and incorporates innovation,



- Measuring our performance against objectives to confirm we are improving, and communicating results throughout the firm and to our clients,
- Auditing our processes to benchmark new goals, verify compliance through multiple points of feedback, and identify opportunities for improvement,
- Continually improving our QMS to enhance its effectiveness,
- Utilizing a dedicated Quality Director responsible for monitoring the quality system and reporting regularly to the Management Team on the system's implementation, status and effectiveness.

1.2 Responsibility for QC/QA and the LA DOTD's Oversight Role

In conversations with the LA DOTD's staff and from review of the LA DOTD's Bridge QC/QA policy, it is apparent that the primary expectation is that consulting engineers contracting with the LA DOTD take full responsibility for their submittals at all stages of the bridge design process. By the assignment of this responsibility, the LA DOTD's bridge design staff expects to provide oversight on the design process but does not expect to be responsible for the checking of bridge designs and plan documents. Specifically, the LA DOTD's Bridge Task Manager will be responsible for the following project tasks, as described in the LA DOTD's Bridge QC/QA policy:

- Develop the bridge design scope of work, labor estimate, design team personnel requirements, and selection evaluation criteria for preparation of the solicitation.
- Participate in the proposal evaluation committee and the selection of the most qualified design team, evaluating design team qualifications, experience and QC/QA plan.
- Initiate a bridge design/rating kickoff meeting, covering items such as the staffing plan, QC/QA plan, project schedule and budget, share expectations and consultant rating criteria, bridge design criteria, and other project management agenda items per the LA DOTD checklist.
- Review and approve the Design Criteria and TS&L submittals for designs. Coordinate revisions in the Design Criteria with the design team for the project duration.
- Monitor the Design Team's implementation of their QC/QA plan.
- Maintain a Project Log sheet recording all major project activities (Project Meetings, Submittals, LA DOTD Review Comments, Major Decisions, etc).
- Review all Design Team submittals, intended to be a cursory review for constructability, consistency and clarity. These reviews are not intended to be a secondary QC of the Design Team's work.
- Monitor project schedule and milestone deliverables.
- Monitor Design Team effort with respect to scope and budget; process supplemental agreements; monitor claims avoidance.



- Review and approve invoices; verify Design Team staff is consistent with proposal; Review and approve qualifications of replacement staff proposed by the Design Team, if necessary.
- Perform a consultant rating for each formal submittal by the Design Team; share ratings and provide feedback to Design Team.
- Archive final bridge design files.

1.3 Definitions of QC and QA

An understanding of the definition of Quality Control (QC) and Quality Assurance (QA), as well as the responsibilities contained in these processes is an important component of GRESHAM SMITH's QMS and the LA DOTD's Bridge QC/QA policy. These key definitions are summarized below:

- Quality Control (QC): This process involves the procedure of checking the accuracy and consistency of calculations and drawings, detecting conflicts, design errors and omissions, and the procedure for resolution of internal comments, correcting and verification of revisions. Also, specific to bridge design, the process verifies that all bridge components are adequately designed for the specified limit stated in the AASHTO LRFD Bridge Design Specifications and the LA DOTD Bridge Design Manual and Memoranda.
- Quality Assurance (QA): This process involves the review of the QC documents to verify that the Quality Control (QC) procedure has been completed in accordance with GRESHAM SMITH's QMS and the LA DOTD Bridge QC/QA policy. In addition, the QA process verifies that the QC process was effective in preventing design and plan errors and assuring consistency.

1.4 Evidence/Verification of QC and QA Activities

GRESHAM SMITH's QMS fully documents the QC and QA processes for all intermediate and final submittals, providing evidence to the LA DOTD that our design team has executed the QC/QA procedures in accordance with the policy.



2.0 ROLES AND RESPONSIBILITIES

Meeting or exceeding the provisions of the LA DOTD Bridge QC/QA policy, the GRESHAM SMITH QMS requires that the quality control processes be completed for all design disciplines for all submittals. For this Program, as it pertains to QC/QA, the roles and responsibilities of the design team are described below, with identification of specific staff shown in the Organization Chart.

2.1 Quality Assurance Manager

The QA Manager (John Weres, PE) will be responsible for assurance that the QC process has been completed, documented and properly filed in project records. The QA Manager will oversee the communication and training of the QC procedures to the project team, including subconsultants. The QA Manager is responsible for the documentation of this training (sign in sheet, development of the training course) and for filing these documents in the project directory, available for audit. The QA Manager is responsible for certifying that a submittal deliverable has met the requirements of the GRESHAM SMITH QMS and the LA DOTD Bridge QC/QA policy and can be released to the client.

2.2 Original Designers and CADD Design Personnel

The original designers are responsible for preparing original calculations and plan drawings in accordance with the direction provided by the Project Plan and associated pre-planning references and design tools (i.e. – Design Criteria, Technical Task Protocols, Design Tools, Validated Software, etc.). In the QC/QA process, the original designers are responsible for the timely, complete and effective preparation of the calculations and plans, incorporating weekly design coordination directives during the design development. The original designers may be professional engineers or engineering interns.

The original designers are responsible for actively resolving comments received at each level of QC (Discipline, Independent Peer, and Inter-Discipline) and for making the necessary corrections in advance of the next level of QC or QA reviews. All design personnel (Engineering and CADD designers) will be trained in the QC/QA procedures by the Quality Assurance Manager. Evidence of the training (sign in sheets, copy of training course) will be filed in the project directory, available for audit.

2.3 Discipline QC Reviewers

This level of review will be completed by experienced engineers who are responsible for the detailed checking of all calculations, specifications, special provisions and plan documents. For this program, we anticipate this level of review will be performed by GRESHAM SMITH staff or the corresponding subconsultant, as indicated in the organization chart. If the original calculations are prepared by a professional engineer, the Discipline QC reviewer may be either another professional engineer or an

experienced engineering intern. If the original calculations are prepared by an engineering intern, the Discipline Review will be completed by an experienced professional engineer. This approach is in compliance with LA DOTD policy. A LA professional engineer will serve as either the lead design engineer or the QC reviewer.

The Discipline QC reviewer will be responsible for documenting all comments, pursuing resolution with the original designer or detailer and for progressing the QC documents (calculations, plans and QC forms) to completion prior to forwarding to the Independent Peer QC and Inter-Discipline QC reviewers. The Discipline QC reviewers will be trained in the QC/QA procedures by the Quality Assurance Manager. Evidence of the training (sign in sheets, copy of training course) will be filed in the project directory, available for audit.

2.4 Independent Peer QC Reviewers

Independent peer reviews are not anticipated for this project due to the non-complex classification assigned to this project. Should a future supplement or task order require such an evaluation, an amendment to this document will be provided. Standard forms for independent peer reviews are included in the appendix for general reference.

2.5 Inter-Discipline QC Reviewers

This level of review will be completed by Discipline Task Leaders (i.e. – Bridge, Geotechnical, Roadway, MOT, Drainage, Traffic, CADD, etc) who are responsible for an oversight review of the plans intended to identify conflicts between the disciplines and to identify plan consistency issues not identified in the more detailed Discipline QC review. For this project, we anticipate this level of review will be completed by the Discipline Leads, comprising of GRESHAM SMITH and our teaming partners. This level of review is required by GRESHAM SMITH's QMS policy and is not intended to replace the Independent Peer Bridge QC review.

