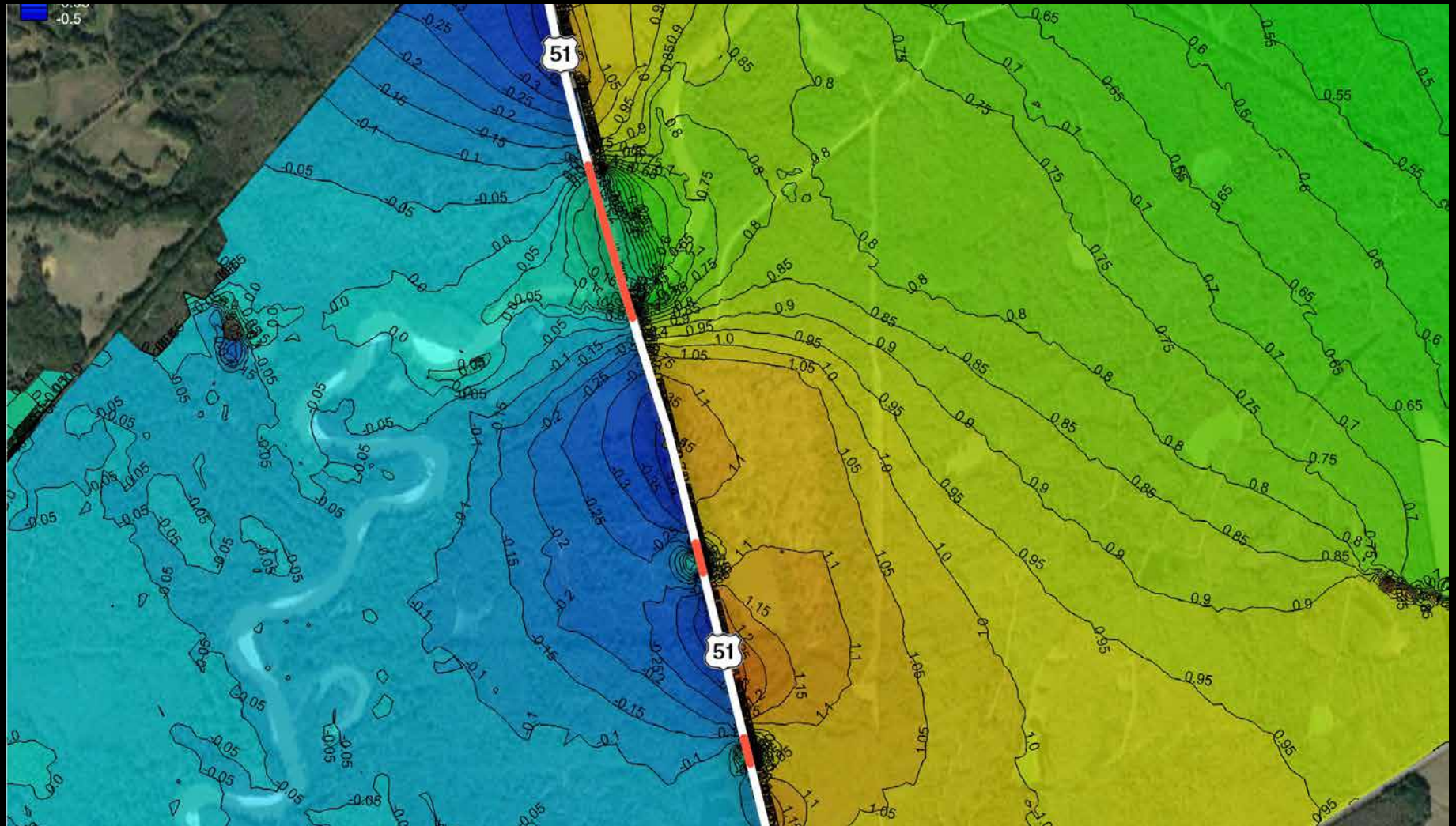




LADOTD

IDIQ Contract for Hydraulics Section Support
Contract No. 4400031035

Statewide, LA | April 15, 2025



Genuine Ingenuity

10000 Perkins Rowe
South Tower - Suite G520
Baton Rouge, LA 70810

225.757.5849
GreshamSmith.com

Gresham Smith

April 15, 2025

Ms. Paulette Territo
Consultant Contract Services Administrator
Department of Transportation and Development
1201 Capitol Access Road, Room 405-E
Baton Rouge, LA 70802

Dear Ms. Territo:

At Gresham Smith, we are honored by the opportunity to continue supporting the Louisiana Department of Transportation and Development (LADOTD) and its mission to deliver safe and resilient infrastructure for the citizens of Louisiana. From our Baton Rouge office—and with support from corporate leadership—we are fully invested in helping LADOTD carry out its responsibilities with efficiency, technical excellence, and genuine partnership.

For this IDIQ contract, Gresham Smith is pleased to propose a dedicated, highly qualified, experienced team with a proven track record in providing comprehensive hydrologic and hydraulic engineering services. Our staff brings proven knowledge, a successful history of performance, and a demonstrated commitment to providing LADOTD with exceptional service across the full spectrum of hydraulic engineering needs.

For 58 years, Gresham Smith has partnered with transportation agencies across the Southeast as a trusted advisor. Our Baton Rouge office is supported by national experts across 26 offices, giving LADOTD access to the depth of resources typical of large national firms, while maintaining the responsiveness and dedicated service of a local partner.