The Inter-Discipline QC reviewer will be responsible for documenting all comments, pursuing resolution with the original designer or detailer and for progressing the QC documents (calculations, plans and QC forms) to completion prior to forwarding to the Quality Assurance Manager for his QA review. All design personnel, including each Inter-Discipline QC reviewer will be trained in the QC/QA procedures by the Quality Assurance Manager. Evidence of the training (sign in sheets, copy of training course) will be filed in the project directory and available for audit.

2.6 Engineer of Record

The Engineer of Record for this project will be assigned by the supervisor or discipline lead on the project team for each task assignment. The Engineer of Record is responsible for the supervision of the calculation, plan and special provision preparation, and is responsible for participation in or oversight of the QC and QA review processes. The Engineer of Record must be licensed to practice engineering in the State of Louisiana; and must have demonstrated experience in the design of



similar structures. In addition to overseeing the calculations and plan submittal thru the QC/QA process, the Engineer of Record is responsible for obtaining the seal and signature of any co-signed sheets in the bridge plans (geotechnical, H&H, etc). The Engineer of Record (EOR) is also responsible for assembling the complete final calculation documents in the format prescribed by the LA DOTD, assuring that all plan sheets include the designer's, design checker's, detailer's and detail checker's initials and for sealing and ensuring special provisions are accurately shown on the construction proposal.

The Engineer of Record will be trained in the QC/QA procedures by the Quality Assurance Manager. Evidence of the training (sign in sheets, copy of training course) will be filed in the project directory, available for audit.

The Engineer of Record for the bridge design related activities for this project is proposed to be Dennis M. Hymel, Jr. P.E., PE, President and Engineering Manager for our bridge subconsultant, Crescent. A separate Engineer of Record may be assigned for a particular task at a later time, but we would consult with DOTD prior to that assignment.



3.0 PRE-PLANNING ACTIVITIES

Both the LA DOTD's and GRESHAM SMITH's QC/QA policies contain careful project execution planning, document control procedures, communication protocols and specific QC and QA procedures.

3.1 Development of the Project Plan

The GRESHAM SMITH team will prepare a Project Plan for distribution to the design team. The plan will contain:

- A project background description and scope summary,
- A design criteria document prepared in compliance with the LA DOTD's checklist. The design criteria document will be submitted to the LA DOTD for review and concurrence,
- Identification of the project team members, organization chart, contact information, and guidance on internal and external communication,
- Identification of all deliverables,
- Project design schedule and task budgets,
- Description of the project directory structure, filing of external communication and file naming conventions, etc.,
- Organization of calculation documents, in compliance with the LA DOTD's QA/QC policy,
- QC and QA procedures, responsibilities and documentation of QC/QA training,
- Specific technical task protocols, design tool templates and design tool validation documentation,
- Templates of all project forms (Letter, Memorandum, Meeting Minutes, Design tool validation forms, Drawing and Calculation QC forms (LA DOTD and GRESHAM SMITH), Quality Assurance forms (LA DOTD and GRESHAM SMITH) to use on the project,
- Description of internal project quality auditing, continual improvement, and client feedback processes.

The project plan is a living document, and will be revised as the design criteria, scope or other internal procedure is revised. As stated in the LA DOTD's QC/QA policy, revisions in the design criteria will be forwarded to the LA DOTD for review and concurrence.

3.2 Project Directory Structure and Bridge Calculation Document Organization

The GRESHAM SMITH QMS policy has established a standardized project directory structure for the documentation of all projects delivered by GRESHAM SMITH. However, this structure may be modified to meet specific requirements of the client and our teaming partners, including the LA DOTD's preferences and file naming requirements as established in the LA DOTD's ProjectWise procedures.

3.3 Development of Technical Task Protocols, Design Tools, and Validation of Software

The design team will prepare technical task protocols for the purpose of documenting and providing detailed direction on specific design tasks. The protocols will provide direction on the specific use of design tools and validated software involved in the completion of the task. The documents will be controlled; revisions to the protocols will be noted by revision number and updated in the Project Plan. All revisions to task protocols will be communicated to design staff. Design Tools (i.e. – Spreadsheets, MathCAD sheets, etc.) will be developed and utilized for specific design calculation functions. All design tools that are prepared will be validated as required by the GRESHAM SMITH QMS, documented, filed and available for audit.

To the extent possible, the design team will select from the pre-approved list of software posted on the LA DOTD Bridge Division website. Before using the pre-approved software, the program will be validated as directed in the GRESHAM SMITH QMS prior to use. For special applications where software not included in the pre-approved list must be used, a synopsis of the software will be provided to the LA DOTD Bridge Design Engineer for approval prior to use. Similar to the pre-approved software, all specialty software will be validated as directed in the GRESHAM SMITH QMS prior to use. It is anticipated that LEAP bridge and MDX will serve as the primary design software with RC-Pier and ConSpan, and /or hand calculations utilized as necessary for various design and analysis components. MIDAS would be utilized for any complex geometry or required finite element analysis, but this is not anticipated for this program.



4.0 QUALITY CONTROL AND QUALITY ASSURANCE REVIEWS

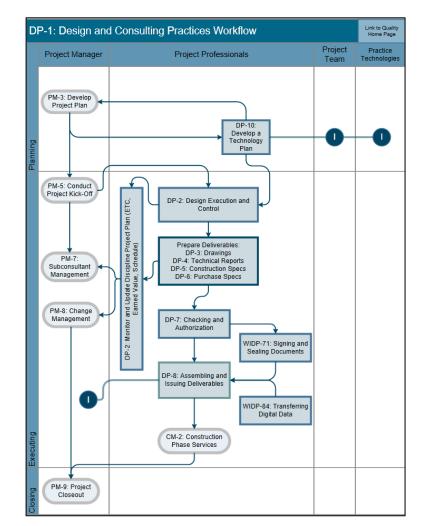
4.1 Design Deliverable Activities

The following are the key anticipated milestones for this project:

- Survey
- Hydraulic Reports
- Pre Plan-in-Hand (Prelim Design)
- Plan-in-Hand
- Post Plan-in-Hand

- Environmental & R/W Requirements
- Pre-Advanced Check Prints
- Advance Check Prints
- Borings or Pile Lengths Reviews
- Final Tracings

Specific expectations for each deliverable are summarized in the LA DOTD Bridge QC/QA policy. Prior to each of the formal submittals, a 3-tiered Quality Control (QC) design review will be performed as well as a Quality Assurance (QA) review. The following flow chart represents the GRESHAM SMITH's design workflow.





4.2 Discipline Level QC Review of Calculations and Drawings

In this first tier of QC review, detailed calculation and drawing review is performed. GRESHAM SMITH's standard Document Checking Process as detailed in Appendix B is supplemented as noted below to blend the standard GRESHAM SMITH process and the DOTD requirements. Preceding the review, design development for the design phase is completed, design activity is in a "pencils down" mode and review sets are produced. In the Discipline QC, each calculation and drawing is thoroughly checked for accuracy, completeness, and for compliance with the project's design task protocols. The reviewer is designated as a senior engineer within the Quality Control Team. The review is documented in the calculations and drawings using a check print stamp and a color-coded mark as indicated below:

- Yellow Confirmed
- Black General comment or suggestion
- Red Correction to be made
- Blue Indicates correction was made
- Green Back check and concurrence with comment or other resolution
- Pink verification by the reviewer that the comment was addressed

Once the Discipline QC review of the calculations is completed, verified and documented using GRESHAM SMITH's-based and LA DOTD-based checklists, the calculations are designated as ready for an independent peer review, as may be appropriate. Similarly, once the Discipline QC review of the drawings is completed, verified and documented using GRESHAM SMITH's-based and LA DOTD-based checklists, the drawings are designated as ready for the Independent Peer QC Review in parallel with an Inter-Discipline QC Review. Issues that cannot be resolved between the Discipline QC reviewer and the original designer will be elevated to the design team leader or deputy project manager for resolution. These processes are described below.