Our team is well-equipped to support LADOTD's Hydraulics Section across multiple task types, including:

- Updating Hydraulics Section Manuals
- HEC-RAS 1D and 2D watershed modeling
- Reviewing NFIP No-Rise applications, CLOMRs, and LOMRs for transportation projects
- Completing 2D bridge hydraulic modeling and scour analysis using SMS
- Performing general hydrologic and hydraulic analyses

Task orders under this contract will be led and managed by Rachel Westerfield, P.E., CFM, a Louisiana-licensed professional engineer (LA #44018) and Certified Floodplain Manager, who brings over 21 years of experience in hydrology and hydraulics for transportation. In 2023, Gresham Smith established a firm-wide Hydraulics Practice led by Rachel to unify talent across the company and deliver consistent, high-quality service to clients like LADOTD.



Key team members supporting this contract include:

- *Rachel Westerfield, P.E., CFM – Project Manager and Lead Design Engineer for Hydrologic and Hydraulic Design Services*
Rachel will lead Hydraulics Section Manual updates and provide oversight of all hydrologic and hydraulic design services, including bridge hydraulic design and scour analysis, as well as NFIP-related tasks such as No-Rise certifications, CLOMRs, and LOMRs. She brings over 21 years of experience, including 14 years with the Mississippi Department of Transportation—six of those as State Hydraulics Engineer—and eight years in the consulting industry. Her combined public and private sector expertise uniquely positions her to lead a cohesive team delivering responsive, innovative solutions tailored to LADOTD's needs.
- *Becky Higgins, P.E., CFM – Lead Design Engineer: Watershed Modeling*
Becky will serve as the lead for HEC-RAS 1D and 2D watershed modeling across this contract. With extensive experience in hydraulic modeling for transportation infrastructure, floodplain studies, and drainage design, Becky excels at developing accurate, efficient models to inform design decisions and support regulatory compliance. Her CFM certification and deep familiarity with FEMA processes ensure effective coordination on NFIP-related efforts.
- *Holly Montgomery, E.I. – Lead Design Engineer: Two-Dimensional Bridge Hydraulic Modeling & Scour Analysis*
Holly will lead two-dimensional bridge hydraulic modeling and scour analysis using the Surface-Water Modeling System (SMS) and SRH2D. With over 10 years of experience, she specializes in two-dimensional hydraulic modeling for transportation infrastructure, with focused expertise applying SMS to simulate complex flow conditions and inform resilient, data-driven design. Her deep experience with this platform ensures accuracy, efficiency, and compliance in support of LADOTD's hydraulic modeling needs.

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. We are fully prepared and available to begin work immediately and look forward to continuing our strong working relationship with LADOTD staff.

Thank you for considering our team. Please don't hesitate to contact me, or reach out directly to our Project Manager, Rachel Westerfield, should you have any questions or need additional information.

Sincerely,

Herbert "Bert" Moore II, P.E., PLS, PTOE
Regional Transportation Leader - Gulf Coast
225.282.2101
bert.moore@greshamsmith.com

Rachel Westerfield, P.E., CFM
Project Manager, Hydraulics Practice Leader
769.524.2631
rachel.westerfield@greshamsmith.com

**Gresham
Smith**

DOTD FORM: 24-102

(Revised December 12, 2024)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

Prime consultant shall complete the DOTD Form 24-102 without altering the Form's text; however, the instruction and/or guidance for Sections 12 through 23 can be removed but do not remove Section title and number.

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

1. Contract title as shown in the advertisement	IDIQ Contract for Hydraulic Section Support Statewide
2. Contract number(s) as shown in the advertisement	4400031035
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (name must match exactly as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; include screenshot from SOS at the end of Section 20)	 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, South Tower - Suite G520, 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, South Tower - Suite G520, Baton Rouge, LA 70810
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Herbert "Bert" Moore, II, P.E., PLS, PTOE Gulf Coast Regional Transportation Leader 225.757.5849 / bert.moore@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 Gulf Coast Regional Transportation Leader 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.

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

11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.

Signature (shall be the same person as #9):



Date: April 15, 2025

Firm(s):
N/A

Firm(s)' %:
N/A

12. Past Performance Evaluation Discipline Table:

Discipline(s)	% of Overall Contract	Gresham Smith (Prime)	Each Discipline must total to 100%
Bridge	10%	100%	100%
Other (Hydrologic and Hydraulic Analysis)	80%	100%	100%
Road	10%	100%	100%
Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.			
Percent of Contract	100%	100%	100%

13. Firm Size:

Firm Name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
Gresham Smith	Clerical	1	1
Gresham Smith	Engineer	2	4
Gresham Smith	Engineer Intern	4	8
Gresham Smith	Engineer - Other	2	4
Gresham Smith	Planner	2	4
Gresham Smith	Principal	1	1
Gresham Smith	Professional	1	4
Gresham Smith	Senior Technician	2	6
Gresham Smith	Supervisor - Eng	2	4
Gresham Smith	Supervisor - Other	2	4
Gresham Smith	Technician	1	4

(Add rows as needed)

14. Organizational Chart:



Prime
Gresham Smith

15. Minimum Personnel Requirements:

MPR No. (Do not insert wording from ad)	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR / certification & number (Ex: PE # - Civil)	State of license	License / certification expiration date
1.	Herbert "Bert" Moore, II, P.E., PLS, PTOE	Gresham Smith	P.E. - 31065 (Civil) PLS - 5043 PTOE - 2728	Louisiana Louisiana International	P.E. Exp. 9/30/2026 PLS Exp. 9/30/2026 PTOE Exp. 9/30/2027
2.	Herbert "Bert" Moore, II, P.E., PLS, PTOE	Gresham Smith	P.E. - 31065 (Civil) PLS - 5043 PTOE - 2728	Louisiana Louisiana International	P.E. Exp 9/30/2026 PLS Exp. 9/30/2026 PTOE Exp. 9/30/2027
3.	Rachel Westerfield, P.E., CFM	Gresham Smith	P.E. – 44018 (Civil)	Louisiana	P.E. Exp 09/30/2025
			P.E. – 18010 (Civil)	Mississippi	P.E. Exp 12/31/2025
	Courtney Rome, P.E.	Gresham Smith	P.E. – 43355 (Civil)	Louisiana	P.E. Exp 9/30/2025
4.	Rachel Westerfield, P.E., CFM	Gresham Smith	P.E. – 44018 (Civil)	Louisiana	P.E. Exp 09/30/2025
			P.E. – 18010 (Civil)	Mississippi	P.E. Exp 12/31/2025
	Courtney Rome, P.E.	Gresham Smith	P.E. – 43355 (Civil)	Louisiana	P.E. Exp 9/30/2025
5.	Rachel Westerfield, P.E., CFM	Gresham Smith	CFM – US-16-08944	United States	N/A
	Becky Higgins, P.E., CFM	Gresham Smith	CFM – US-24-13318	United States	N/A

16. Staff Experience:

Gresham Smith**Herbert "Bert" Moore, II, P.E., PLS, PTOE**

Project Executive

	Herbert “Bert” Moore, II, P.E., PLS, PTOE Project Executive		Years of experience with this firm/employer		10
			Years of experience with other firm(s)/employer(s)		16
Degree(s) / Years / Specialization			Bachelor of Science / 1999 / Civil Engineering, Louisiana State University		
Active registration number / state / expiration date			P.E.0031065 / LA / Exp. 9/30/26 PTOE 2728 / Exp. 9/30/26 PLS 5043 / LA / Exp. 9/30/26		
Year registered			2004(PE); 2009(PTOE); 2010(PLS)	Discipline	P.E. / Civil, PLS, PTOE
Contract role(s) / brief description of responsibilities				Project Executive / Bert will provide overall contract management and direction for our team, and ensure they have the resources necessary.	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
02/17–12/20		LADOTD, SRTS/LRSP Task Order 6 & 21: Endom Bridge, West Monroe, LA <i>Project Executive</i>. Bert was responsible for overseeing the data collection, analyzing the traffic counts to determine appropriate lane configuration and geometry, and support and coordination of overall design.			
03/21–04/24		MSY, Task 4: Entrance Road Capacity, Kenner, LA <i>Senior Transportation Engineer</i>. Gresham Smith provided 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 included 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 (S.P. H.011670). The completed widened road connects the design-build freeway operated by LADOTD to the existing roundabout on the airport property, improving the flow of traffic from MSY.			
04/20–11/22		City of Central (LA), Hooper Road (LA 408) at Sullivan Road (LA 3034) Roundabout Design <i>Project Executive</i>. 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 assisted the team with roundabout analysis, temporary traffic control, and sequencing of construction.			
06/21–01/24		EBR DTD, MoveBR-Plank Road Corridor Enhancement, Baton Rouge, LA <i>Project Executive</i>. Gresham Smith was selected to perform the corridor enhancement of Plank Road between Dawson Drive to Harding Boulevard. This project included a topographic survey, a design study for bicycle and pedestrian facilities, improved drainage, transit facilities, new traffic signals, and street lighting. A design study was completed, followed by the development of final design plans. The project will result in a revitalized corridor with improvements for all users.			
02/22–Ongoing		City of Dallas, Bike Plan Update 2022, Dallas, TX. <i>Senior Traffic Engineer</i>. Gresham Smith was selected to provide planning and engineering services to the City of Dallas to update their Bicycle Master Plan, prepare feasibility studies for specific high priority bicycle facilities, and develop final design plans for specific high priority bicycle facilities. The scope of this			

	project includes updating the City-Wide Bicycle Network to reflect existing conditions, priority destinations or connections, and desired facility types comfortable for a wide range of ages and abilities; ensuring bicycle route feasibility based on City traffic engineering standards and specifications, safety and public input; updating design standards for bicycle facilities based upon identified national, state and local best practices; creating a prioritized and phased implementation plan; and setting a path for incorporating the Dallas Bike Plan in the Thoroughfare Plan, City Code, etc.
04/18–05/19	LADOTD, I-10 TMP West of LA 108 to I-210 Interchange TMP, Lake Charles, LA Project Executive. 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.
10/17–04/18	LADOTD, US 90 Bridge Maintenance over I-10 Ramps, Transportation Management Plan (TMP), Lake Charles, LA Project Executive. 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.
09/17–11/17	LADOTD, SRTS/LRSP Task Order 8: Design Reports for LR West Feliciana Striping, West Feliciana, LA Project Executive. Bert was responsible for support and coordination of design report and QA/QC.
02/16–06/20	LADOTD, SRTS/LRSP Task Order 1: Vidalia Traffic Study, Vidalia, LA Project Manager. Bert worked closely with the local municipality and all stake holders to determine all critical project issues and to develop solutions that could be implemented in a cost-effective project to improve safety and traffic flow.
10/17–05/19	LADOTD, SRTS/LRSP Task Orders 5 & 11: Ouachita Schools Report and Design, Ouachita Parish, LA Project Executive. Bert was responsible for support and coordination and QA/QC of project report and the design plans.
12/17–02/18	LADOTD, SRTS/LRSP Task Order 10: Design Reports for Foster/Greenwell Springs Road Diets and Sidewalks, Baton Rouge, LA Project Executive. Bert was responsible for support and coordination of design report and QA/QC.
09/18–04/21	LADOTD, SRTS/LRSP Task Order 16: Tangipohoa Striping Design, Tangipohoa Parish, LA Project Executive. Bert was responsible for support and coordination of overall design and QA/QC. Bert also assisted by providing his traffic engineering experience for the signing and striping of the road and pedestrian facilities.
Career	Bert is a professional engineer with more than 26 years of experience designing and managing projects in the fields of traffic and transportation engineering. He previously spent six years as the district traffic operations engineer for LADOTD where he was responsible for the daily maintenance and operation of signs, striping and traffic equipment for 2,000 miles of roadway and over 600 traffic signals in the Department's Baton Rouge district. His experience is in traffic operations, traffic control, signal warrants, traffic signal timing and design, safety studies, the implementation of access management principles, temporary traffic control for work zones, Transportation Management Plans (TMP), and bicycle and pedestrian accommodations the roadway network. Bert has been the Project Executive and led the traffic efforts of this contract over the past 8 years.