4.3 Independent Peer QC Review of Calculations and Drawings

Refer to Section 2.4 – No Independent Peer Review is anticipated for this project.

4.4 Inter-Discipline QC Review of Drawings

The Inter Discipline Review is a discipline leader and project manager review of the documents; and is intended to be an overall design coordination review to identify potential conflicts in the plans between disciplines (i.e. – Roadway and Geometry, Structures, Drainage, Utilities, Geotechnical, etc.). Preceding the Inter-Discipline review, the Discipline QC review will be completed, design activity is in a "pencils down" mode and a drawing set is produced for review. Similar to the Discipline Review process, comments are provided in black or red, concurrence or other resolution in green, corrections in blue, and verification by the reviewers in pink. Issues that cannot be resolved between



the Inter-Discipline QC reviewer and the original designer will be elevated to the design team leader or deputy project manager for resolution. This review is documented in the Drawing QC checklist form previously discussed.

4.5 Quality Assurance Review of Calculations and Drawings

Once the drawings and calculations have completed the tiered, Discipline QC, Independent Peer QC and Inter-Discipline QC review processes, the submittal is ready for a Quality Assurance review. This review is performed at GRESHAM SMITH by a specifically-trained senior engineer designated to be the Quality Manager for the project. The QA reviewer will examine all documented review materials, including plans, calculations and QC forms for compliance with the GRESHAM SMITH and LA DOTD policies and for completeness. In addition, the QA process verifies that the QC process was effective in preventing design and plan errors and in assuring consistency. Any comments provided by the QA reviewer on the QC process or documentation must be resolved and addressed prior to the QA reviewer approving the design package (plans and calculations) to be submitted.

4.6 Post QA Review Revisions

If for any reason (i.e. – Late inputs or other issue not anticipated) revisions are necessary during or after completion of the QA review, all revisions will be documented on the drawing or calculation check prints and forwarded with revised drawings or calculations to the QA reviewer for a secondary review, prior to submittal.

4.7 Submittal and Filing

Once the QA reviewer has verified that the QC process was completed satisfactorily, they will complete and sign the Document Release Record, allowing the submittal to be released to the client. All calculation, drawing and QC/QA documents will be filed and archived in the project folder, organized and filed by submittal.



5.0 DOCUMENTATION OF COMMENTS/RESPONSES

5.1 Documentation of Internal Comments and Responses

The documentation of all internal comments and resolution will be contained within Discipline QC drawing check prints and forms, calculation review check prints and forms, and in Independent Peer Bridge QC calculation review forms and drawing check prints. Similarly, the documentation of the Inter-Discipline QC comments and resolution will be contained within the drawing check prints and forms. All QC documents will be stored electronically in the project folder and be available for audit.

5.2 Documentation of Client Comments and Responses

At formal submittal client reviews, a comment log will be used to document all comments, by page number. A plan markup may also be provided by the client. The design team will promptly review all comments received and schedule a comment resolution meeting to resolve the comments and set forth an action list to be completed prior to the next formal submittal. Revisions in the action list will be documented on the drawing and calculation Discipline QC review check prints for the next formal submittal.

5.3 Quality Assurance Records

Finally, the documentation of the QA review will be contained within the Document Release Record form at the completion and verification of all QC and QA review activities. All QA documents will be stored electronically in the project folder and be available for audit.



6.0 CONTROL OF SUBCONSULTANT QC PROCESS

GRESHAM SMITH's approach to project management and delivery is to fully incorporate subconsultants and teaming partners into an integrated project team, as opposed to an approach where subconsultants operate independently, with their deliverables "plugged into" the overall formal submittal. Subconsultants are integrated into the project communication process thru weekly project coordination. Individual subconsultant resources are expected to work as an extension of and inclusive with GRESHAM SMITH's staff resources. As such, subconsultants are expected to be fully trained in the GRESHAM SMITH QMS policy and to participate in the Discipline QC and Inter-Discipline QC reviews.

As described previously, all project personnel (including subconsultants) will be trained in both the LA DOTD's Bridge QC/QA policy, as well as GRESHAM SMITH's QMS policy. The training will be done by the Quality Assurance Manager, or designated Project Manager or Deputy Project Manager familiar with and experienced in the LA DOTD's Bridge QC/QA policy or GRESHAM SMITH's QMS policy.



7.0 CLIENT FEEDBACK AND QUALITY AUDITS

7.1 Administrative Oversight and Continuous Improvement

A desired outcome of the GRESHAM SMITH QMS policy is continuous improvement. The process identifies issues where the design team (collectively and individually) can improve design processes and skills. Most importantly, feedback from the client is solicited and incorporated into our process of continuous improvement, for each formal submittal. All project performance issues are discussed internally with the design team in regularly scheduled design coordination meetings throughout the project.

7.2 Internal and External Quality Audits

GRESHAM SMITH's Office of the Risk Management Plan performs independent internal audits of projects to assure that the QC/QA program is being implemented correctly. As all quality records are maintained for each formal submittal in the project directory, all QC and QA documents are available for LA DOTD quality audits at their request.



APPENDIX A – PROJECT PRE-PLANNING GUIDANCE & FORMS

- LA DOTD Design Criteria Checklist
- LA DOTD Project Activity Log Sheet
- LA DOTD Consultant Project Bridge Design Kick-Off Meeting Agenda Checklist
- GRESHAM SMITH PM-2 Assigning Project Roles & Responsibilities (Page 1 of 12)
- GRESHAM SMITH PM-3 Developing/Updating a Project Plan (Page 1 of 9)
- GRESHAM SMITH PMF-11 Project Plan Summary
- GRESHAM SMITH SS-1 Developing a Safety & Security Plan (Page 1 of 10)
- GRESHAM SMITH WIPM-31 Developing a Quality Plan Page (1 of 7)



THE COVER PAGE OF APPLICABLE GRESHAM SMITH PROCEDURES AND POLICIES IS INCLUDED IN THIS DOCUMENT. THE FULL PROCEDURE WILL BE INCLUDED IN THE OPERATIONAL VOLUME OF THE QC/QA PLAN

APPENDIX A-DESIGN CRITERIA CHECKLIST

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

____ Cover sheet

The following information must be included on the cover sheet:

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

Governing Design and Construction Specifications and Other References

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

____ Design Assumptions and Design Exceptions

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

____ General Information

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

- Bridge information (no. of bridges, bridge clear width, length, no. of lanes, lane width, shoulder width, etc.)
- Road information (roadway classifications, design speed, traffic data, etc.)
- Vertical datum
- Vertical and horizontal clearances
- Other relevant information

____ Hydraulic Design Criteria

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

___ Design Factors

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

____ Design Loads

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

____ Limit States

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

____ Bridge Barrier Railing

The design criteria, types, and test levels for bridge barrier railings shall be listed in this section. Standard Plans should be listed if they are utilized.