16. Staff Experience:

Gresham Smith				
	Rachel Westerfield, P.E., CFM Project Manager		Years of experience with this firm/employer	5
			Years of experience with other firm(s)/employer(s)	18
Degree(s) / Years / Specialization		Bachelor of Science / 2002 / Biological Engineering, Mississippi State University		
Active registration number / state / expiration date		P.E.0044018 / LA / Exp. 09/30/2025; ASFPM Certified Flood Plain Manager (CFM) #35861 / 2016		
Year registered		2019 (LA) 2007 (MS)	Discipline	P.E. / Civil
Contract role(s) / brief description of responsibilities			Lead Hydraulic Engineer / Rachel will serve as Project Manager, leading any updates to the Hydraulics Section Manual and overseeing all hydrologic and hydraulic design services. Her responsibilities will include bridge hydraulic design and scour analysis, as well as NFIP-related tasks such as No-Rise certifications, CLOMRs, and LOMRs.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
2003–2017	MDOT, Jackson, MS Hydraulics Division Director – <i>State Hydraulics Engineer</i> . As the Administrator of the Hydraulics Division, Rachel was responsible for management and oversight of the Hydraulics Division which provides hydraulic engineering support for all MDOT Districts statewide. She performed project management and administration duties to ensure the successful completion of hydraulic design for every drop of water that comes in contact with MDOT roadways and bridges in accordance with state and federal regulations. Rachel ensured that proper design and analysis were completed, including one dimensional and two dimensional hydraulic modeling of riverine and bridge systems as well as detailed scour analyses in accordance with state and federal regulations. Also served as a participant representing Mississippi DOT as a selected practice from fourteen invited state DOTs for the NCHRP Project 20-68A, Scan 15-02 <i>Bridge Scour Risk Management</i> in 2016.			
09/18–04/25	GDOT Drainage Design Policy Manual (DDPM), Statewide, GA <i>Senior Hydraulic Engineer/ Technical Writer</i> . Gresham Smith was tasked with developing the GDOT DDPM. Services provided under this task order include complete review and reorganization of the current manual, removing references to any federal policy and procedures and restructuring the manual to be strictly GDOT policy focused that is clear and concise. Deliverables include overall manual structure and outline, work plan, and individual chapter submittals to GDOT for review. Rachel authored and reviewed several chapters of the newly published manual including Design Guidelines and Standards, Hydrology, Culverts, and Bridge Hydraulics.			
01/22–04/24	MDOT, 2021 WA #1 US 51 at Big Black River and Reliefs - Bridge Hydraulic Design Madison and Yazoo Counties, MS <i>Project Manager & QA/QC</i> . Rachel was responsible for the completion of bridge hydraulic design for five existing bridge replacements for the US 51 crossing along the Big Black River floodplain. Gresham Smith completed field reconnaissance, data gathering, SMS/SRH-2D hydraulic models, stream stability analysis, scour calculations, countermeasure design, Hydraulic Report and Bridge Layout Drawings. SMS/SRH-2D were used to determine the most cost efficient bridge waterway opening and scour elevations meeting bridge hydraulic design criteria.			

09/19–08/21	MDOT, 2018 HY WA #3 I-55 Scour Evaluations, Statewide, MS Project Manager & QA/QC. Gresham Smith provided Phase I and II Bridge Scour Evaluations for Beaver Creek, Dickerson Creek, Dye Branch, and West Ditch at I-55 in Pike, Lincoln, Copiah, and Tate Counties, respectively. Rachel was responsible for the completion of Phase I and II Bridge Scour Evaluations per FHWA HEC18 guidance for four sites across the state including 2-D hydraulic models (SRH-2D), scour evaluations, recommendations and report. Phase I qualitative analysis included defining stream characteristics, evaluating land use changes, assessing overall stream stability, and evaluating lateral and vertical stability. Phase II scour analysis included determining velocity and flow distributions; evaluating bed and bank material, watershed sediment, incipient motion, armoring potential, and rating curves; evaluating scour conditions; and calculating scour depths for the existing bridge crossings. Recommendations and findings were provided to MDOT.
06/22–12/23	MDOT, 2021 WA #2 SR 145 over Euclatubba Creek Tributary located 500 feet south of Industrial Park Road, Lee County, MS Project Manager & EOR. Gresham Smith provided a FEMA analysis utilizing HEC-RAS for the crossing of Euclatubba Creek Tributary at SR 145 to determine if the existing box bridge could be extended per Roadway Design plans. Once Gresham Smith determined that the proposed extension would not meet state and federal regulations, alternatives were investigated to determine the best recommendation to replace the existing box. A FEMA No-Rise Certification was provided for a proposed box replacement. Rachel served as the project manager and engineer-of-record for this study.
2023–Ongoing	TDOT, SR 150 Corridor Drainage and Feasibility Study, Weakly County, TN QA/QC Technical Lead Rachel was responsible for the successful completion of a drainage study to investigate flooding problems along SR-150 in Marion County, TN. The study involved completing a complete hydrologic analysis of the watershed as well as completing a two-dimensional hydraulic model using SMS/ SRH-2D to compare pre-project to post-project impacts of the newly constructed corridor. Gresham Smith also provided proposed improvements that could be completed within right-of-way for the corridor to reduce the drainage issues at present.
05/24–02/25	TDOT, Ralston Road over North Fork Obion River and Reliefs, Marion County, TN QA/QC Technical Lead Rachel was responsible for the completion of bridge hydraulic design for five existing bridge replacements for the Ralston Road crossing along the North Fork Obion River floodplain. Gresham Smith completed field reconnaissance, data gathering, SMS/SRH-2D hydraulic models, stream stability analysis, scour calculations, countermeasure design, Hydraulic Report and Bridge Layout Drawings. SMS/SRH-2D were used to determine the most cost efficient bridge waterway opening and scour elevations meeting bridge hydraulic design criteria.
Career	Rachel has over 22 years of drainage experience including eight years of experience as a consultant delivering multiple task orders for on-call IDIQ contracts for drainage design services specializing in Bridge Hydraulics including GDOT, MDOT, TDOT and KYTC. Rachel served on the AASHTO Technical Committee on Hydrology and Hydraulics (ATCHH) from 2012-2017, and also participated in the NCHRP 20-68A “Bridge Scour Risk Management”. Rachel's project expertise includes hydrologic analysis; bridge hydraulic design and reviews including determining the most suitable bridge configurations and alternatives; highway hydraulic design including channels, culverts, and energy dissipators, hydraulic modeling including HEC-RAS and SMS/SRH2D); bridge deck drainage; bridge scour analysis and evaluations (existing and proposed); stream stability and countermeasure design; hydraulic reports including FEMA studies for No-Rise/No-Impact Certifications, CLOMR and LOMR applications; bridge recommendations and plans for conceptual and preliminary submittals, as well as assisting with Drainage Manual development. Rachel has also presented at the National Hydraulic Engineering Conference in 2022 and 2024. Based on her extensive knowledge and experience of hydrology and hydraulics designs as well as best practices in an ever expanding field of drainage, Rachel has implemented an effective QC/QA process to ensure that hydraulic designs meet federal, state and local regulations especially specific policies and procedures as applied to each DOT.

16. Staff Experience:

Gresham Smith

Michael Bywaletz, P.E.
Senior Transportation Engineer

	Michael Bywaletz, P.E. Senior Transportation Engineer		Years of experience with this firm/employer		11
			Years of experience with other firm(s)/employer(s)		36
Degree(s) / Years / Specialization			Bachelor of Science / 1991 / Civil Engineering, University of Central Florida		
Active registration number / state / expiration date			P.E.0050707 / FL / Exp. 02/28/2027; P.E.0028798 / AL / Exp. 12/31/2025		
Year registered			1996 (FL) 2007 (AL)	Discipline	P.E. / Civil
Contract role(s) / brief description of responsibilities				Senior Transportation Engineer / Michael will serve as Senior Technical Advisor. He will provide peer review of 1D and 2D models, bridge hydraulic and scour analyses.	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
08/23–Ongoing		ODOT, Brent Spence Bridge Corridor BSB, Multiple Cities, OH <i>Senior Transportation Engineer</i> . In 2023, Gresham Smith was contracted for Utility Coordination on the Brent Spence Bridge Corridor. This 3.6 billion dollar Progressive Design-Build project starts in Covington, KY, crosses over the Ohio River, and ends outside of downtown Cincinnati. Our team has successfully collaborated with over 50 utility contacts to create utility base files, facilitate high priority relocations, and work with the Walsh Kokosing Design-Build Team, ODOT, and KYTC to avoid major utility infrastructure.			
04/18–03/21		Town of Smyrna, Hydrologic & Hydraulic Study, Smyrna, TN <i>Senior Transportation Engineer</i> . Gresham Smith provided a hydrologic and hydraulic engineering analysis of the existing and proposed Downtown Smyrna area located generally in the area of Hazelwood Drive, US 41/70 and Rotary Soccer Park (Approximately 600+/- acres). This area was subject to localized flooding and this study provided documented analysis that assisted the Town in watershed evaluation, stormwater management planning and also with implementation of best management practices (BMP). Gresham Smith developed sufficient conceptual designs to remediate the localized flooding and engineering opinions of probable cost for the remediation alternatives.			
12/17–01/20		MDOT, 2017 BR WA#2 US51 Bridge Hydraulics, Tilatoba, MS <i>Senior Transportation Engineer</i> . The study produced a report that provided MDOT with a recommended span arrangement based on the velocity, backwater, and proposed minimum finished grade. Michael served on the roadway team for this project by facilitating in establishing roadway profiles, detour alignments and phase A plans.			
Career		Michael has over 35 years of experience managing transportation and hydrological design solutions, MS4, watershed studies and modeling, drainage design and erosion control for DOT, county and municipal projects throughout the southeast. He has been utilized as an expert witness on numerous drainage and erosion control projects in support of clients. Michael has performed investigative field visits to determine source of impact, whether erosion, sedimentation, scour, drainage structure failure, or roadway failure from overtopping and flooding. He has provided peer review of 1D/2D hydrologic and hydraulic models, bridge hydraulics and scour and floodplain studies. Michael is also a GSWCC Level 2 design professional and trainer.			