____ Guardrail

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

____ Approach Slab

Design criteria for approach slab shall be included in this section. Standard Plans should be listed if they are utilized.

____ Deck and Deck Drainage

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

____ Bearing

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

____ Joint

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

____ Superstructure

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

_____ Substructure

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

____ Piles and Drilled Shafts

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

____ Geotechnical Design

All geotechnical design criteria shall be included in this section and the information shall be provided by the Geotechnical Engineer. Standard Plans should be listed if they are utilized.

____ Mechanical Design

All mechanical design criteria shall be included in this section if applicable. Standard Plans should be listed if they are utilized.

____ Electrical/Lighting Design

All electrical design criteria shall be included in this section if applicable. Standard Plans should be listed if they are utilized.

As-Designed Bridge Rating Criteria

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

_____ Software

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

APPENDIX J—PROJECT ACTIVITY LOG SHEET

Project No.:

Project Name:

Bridge Task Manager:

| Date | Project Activity | Comments |
|------|------------------|----------|
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APPENDIX H—CONSULTANT PROJECT BRIDGE DESIGN KICK-OFF MEETING AGENDA CHECKLIST

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

- ____ Introduce LADOTD Bridge Task Manager and the Consultant's Key Team Members (The Supervisor or Team Leader and Key Designers/Design Checkers/Reviewers)
- Discuss Consultant's Staffing Plan and Implementation of QC/QA Plan Document
 (The staffing plan should include names and responsibilities of the designers, detailers, checkers, reviewers, and the EOR.)
- Determine Schedules for Project Submittals
 (Design Criteria, TS & L, 30%, 60%, 90%, 100% of Preliminary Plans and Final Plans, Final Calculations, etc.)
- ____ Share Expectations and Consultant Rating Criteria (Consultant rating will be performed for all project submittals shown on the project submittal schedule.)
- ____ Discuss Design Criteria
- ____ Discuss Budget, Supplemental Requests, Invoices, and Importance of Avoiding Claims (Staff shown on invoices will be reviewed in accordance with the staffing plan.)



Quality Management System

| QMS Process Section: Planning and Managing Work | Revision: 4 Date: 06SEP2018 | Number: PM-2 |
|---|--------------------------------|-----------------|
| Procedure: Project Roles and Responsibilities | Approval: McGormley/Wharton | Page: 1 of 9 |

A. PURPOSE

This procedure and associated exhibits address Gresham Smith's definition of project roles, standard practice for assigning project roles and responsibilities, and the minimum expectations of those individuals assigned a role to assure consistency in completing the responsibilities.

B. SCOPE

- 1. This procedure describes the process for assigning project roles and provides guidance to enable scalable application to suit all Gresham Smith projects.
- 2. This procedure and its associated exhibits define the primary project roles and summarizes general project responsibilities for each role.
- 3. This procedure does not address roles and responsibilities for personnel performing project support roles (e.g., IT, Document Control, etc.), nor does it address personnel performing business operations roles.

Note: Project role names may be labeled differently for external use to match client preferences.

C. DEFINITIONS

- 1. Authority: The assigned power or right to give instructions or make decisions.
- 2. Project Role: The project-specific job description assigned to an employee.
- 3. Responsibility: A functional duty or obligation of an employee or employees by the nature of their assigned project role. Responsibility cannot be shared or delegated.
- 4. Roles
 - a. Assistant Project Manager (APM): The APM position works with project managers (PM) in managing the project from the fee proposal stage through close-out. This position will work with project managers in creating, maintaining and communicating all aspects of the Project Plan, monitoring



Quality Management System

| QMS Process Section: Planning and Managing Work | Revision: 4 Date: 03JUN2019 | Number: PM-3 |
|---|--------------------------------|-----------------|
| Procedure: Developing/Updating a Project Execution Plan | Approval: John Wharton | Page: 1 of 10 |

A. PURPOSE

1. This procedure addresses Gresham Smith's standard practice for planning projects. It identifies all the elements of a well-planned project and identifies how these elements are pulled together into a cohesive plan. This procedure addresses the project activity after award of the project and prior to the kick-off meeting.

B. SCOPE

- 1. This procedure forms the core of the planning process and shows the relationship between the project execution plan and other portions of the "Planning and Managing Work" process.
- 2. This procedure applies to all projects in Gresham Smith. The degree of development of each project execution plan element is intended to be scalable to match the size and complexity of the project.
- 3. Note: The Project Execution Plan is a <u>living document</u>; The PM should update and re-issue the Plan throughout the project duration as changes occur.

C. DEFINITIONS

- 1. Agreement: The contractual instrument between the Client and Gresham Smith.
- Digital Data: AIA E203 defines Digital Data as "information, including communications, drawings, specifications and designs, created or stored for the Project in digital form." The term Digital Data includes the Model, CAD files, Word files, Excel files, and PDF files.
- 3. Qualified Reviewer: A person who has experience <u>directly relevant</u> to the project he/she is being asked to review, <u>and</u> who demonstrates the technical capabilities to perform as a checker. Ideally, the qualified reviewer has designed and/or been in responsible charge of a project very similar in nature, scope and complexity.
- 4. Quality Assurance (QA): Part of quality management focused on providing <u>confidence that quality requirements as defined in our QMS will be fulfilled</u>. It is aimed at preventing errors and building in quality throughout the process. This

Gresham Smith

| Quality Management System | | | | | |
|--|--|---|--------------------------------|--|--|
| QMS Forms: ProjectRevision: 6Number: PMF-31Page: 1 of 1Execution PlanDate: 03JUN2019 | | | | | |
| Project Information | | | | | |
| Project Name/Location: ABC Facility and Site Expansion | | | | | |
| Client: | ABC Company, LLC | | | | |
| Project Manager: | Jones | PX: | Anderson | | |
| Gresham Smith Project Numbe | 12365.05 | Gresham Smith Responsibility: | Prime | | |
| Date Prepared: | 7-Jan-2019 | Revision Date: | | | |
| | Form of Plan/Document: | Describe Location of Plan or | r Details or Link: | | |
| 1 Agreements | | (Overwrite folder link if nece | | | |
| Agreement: Client | Gresham Smith Standard | \ <u>\global.gsp\data\nf\cg_nf02\1236505\04</u> | | | |
| Digital Data Agreement: Client | AIA E203, Digital Model Execution Plan | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\01Agrmnts | | |
| Agreement: Subconsultants | Gresham Smith Standard | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\01Agrmnts | | |
| Digital Data Agrmnt: Subconsultant | AIA E203, Digital Model Execution Plan | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\01Agrmnts | | |
| Digital Data Agrmnt: 3rd Party | Gresham Smith Waiver | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\01Agrmnts | | |
| Amendments/Changes: | Located in Agreements folder | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\01Agrmnts | | |
| Invoicing Process: | Gresham Smith Standard | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\00Financial | | |
| 2 Risk Management Plan | | | | | |
| Risk Management Plan: | See tab RMF41 | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\02RiskMgmt | | |
| 3 Staffing Plan / Roles an | 3 Staffing Plan / Roles and Responsibilities | | | | |
| Staffing Plan: | See tab PMF21 | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\03TeamR&R | | |
| 4 Scope of Services | | | | | |
| Scope of Services: | Scope incorporated into Agreement | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\04Scope | | |
| 5 Schedule and Deliverab | les | | | | |
| Project Schedule: | Located in Schedule folder | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\05Schedule | | |
| Team Meetings: | Every Two Weeks | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\05Schedule | | |
| 6 Budget | | | | | |
| Budget Plan: | Budget Breakdown in Vision | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\06Budget | | |
| Earned Value: | Earned Value in Vision | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\06Budget | | |
| 7 Work Breakdown | | | | | |
| Work Breakdown Structure: | See Vision | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\07WBS | | |
| 8 Quality Plan | | | | | |
| Quality Assurance Plan: | Gresham Smith QMS procedures | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\08Quality | | |
| Quality Control Plan: | See tab PMF32 | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\08Quality | | |
| Subconsultant Quality Plan: | Subs follow our QC Plan | | | | |
| Client Quality Process: | No Special Client Requirements | \\global.gsp\data\nf\cg_nf02\1236505\04 | | | |
| 9 Technology Plan | | | | | |
| Document Management: | Gresham Smith Standard - NewForma | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\09PracticeTech | | |
| Technology Validation Plan: | See tab DPF101 | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\09PracticeTech | | |
| Digital Model Execution Plan | Located in PracticeTech folder | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\09PracticeTech | | |
| 10 Safety & Security Plan | | | | | |
| Safety & Security Plan: | See tab SSF11 | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\10Safety | | |
| 11 Sustainability Plan | | | | | |
| Sustainability Plan: | See tab PMF33 | \\global.gsp\data\nf\cg_nf02\1236505\04 | PM\01ProjPlan\11Sustainability | | |