16. Staff Experience:

Gresham Smith					
	Holly Montgomery Engineering Technician			Years of experience with this firm/employer	5
				Years of experience with other firm(s)/employer(s)	5
Degree(s) / Years / Specialization		Bachelor of Science / 2014 / Civil Engineering, Mississippi State University			
Active registration number / state / expiration date		N/A			
Year registered		N/A	Discipline	Civil	
Contract role(s) / brief description of responsibilities			Engineering Technician / Holly will lead two-dimensional bridge hydraulic modeling and scour analysis using the Surface-Water Modeling System (SMS) and SRH2D		
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).				
07/21–06/24	MDOT, SR 145 at Euclatubba Creek Tributary Bridge Hydraulic Replacement, Saltillo, MS HECRAS Modeling, FEMA Analysis, Hydraulic Reports . Gresham Smith provided a FEMA analysis utilizing HEC-RAS for the crossing of Euclatubba Creek Tributary at SR 145 to determine if the existing box bridge could be extended per Roadway Design plans. Holly completed the HECRAS analysis and bridge hydraulic report for this study				
01/22–06/24	MDOT, US 51 at Big Black Bridge Hydraulic Replacements in Yazoo and Madison County, Pickens, MS SRH2D/SMS Modeling, Scour Analysis, Recommendations, Hydraulic Report . Gresham Smith completed conceptual and preliminary bridge hydraulic design, recommendations and plans for five existing bridges for the US 51 crossing along the Big Black River floodplain utilizing SMS/SRH2D to determine the most cost-effective replacements that met MDOT criteria. Holly completed all aspects of the hydraulic design including SRH2D/SMS modeling, scour analysis, recommendations and plans and hydraulic report for all five bridges along the project.				
11/20–04/24	TDOT, Marion County Drainage Study, Marion County, TN SRH2D/SMS Modeling . Holly completed the two-dimensional hydraulic model using SRH-2D to compare pre-project to post-project impacts, and any proposed drainage improvements that could be completed within right-of-way for the corridor to reduce the drainage issues present.				
03/23–Ongoing	MDOT, SR 245 Chickasaw County 3 Bridge Replacements, Okolona, MS 2D Modeling . Gresham Smith completed the conceptual and preliminary hydraulic design, recommendations, and plans for three existing bridges with separate crossings over Mattubby Creek, Tallabinnela Creek Tributary, and Willgo Creek along SR 245. Utilizing SMS/SRH-2D modeling to identify cost-effective replacement options that met MDOT criteria, Holly led all aspects of the hydraulic design process, including SRH-2D/SMS modeling, scour analysis, design recommendations, plan development, and hydraulic reporting for all three structures.				
Career	Holly's experience includes all aspects of hydrologic analysis and hydraulic design associated with bridge hydraulics and scour analysis. She has extensive experience completing SRH2D/SMS modeling, scour analysis, bridge recommendations, conceptual design reviews using output from SRH2D/SMS, hydraulic reports, and scour evaluations for existing bridges. She is proficient with SRH-2D/SMS, HECRAS, ArcGIS, Microsoft Excel, MicroStation, Hydraulic Toolbox, and HY-8.				

16. Staff Experience:

Gresham Smith				
 Nick Sopchak, P.E. Transportation Engineer	Years of experience with this firm/employer			8
	Years of experience with other firm(s)/employer(s)			4
Degree(s) / Years / Specialization		Bachelor of Science / 2012 / Civil Engineering, University of Georgia		
Active registration number / state / expiration date		P.E.0033620 / MS / Exp. 12/31/2025; P.E.0046571 / GA / 12/31/2025		
Year registered		2023 (MS) 2020 (GA)	Discipline	P.E. / Civil
Contract role(s) / brief description of responsibilities		Transportation Engineer / Nick will support hydrologic and hydraulic analysis for bridge and highway systems, including scour evaluations and FEMA-related studies. His experience includes 1D modeling with HEC-RAS, 2D modeling with SRH-2D, and preparation of technical documentation and final deliverables.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
2017–2020	GDOT, Special Drainage Studies – On-Call, Indefinite Delivery, Indefinite Quantity (IDIQ) Contract, Districts 1,2,4 & 5, GA Hydraulics Engineer. Working for Gresham Smith, Nick has provided hydrologic and hydraulic evaluations, analysis, and recommendation of solutions for persistent drainage issues across four of the State’s seven Districts. Typical projects involved hydrologic analysis for various projects, and hydraulic analysis for culverts, roadways, urban stormwater systems, flooding issues, emergency projects, bridge hydraulic studies, scour analysis, and post-construction BMP design aimed at resolving existing drainage problems.			
10/18–06/20	City of Atlanta Department of Watershed Management, TO #46, Niskey Lake Culvert Replacement Program, Atlanta, GA Hydraulics Engineer. This TO involved a hydrologic and hydraulic evaluation for 19 culverts to provide recommendations to improve stormwater conveyance and to reduce erosion and sedimentation into Niskey Lake.			
03/12–03/15	City of Roswell, Big Creek Parkway Planning, Environmental and Design, Roswell, GA Transportation Engineer. Project responsibilities included the hydrologic analysis and design of the on-site stormwater conveyance. Design of Post-Construction Stormwater BMPs per guidance provided in the Department’s Drainage Design Manual to meet the State’s NPDES Permit requirements for MS4 designated areas. This was accomplished by design and implementation of bioretention basins used to capture and treat direct runoff from impervious areas.			
Career	Nick’s well-rounded range of experience spans urban construction projects, to scope and fee development and stormwater management design relevant to transportation projects. His experience includes bridge and culvert hydraulic studies, floodplain analysis, sustainability practices, drainage system design, utilizing the GDOT Drainage Design for Highway Manual, FHWA Highway Drainage Publications. post-construction stormwater BMP design for MS4 Permit compliance to municipal/state DOTs.			

16. Staff Experience:

Gresham Smith				
	Deanna Walker , CFM Engineering Technician		Years of experience with this firm/employer	1
			Years of experience with other firm(s)/employer(s)	9
Degree(s) / Years / Specialization		Bachelor of Science / 2014 / Civil Engineering, University of Tennessee		
Active registration number / state / expiration date		N/A		
Year registered		N/A	Discipline	Civil
Contract role(s) / brief description of responsibilities			Engineering Technician / Deanna will support bridge hydraulics design and floodplain modeling HEC-RAS, GIS, technical writing, and FEMA submittal review.	
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).			
05/15–12/20	FEMA Region IV, MT-2 Processing, Atlanta, GA <i>Project Engineer</i>. DeAnna was responsible for the review of hydraulic and hydrology modeling used to prepare Letters of Map Revisions for FEMA Regions I, IV, VI, and VIII. Responsibilities included verifying applications adhering to the National Flood Insurance Program (NFIP), coordinating with community officials, submitting applicants, and GIS analysts			
06/18–12/20	North Carolina Floodplain Mapping, North Carolina LOMR Delegation, Atlanta, GA <i>Project Engineer</i>. DeAnna was responsible for reviewing submitted hydraulic and hydrologic modeling for LOMRs and CLOMRs. She supported submitting applicants in revising errors in submitted modeling and final issuance of producing FEMA Flood Insurance Study attachments			
10/17–01/18	FEMA Region I, Massachusetts LiMWA Statewide Update, Atlanta, GA <i>Project Engineer</i>. DeAnna was responsible for updating the Limit of Moderate Wave Action (LiMWA) for LOMRs affected by the statewide update.			
01/18–12/19	FEMA Region IV, Williamson County Floodplain Update Atlanta, GA <i>Project Engineer</i>. DeAnna aided in the development of HEC-RAS modeling and floodplain boundary delineations for Harpeth and Little Harpeth Rivers in Williamson County, Tennessee			
01/24–08/24	Fulton County, Willeo Creek Streambank Stabilization, Atlanta, GA <i>Engineering Technician</i>. DeAnna is responsible for modifying the effective FEMA model for Willeo Creek to achieve a “no-rise” certification for a streambank stabilization project at the Big Creek Water Reclamations Facility.			
01/24–10/24	GDOT, Burke County, SR 56 over Rocky Creek, Atlanta, GA <i>Engineering Technician</i>. DeAnna is responsible for the development of the HEC-RAS model and reporting for Rocky Creek to reflect the bridge replacement over SR 56.			
Career	Deanna currently serves as a bridge hydraulics design engineering technician and reports directly to Rachel in Gresham Smith's Hydraulics Practice Group. She has water resources experience with a focus in floodplain mapping and modeling. She is a detail-oriented individual with a strong engineering knowledge base and work ethic. Prior to joining Gresham Smith, she spent over 9 years developing her skillset as a water resource engineer with specific experience in HEC-RAS, GIS, technical writing and reviewing FEMA submittals.			

16. Staff Experience:

Gresham Smith

Shannon McFadden, E.I.T.
Engineer-in-Training

	Shannon McFadden, E.I.T. Engineer-in-Training		Years of experience with this firm/employer		1
			Years of experience with other firm(s)/employer(s)		0
Degree(s) / Years / Specialization			Bachelor of Science / 2023 / Civil Engineering, University of Tennessee		
Active registration number / state / expiration date			N/A		
Year registered			N/A	Discipline	Civil
Contract role(s) / brief description of responsibilities			Engineer-in-Training / Shannon will support HEC-RAS 1D and 2D watershed modeling, NFIP No-Rise, CLOMR, and LOMR application reviews, 2D bridge hydraulic modeling and scour analysis using SMS, and general hydrologic and hydraulic analysis for transportation projects.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).				
03/23–Ongoing	MDOT, 2021 HY WA#4 SR 245 Chickasaw County 3 Bridge Replacements, Okolona, MS SRH2D/SMS Hydraulic Modeling. Shannon completed a two-dimensional hydraulic model using SRH-2D within the SMS interface to evaluate hydraulic performance and scour potential at the SR 245 crossing of Tallabinela Creek. The model was used to compare bridge replacement options, simulate design storm conditions, assess floodplain impacts, and support the selection of a hydraulically efficient, FEMA-compliant solution.				
02/24–Ongoing	MDOT, 2021 HY WA#5 I-22 Scour Evaluations at Lick Skillet, Gum Creek, Cypress Creek, Bull Mountain Creek and Two reliefs, Itawamba County, MS Hydrologic Analysis, SRH2D/SMS Hydraulic Modeling. Shannon is currently working on the hydrologic analysis as well as the SRH2D/SMS two-dimensional hydraulic modeling for this project.				
Career	Shannon currently serves as a bridge hydraulics and roadway design EIT in Gresham Smith’s Knoxville office and reports directly to Rachel in Gresham Smith’s Hydraulics Practice Group. She is a recent graduate of the University of Tennessee, where she focused her studies on stormwater drainage and culvert design, with extensive research into TDOT drainage requirements. Shannon has experience in CAD Drafting and hydraulic modeling				