Quality Management System

| QMS Process Section: Safety and Security | Revision: 1 | Number: |
|--|---------------------------|---------------|
| | Date: 06SEP2018 | SS-1 |
| Procedure: Developing a Safety & Security Plan | Approval: John Wharton | Page: 1 of 10 |

A. PURPOSE

 This procedure documents a Safety & Security Plan and provides the details necessary to support the development of a complete and effective plan. The procedure provides a methodology for the identification of the potential risks, evaluation of the probability and severity of those risks, and potential plans to mitigate or eliminate the risk. The Safety & Security Plan is one of the tools for the Project Manager to plan and execute the project.

B. SCOPE

- 1. This procedure applies to all projects and provides the standard template for capturing all issues related to Safety and Security.
- 2. Safety & Security Management begins during the "Pursuing" phase before a proposal has been submitted and continues throughout the life-cycle of the project. The major efforts will take place during both the Pursuing and Planning phases, after which the efforts will primarily focus on ensuring the plan is followed by the project team, identifying additional risks that may arise, and monitoring for compliance to the plan.
- 3. The intent is to address all elements of the project that are included in our scope including work in the home office, client's site, and construction site. Guidance is provided for typical scenarios, but is not to be considered comprehensive.
- 4. The plan requires the PM to identify issues that are beyond the scope of "typical" hazards for which the majority of our staff will have been trained. These atypical or unusual hazards are to be identified and then a plan must be developed to address how we will work in a safe and secure manner. The PM is not expected to identify every possible hazard.



Quality Management System

| QMS Process Section: Planning and Managing Work | Revision: 3 Date: 03JUN2019 | Number: WIPM-31 |
|---|--------------------------------|--------------------|
| Work Instruction: Developing a Quality Control Plan | Approval: John Wharton | Page: 1 |

A. PURPOSE

1. This work instruction addresses Gresham Smith's standard practice for creating and maintaining a Quality Control Plan.

B. SCOPE

1. This work instruction applies to all projects in Gresham Smith. The degree of development of the Quality Control Plan is intended to be scalable to match the size of the project.

C. DEFINITIONS (See <u>QM-7: Definitions</u>)

- 1. Formal Check: Types of Formal Checking Include: Off-Team Discipline QC Check, Cross-Discipline Coordination (CDC) Check, Constructability Check
- 2. Quality Assurance (QA)
- 3. Quality Control (QC)
- 4. Quality Assurance (QA) Plan
- 5. Quality Control (QC) Plan
- 6. Quality Management System (QMS)
- 7. Roles: Constructability Reviewer (CR), Project Professional (PP), Qualified Reviewer (QR)

Notes:

- If a Market has a listing of designated Qualified Reviewers and Constructability Reviewers, the QR or CR must be from this list.
- Although the QR is not part of the project team, the team is encouraged to inform the QR periodically as significant decisions are made. This will provide valuable context to the QR prior to their review.
- 8. Scope of Services (SOS)
- 9. Self-Check
- 10. Work Breakdown Structure (WBS)



APPENDIX B – DISCIPLINE & INTER-DISCIPLINE QC FORMS

- LA DOTD Final Calculation Book Checklist
- LA DOTD Off-System Guidelines Survey Checklist Not Anticipated
- GRESHAM SMITH DP-7 Checking and Authorization (Page 1 of 13)
- GRESHAM SMITH DP-10 Developing a Technology Plan (Page 1 of 5)
- GRESHAM SMITH DPF-71 QC Check Cover Sheet (Pages 1 & 2 of 2)



THE COVER PAGE OF APPLICABLE GRESHAM SMITH PROCEDURES AND POLICIES IS INCLUDED IN THIS DOCUMENT. THE FULL PROCEDURE WILL BE INCLUDED IN THE OPERATIONAL VOLUME OF THE QC/QA PLAN

APPENDIX B—FINAL CALCULATION BOOK CHECKLIST

The final calculation book for each project shall include, but not limited to, the following sections:

_ Cover Sheet

The following information must be included on the cover sheet:

- LADOTD project number
- Project name
- The title of "Final Calculation Book"
- The EOR's seal with signature and date
- ____ Final Calculation Book Check List
- _____ QC/QA Certifications
- ____ Peer Review Resolution Agreement (if peer review is performed)
- ____ Design Criteria
- Final Hydraulic Analysis Report from Hydraulic Engineer
- ____ Final Geotechnical Analysis Report from Geotechnical Engineer
- ____ Superstructure Design Calculations
- ____ Substructure Design Calculations
- ____ Quantity Calculations
- ____ Special Provisions/NS-Items
- **___** Construction Cost Estimate
- ____ As-Designed Rating Report
- ____ List of All Final Electronic Design Files and File Locations (ProjectWise directory name)

Consultants shall submit the final calculation book to LADOTD bridge task managers; the submittal shall be on a CD or Flash Drive or placed to a designated ProjectWise folder including the following information:

- ____ A PDF File of the Calculation Book (Including the As-Designed Rating Report)
- ____ All Electronic Design Files

____ A PDF File of the As-Designed Rating Report Only

The final calculation book for in-house projects shall include the same files listed above for consultant projects. The final calculation book and other final design documents for all projects including in-house and consultant projects shall be uploaded to the archiving location designated in the record retention policy within 30 calendar days after the stamped final plans are delivered.

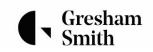
SURVEY CHECK LIST

| PROJECT NO .: | |
|---------------|--|
| PARISH: | |
| DATE: | |
| CHECKED BY: | |

- 1. _____ Minimum of 4 TBMs (one at each end of project & at each bridge end)
- 2. North arrow
- 3. _____ Scale:
- 4. ____ Name of roadway:
- 5. _____ Type of roadway:
- 6. _____ Width of roadway:
- 7. _____ Centerline elevations 2 decimals (Asphalt or Concrete) 1 decimal (Gravel)
- 8. _____ Bearings
- 9. Curve data
- 10. Showing distance to the nearest intersecting roadway on both ends of survey?
- 11. Elevations & plusses of centerline of channel
- 12. Stream traverse shown & stationed where it ties to the survey line
- 13. Structure Number:

14. _____ Description of existing structure in upper right corner?

- 15. Description of existing structure: W- x L-
- 16. # of Spans:
- 17. Type of Bridge:
- 18. Exist. structure dashed/spans in the plan view
- 19. Exist. structure dashed/spans in the profile view
- 20. All existing pipe dashed
- 21. _____ All cross drains shown in profile (dashed) with flow lines
- 22. Pipe diameters shown
- 23. Name of waterway:
- 24. Flow arrows in stream shown
- 25. _____ Type of fence spelled out. # strands of B/W shown? Y N N/A
- 26. Utilities in plan & profile (if buried) shown
- 27. Utility Owners
- 28. Existing / Assumed / Apparent R/W
- 29. _____ Reference Points
- 30. Low Chord Elevation:
- 31. Drainage Map
- 32. Lettering & symbols correct size & weight? Will be legible when reduced to half-size?
- 33. _____ State Project number and Parish name on field book(s) in permanent ink?
- 34. Certification in field book(s)?
- 35. _____ Point listing: numerical order with description, coordinates, elevations?
- 36. Point listing: station & offset, descriptions, elevations?
- 37. _____ Point listing: roadway cross section points; station, offset, elevations?
- 38. _____ Point listing: stream cross section points; station, offset, elevations?
- 39. Plotted roadway and stream cross sections
- 40. Copy of color photos for DOTD file?
- 41. _____ State plane coordinates shown at 2 points (min.) on survey?
- 42. _____ QC/QA Certification



Quality Management System

| QMS Process Section: Design and Consulting Practices | Revision: 2 Date: 06SEP2018 | Number: DP-7 |
|--|--------------------------------|-----------------|
| Procedure: Document Checking and Authorization | Approval: J. Wharton | Page: 1 |

A. PURPOSE

1. Establish minimum requirements for checking and authorizing documents.

B. SCOPE

- 1. The scope of this document applies to technical reports, drawings, technical specifications, calculations, and cost estimates.
- 2. This procedure describes a process for checking documents to ensure quality work has been produced. Proactive efforts are required to produce quality work through daily commitment to the project plans, and close coordination with colleagues, Clients, and external parties.
- 3. All Formal Issue documents REQUIRE an Off-Team Discipline QC Check prior to issue. This check is performed by a Qualified Reviewer who is not part of the project team.
- 4. All Formal Issue documents that involve multiple disciplines REQUIRE the Project Professionals to perform a Cross-Discipline Coordination Check prior to issue.
- 5. Constructability Checks are strongly recommended prior to each Formal Issue, if applicable.
- 6. Informal Issues of Documents For Information Only do not require a formal check.
- 7. The scope of this document <u>includes our subconsultants</u>. Any documents that are produced by others under our prime agreement with the Owner must go through an Off-Team Discipline QC Check (using their own resources to perform the check). Subconsultants must also fully participate in our Cross-Discipline Coordination Check prior to each formal issue. Subconsultants are <u>required</u> to produce a cover sheet DPF-71 as evidence that the check took place and provide the signed copy to the GS&P Project Manager for each Formal Issue.

C. DEFINITIONS

1. Authorization: Individual's signature or initials on a document indicating the document is approved for Formal Issue.



Quality Management System

| QMS Process Section: Design and Consulting Practices | Revision: 2 Date: 06SEP2018 | Number: DP-10 |
|--|--------------------------------|------------------|
| Procedure: Developing a Technology Plan | Approval: J. Wharton | Page: 1 |

A. PURPOSE

1. This work instruction addresses Gresham Smith's standard practice for creating and maintaining a Technology Plan.

B. SCOPE

- 1. This procedure applies to all projects in Gresham Smith.
- 2. The Technology Plan is the minimum requirement; however, many projects will require a Digital Model Execution Plan.
- 3. This procedure addresses the use of the following types of software products:
 - a. Commercially licensed software
 - b. Vendor-supplied software
 - c. Client-supplied or Client-mandated software
 - d. In-house developed software
 - e. Excel Spreadsheets used to impact design or deliverables
 - f. Public domain software
 - g. New Versions/Updates to any of the above
- 4. This procedure does not apply to software that is developed by Gresham Smith for use outside of Gresham Smith. Software developed for external use must be approved by the MVP and CFO.
- 5. This procedure does not apply to technology that is being used only to record data or information. For example, an Excel spreadsheet that is used to create a table of information.

C. DEFINITIONS

- 1. Commercial product: A product available for sale on the commercial market that provides results that we will use to impact our deliverables.
- 2. In-House Developed Software: Software developed by Gresham Smith that is not to be transferred outside of Gresham Smith. (Software developed for transference outside of Gresham Smith requires corporate approval.)

Gresham Smith Quality Management System

| QMS Forms: QC Check Cover Sheet | Revision: 2 | Number: | Page: 1 |
|---------------------------------|-----------------|---------|---------|
| | Date: 06SEP2018 | DPF-71 | |

| Project Information | | |
|-------------------------------|----------------------------|--|
| Project Name/Location: | | |
| Client: | | |
| Project Manager: | PX: | |
| Gresham Smith Project Number: | Date Prepared: | |
| Project Professional: | Discipline: | |
| Submittal Description: | Submittal Date: | |
| Qualified Reviewer: | Constructability Reviewer: | |

| Off-Team Discipline QC Check – Signature Block | | | |
|--|------------|-------|--|
| Action: | Signature: | Date: | |
| Submitted by Project Professional: | | | |
| Checked by Qualified Reviewer: | | | |
| Resolved by Project Professional: | | | |

| Cross-Discipline Coordination Check – Signature Block | | | |
|--|---|---------------------------|---|
| Discipline Designation | Originating PP: Confirm Review (Signature) | Discipline Designation | Originating PP: Confirm Review (Signature) |
| Choose an item. | | Choose an item. | |
| Choose an item. | | Choose an item. | |
| Choose an item. | | Choose an item. | |
| Choose an item. | | Choose an item. | |
| Choose an item. | | Choose an item. | |
| Originating Discipline Resolved and Back-Checked Comments: | | | |
| Resolved By PP: | | Date: | |

| Constructability Check – Signature Block | | | |
|--|------------|-------|--|
| Action: | Signature: | Date: | |
| Submitted by Project Professional: | | | |
| Checked by Constructability Reviewer: | | | |
| Resolved by Project Professional: | | | |

Note: Completed Forms are to be stored digitally in the Newforma Folder: 04PM\01ProjPlan\08Quality

| QMS Forms: QC Check Cover Sheet | Number: DPF-71 | Page: 2 |
|---------------------------------|----------------|---------|
| | | |

| Project Professional's Notes to Reviewer(s) | |
|--|---------------|
| | |
| | |
| | |
| Documents to be Checked in this review (PP to List or Attach List) | |
| Document Name/Description (Drawings, Reports, Specs, Calculations, etc.) | Revision/Date |
| | |
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| Supporting Documents (PP to List or Attach List) | |
|---|---------------|
| Document Name/Description (Design Basis, Code Analysis, AHJ Comments) | Revision/Date |
| | |
| | |
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DOTD Project No. 44-24641 LA 447 Corridor Bridge Design QC/QA Plan

APPENDIX C – INDEPENDENT PEER REVIEW BRIDGE QC FORMS

Not Required for this Bridge Project.



DOTD Project No. 44-24641 LA 447 Corridor Bridge Design QC/QA Plan

APPENDIX D – QUALITY ASSURANCE & DELIVERABLE RELEASE RECORD FORMS

- LA DOTD QA Information Package Checklist
- LA DOTD QC/QA Certification
- LA DOTD Consultant Submittal QC/QA Certification
- GRESHAM SMITH QM-5 Internal Project Auditing (Page 1 of 11)
- GRESHAM SMITH QMF-52 Corrective Action Report Form (Page 1 of 1)
- GRESHAM SMITH WIDP-71 Signing and Sealing Documents (Page 1 of 18)

THE COVER PAGE OF APPLICABLE **GRESHAM SMITH** PROCEDURES AND POLICIES IS INCLUDED IN THIS DOCUMENT. THE FULL PROCEDURE WILL BE INCLUDED IN THE OPERATIONAL VOLUME OF THE QC/QA PLAN

APPENDIX C—QA INFORMATION PACKAGE CHECKLIST

Project No.:

Project Description:

| Calculation Book |
|------------------------|
| Plans |
| Special Provisions |
| Cost Estimate |
| Other Documents |

APPENDIX D—QC/QA CERTIFICATION

Project No.:

Project Name:

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

| Team Members | Name | PE Registration No. | Responsible Plan Sheets | Responsible Special Provisions | Construction Cost Estimate | Signature |
|--------------------------|------|---------------------------|----------------------------|--------------------------------------|----------------------------------|-----------|
| Designers | | | | | | |
| Design Checkers | | | | | | |
| Detailers | | | | | | |
| Detail Checkers | | | | | | |
| Reviewers | | | | | | |
| Peer Reviewer | | | | | | |
| Geotechnical Engineer | | | | | | |
| Hydraulic Engineer | | | | | | |
| EOR | | | | | | |

APPENDIX I—CONSULTANT SUBMITTAL QC/QA CERTIFICATION

Project No.: Project Name:

I, the undersigned Supervisor or Team Leader for this project, certify that the information included in this submittal has been prepared in accordance with the QC/QA plan documents and LADOTD Bridge Design Section policy on QC/QA and the information presented is accurate and meets the requirements of this submittal. All CAD drawings meet LADOTD CAD standards.

Submittal Description

Supervisor or Team Leader Name

Signature

Date



Quality Management System

| QMS Process Section: Quality Management | Revision: 1 Date: 15SEP2017 | Number: QM-5 |
|---|--------------------------------|------------------|
| Procedure: Internal Project Auditing | Approval: John Wharton | Page: 1 of 11 |

A. PURPOSE

To define the steps for internal auditing of projects. Audits are conducted to verify conformance to process definitions, procedures, work instructions, and policies, in order to determine the effectiveness of the Quality Management System.

B. SCOPE

This procedure applies to internal audits only, and covers the complete audit process, from identification of the need for an internal audit, method of conducting an audit, reporting of audit findings, to completion of follow-up on corrective actions.

Internal audits are generally scheduled in advance, but an unscheduled audit may be initiated when a procedure breakdown has been identified, significant quality problem has arisen, or at other times as identified by the Director of Quality or Market Vice President.

C. DEFINITIONS

- 1. Audit Terms:
 - a. Complete: All information is provided and filed properly in the project directory. All form blanks requesting information are addressed, or identified as "Not Applicable". All actions are performed according to the relevant procedure or work instruction.
 - b. Partially Complete: Information is entered that is meaningful for a portion of the document that is being audited, but other relevant parts of the document are incomplete or incorrect.
 - c. Maintained: Documents have been created, and have been updated as the project has changed or evolved with time. For example, the project plan and the 11 modules that supplement the project plan are created at the beginning of the project, and those documents especially schedules frequently require maintenance as things change.



| QMS Process Section: Quality Management | Revision: 2 | Number: |
|---|-------------------|--------------|
| | Date: 06SEP2018 | QMF-52 |
| QMS Forms: Corrective Action Report | Approval: Wharton | Page: 1 of 1 |

| Project Name/Location: | Project Name | | | | | |
|--|------------------------|--------------------|------------------------------|------|--------|----|
| Client Name: | Client Name | | | | | |
| Project Manager: | Name | | PX: | Nam | е | |
| Auditor's Name: | Name | | Gresham Smith Project No: | 0000 | 00.00 | |
| Auditee's Name: | Name | | Gresham Smith Office: | | ose an | |
| Project Phase being audited: | Choose an item. | | Date Prepared: | | า-2017 | |
| Note: Turn on "Review" | "Track Changes" to a | low tracking of Co | omments and Signat | ures | | |
| <u>Auditor's Description of Non-</u> <u>Conformance</u> (Include a list of Project documents that do not conform to QMS Requirements, and list QMS documents that address the requirements) | | | | | | |
| | Comply with Procedur | e, Non-Conforman | ce will be Corrected: | | Yes | No |
| | Recommend a Change | to the Procedure (| Explain Below): | | Yes | No |
| | Other (Explain Below): | | | | Yes | No |
| Auditee Proposed Corrective Action Plan: | | | | | | |
| | Corrective Action Plan | Approved: | | | Yes | No |
| Auditor Response: | Corrective Action Plan | Disapproved: | | | Yes | No |
| Corrective Action Completed (Auditee): | Signature: | | Date: | | | |
| Corrective Action Confirmed (Auditor): | Signature: | | Date: | | | |
| | Follow-up Action Requ | ired: | | | Yes | No |
| | Procedure Revision to | | | | Yes | No |
| Director of Quality Response: | | | | | | |



| QMS Process Section: Design and Consulting Practices | Revision: 1 | Number: |
|--|-----------------|--------------|
| | Date: 06SEP2018 | WIDP-71-EX4 |
| Work Instruction: Signing and Sealing Documents: | Approval: | Page: 1 of 4 |
| Exhibit 4 – Issuing Digitally Certified Documents | Wharton/Munkel | |

Process for Creating "Digitally Certified" Documents

- 1. <u>PP</u>: Before applying seals and signatures, create a "backup" folder and store copies of PDFs to be sealed. The signing process sometimes has glitches and creating a backup can avoid having to re-publish PDFs from CAD.
- 2. <u>PP</u>: Apply the electronic seal image.
 - a. Method 1: Apply the electronic seal image and date in the native format (CAD or Revit) file. Generate the PDF file with the seal embedded. Be sure to use the correct <u>PDF naming convention</u>.
 - Method 2: Apply the electronic seal image in the PDF after the PDF has been generated from the native format (CAD or Revit) file. This is done in Adobe Reader DC using the "Stamp" tool. Select "Tools", then "Stamp". Click on the "Stamp" icon in the top banner. From the drop-down list, select "Seal". If you created a custom stamp (See Exhibit 3), it will appear as an image. Drag the image to the correct location and click to place it.
- <u>PP</u>: Apply the date (If the date was not already placed in the native format file prior to creating the PDF file): In Adobe Reader click "Tools", then click "Comment". Click on the text box symbol I. Then place the text box on the PDF file. The date normally goes below the professional seal, but be sure to check the state



licensing laws and policies to ensure you are complying. Insert the appropriate date in the text box. The box should be formatted with no border.

3. <u>PP</u>: Place the digital signature/certificate on each document:

Note: If you are using the Entrust verification system, insert your USB token with the Entrust Certificate into a USB port now.

Note: The PP <u>must perform a final review of the PDF contents</u> to ensure the PDF is complete and ready for signature.

- a. Open one or multiple PDFs using Adobe Reader DC. Up to about 10 PDF's can be opened at a time.
- b. Zoom / pan to the area in the plan where the seal resides.

| Gresham Smith- Quality Mar | nagement Systen | n |
|--|-----------------|-------------|
| QMS Process Section: Design and Consulting Practices | Revision: 1 | Number: |
| | Date: 06SEP2018 | WIDP-71-EX4 |

Work Instruction: Signing and Sealing Documents:Approval:Page:Exhibit 4 – Issuing Digitally Certified DocumentsWharton/Munkel2 of 4

- c. Click the "Tools" tab and then click the "Certificates" icon. Click "Digitally Sign"
- d. Select the Location of the digital signature: A box will appear. Place the box and resize if necessary to place the signature block in the correct location. The signature normally goes across the professional seal, but be sure to check the state licensing laws and policies to ensure you are complying.



e. Apply the Digital Certificate: A pop up box, "Sign with a Digital ID" will appear. Select the correct digital ID, and hit the "Continue" button. Note: Typically, there will just be one choice, unless you have certificates with both Entrust and IdenTrust.



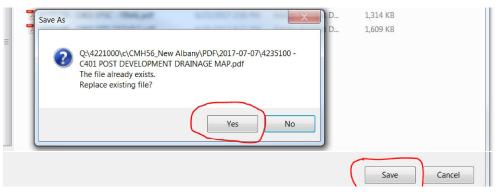
- f. Choose how the signature will appear: Another box "Sign As..." will appear. Select the "appearance" box to make the selection.
 - Method 1: The default signature is the text certificate, and is the more secure method. Below is an example of a text, time and date stamp digital signature.
 Stephen Brown Brown Brown Date: 2017.07.07 15:11:28-05'00'
 - Method 2: If the client, AHJ or State Licensing Board requires a scanned image of a manual signature, click on the drop-down box next to "Appearance" and select the transparent signature image created in the setup process (Exhibit 3).

| Gresham Smith– Quality Ma | nagement Syster | n |
|--|--------------------------------|------------------------|
| QMS Process Section: Design and Consulting Practices | Revision: 1 Date: 06SEP2018 | Number: WIDP-71-EX4 |
| Work Instruction: Signing and Sealing Documents: | Approval: | Page: |
| Exhibit 4 – Issuing Digitally Certified Documents | Wharton/Munkel | 3 of 4 |

- g. The "Sign as "YOUR NAME"" screen will appear. Select "Lock document after signing".
- h. Complete the signing process:
 - i. Enter your password created during the setup process.

| Sign as Jo | hn Doe" | × |
|-------------|------------------------------------|------------------------------------|
| Appearance | Created 2017.12.29 16:05:33 -05' 🗸 | Create Edit |
| | 1/1 |) |
| | Jun 1 | 1000 |
| € Lock docu | ment after signing | View Certificate Detail: |
| | ment after signing | View Certificate Detail: Review |

- ii. Select the "Sign" button.
- iii. The "Save As" Windows dialog will appear. Click the "Save" button.
 Another dialog box will appear asking if you want to replace the existing file. Click "Yes". This will overwrite the original PDF with the new signed, secure version.
- iv. Close the individual PDF (not the Adobe window).



Note: After you save the file, be careful not to click again in the PDF until after the save command is complete which can take a few seconds. Clicking while it is saving can cause you to inadvertently apply two signatures which can frequently crash Adobe Reader DC.

Note: You may will see an error message after the save process competes. This is a glitch that typically has no adverse effects associated with viewing the final secure pdf and can typically be disregarded.

| Gresham Smith– Quality Management System | | | | |
|--|-----------------|-------------|--|--|
| QMS Process Section: Design and Consulting Practices | Revision: 1 | Number: | | |
| | Date: 06SEP2018 | WIDP-71-EX4 | | |
| Work Instruction: Signing and Sealing Documents: | Approval: | Page: | | |
| Exhibit 4 – Issuing Digitally Certified Documents | Wharton/Munkel | 4 of 4 | | |

- 4. <u>PP</u>: Repeat the signing steps with the remaining PDFs. If you keep the active Adobe Reader DC window open during the entire multiple PDF signing process, you will not be prompted to enter your password each time you apply a signature.
- 5. <u>PP or Designee</u>: After the process is complete for multiple sheets, re-open each of the files to verify the signature has been properly applied and the security certificate is valid.
- 6. <u>All PP's: Applying multiple signatures</u>: If multiple signatures are required on a single sheet, for example, a Project Manual cover sheet, each registrant should apply their seal and signature as above, but DO NOT click on "Lock document after signing" as described above. If that box is checked, it will not be possible to add more signatures without invalidating the signatures already in place. Only the last registrant will click on "Lock document after signing".
- 7. <u>PP:</u> Signed documents should always be retained internally in accordance with various state board regulations and GSP document retention policies. Be careful to not delete any securely signed documents. These are considered originals.

<u>Tips:</u>

- Note: If you must apply anything other than your signature in Adobe, do so prior to applying the signature. For example, if the seal or date is left off, it can be applied in Adobe before applying the signature. Once you select "Lock document after Signing", "Sign", and save the file, <u>you cannot make any changes</u> to the document without invalidating the document.
- Non-secure documents such as transmittals can be signed simply using the "Sign" tool in "Fill & Sign". Typically, secure signatures are only needed in sealed documents or other sensitive documents.

| Fill & Sign * | [Ab] X ✓ ○ − ● | 🖧 Sign |) |
|---------------|----------------|--------|---|
|---------------|----------------|--------|---|

REVISION HISTORY

| Rev. No. | Date | Approval | Summary of Changes |
|-------------|-----------|----------|--------------------|
| 1 | 05JAN2017 | Wharton | General Revisions |
| 2 | 06SEP2018 | Wharton | Format Change |

22. Sub-consultant Information:

| Firm Name (as registered with Louisiana's Secretary of State) | Address | Point of Contact and email address | Phone Number |
|--|---|--|--------------|
| T. Baker Smith, LLC | 412 South Van Avenue P. O. Box 2266 (70361) Houma, LA 70363 | Paul Olivier paul.olivier@tbsmith.com | 985.446.7970 |
| Crescent Engineering & Mapping, LLC | P.O. Box 370 Vacherie, LA 70090 | Dennis Hymel dennis.hymel@crescentengla.com | 225.329.1742 |
| La Terre Engineering, LLC | 343 Third Street, Suite 511B Baton Rouge, LA 70801 | Seneca Toussant stoussant@laterre-eng.com | 225.960.1160 |

(Add rows as needed)

23. Location:



Alpharetta, GA Atlanta, GA Baton Rouge, LA Birmingham, AL Charlotte, NC Chattanooga, TN Chicago, IL Cincinnati, OH Columbus, OH Dallas, TX Ft. Lauderdale, FL Jackson, MS Jacksonville, FL Knoxville, TN Lexington, KY Louisville, KY Memphis, TN Miami, FL Nashville, TN Orlando, FL Richmond, VA Suwanee, GA Tallahassee, FL Tampa, FL 10000 Perkins Rowe Suite 280 Baton Rouge, LA 70810 225.757.5849 GreshamSmith.com