16. Staff Experience:

Gresham Smith			
 Becky Higgins, P.E., CFM Senior Engineer	Years of experience with this firm/employer		<1
	Years of experience with other firm(s)/employer(s)		14
Degree(s) / Years / Specialization	Bachelor of Science / Civil Engineering, Michigan Technological University Master of Science / Civil Engineering, University of Minnesota		
Active registration number / state / expiration date	P.E.0090336 / FL / Exp. 02/28/2027; P.E.00139031 / TX / Exp. 06/30/2025		
Year registered	2020 (FL) 2020 (TX)	Discipline	P.E. / Civil
Contract role(s) / brief description of responsibilities		Senior Engineer / Becky will serve as the lead for HEC-RAS 1D and 2D watershed modeling	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).		
04/24–Ongoing	City of Jackson, Jackson Stormwater Condition Assessment and Master Plan, Jackson, TN Hydraulic Engineer. Becky is lead modeler on a comprehensive project including survey, condition assessment field work, HEC-RAS, H&H modeling, and master plan report. Project area includes Cane Creek and Bond Creek basin within the City of Jackson limits. The City of Jackson has no formal database for stormwater infrastructure while experiencing significant flooding.		
01/25–Ongoing	City of Athens -TO#1 Condition Assessment, Master Planning and Stormwater Utility Fee Development, Athens, TN Project Engineer. Gresham Smith is currently assisting the City to upgrade its stormwater management program and utility infrastructure through developing a stormwater master plan by assessing existing infrastructure, identifying deficiencies, and recommending a prioritized list of capital improvement projects through a phased implementation plan. We are currently conducting field survey and review of geodatabase assets, followed by hydrologic and hydraulic modeling of the storm sewer system. The simulations will be used to determine proposed stormwater CIPs that will be ranked and prioritized with City input. For long-term sustainability of the City's stormwater program, Gresham Smith is developing a proposed stormwater utility fee, which will account for system cost of ownership that is fair to its customers and is not overly burdensome to administer. Finally, Gresham Smith is advising the City on selection of an asset management tool that meets City needs for maintaining its system, tracking costs, and assigning work activities.		
Career	Becky is a civil engineer specializing in water resources and hydraulics engineering. Her extensive background includes hydrologic and hydraulic modeling, open and closed roadway drainage design and construction, floodplain management and modeling of FEMA and non-FEMA regulated waterways, BMP design, and sustainable stormwater management. She has continually demonstrated competent design, project delivery, and team management for a multitude of projects for municipal, state, and federal clients.		

16. Staff Experience:

Gresham Smith

Jennifer Hundl, P.E., CFM, EN VSP, LEEP AP
Senior Engineer

 Jennifer Hundl, P.E., CFM, EN VSP, LEEP AP Senior Engineer		Years of experience with this firm/employer		<1
		Years of experience with other firm(s)/employer(s)		17
Degree(s) / Years / Specialization		Bachelor of Science / 2014 / Civil Engineering, University of Houston		
Active registration number / state / expiration date		P.E.109974 / TX / Exp. 09/30/2025; CFM / 2506-13N; EN VSP / 28635		
Year registered		2011 (P.E.) 2013 (CFM)	Discipline	P.E. / Civil
Contract role(s) / brief description of responsibilities			Senior Engineer / Jennifer will support HEC-RAS 1D and 2D watershed modeling, NFIP No-Rise, CLOMR, and LOMR application reviews, 2D bridge hydraulic modeling and scour analysis using SMS, and general hydrologic and hydraulic analysis for transportation projects.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
02/25–Ongoing	KYTC, Statewide Drainage Design Services, Statewide, KY Senior Engineer. Gresham Smith was selected as one of two Statewide Drainage consultants. The honor of being recognized as a drainage practice leader in the state of Kentucky was balanced by the challenge of continuous improvement which we are dedicated to providing safe, cost-efficient and reliable hydraulic design. Even before receiving our first letter agreement, we were engaged in review of formatting for Openroads Drainage flex tables being developed by Tim Robinson. Moving forward, Gresham Smith began work on a committee consisting of KYTC Drainage Branch, Kentucky Transportation Center, and Palmer (the other selected consultant) in an ongoing effort to update KYTC’s Drainage Manual. These two tasks are in support of KYTC’s goal to improve the state of drainage practice in Kentucky.			
02/25–Ongoing	City of Roswell, Atlanta Street Historic Corridor MS4 Stormwater Report, Roswell, GA Senior Engineer. Gresham Smith is working closely with the prime, City, and GDOT to develop preliminary construction plans for the removal of a reversible lane system and replacing it with a four-lane divided roadway through the heart of historic Roswell. The project also supports the needs of the community by including vehicular, pedestrian, bicycle, transit, land use, historical context and aesthetic value in the corridor.			
Career	Jennifer is an experienced Hydrology and Hydraulics engineer, project manager, and industry mentor. Driven by her desire to lead her field and provide understanding of common methodologies, Jennifer uses the latest technology and data to provide informed, accurate, and innovate design for storm water. She is highly organized, meticulous with experience in staff management, project planning, and fiscal management. She has proven experience managing projects through defining and developing budgets, minimizing costs, and tracking and forecasting costs and schedules for projects.			

16. Staff Experience:

Gresham Smith				
	Jake Graves, P.E. Transportation Engineer		Years of experience with this firm/employer	10
			Years of experience with other firm(s)/employer(s)	3
Degree(s) / Years / Specialization		Bachelor of Science / 2014 / Civil Engineering, University of Tennessee Master of Science / 2015 / Environmental and Water Resources, University of Tennessee		
Active registration number / state / expiration date		P.E.00122211 / TN / Exp. 06/30/2025		
Year registered		2019 (TN)	Discipline	P.E. / Civil
Contract role(s) / brief description of responsibilities		Transportation Engineer / Jake will assist with the FEMA No-Rise, CLOMR, and LOMR Applications for Highway and Bridge Projects.		
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).			
01/17–03/21	City of Alcoa, Tesla Boulevard Extension, Alcoa, TN Project Designer . Jake was responsible for roadway corridor design plans, roundabout layout, roadway drainage design, signing & striping, traffic control, erosion control, environmental permitting, & greenway trail design.			
09/22–Ongoing	City of Maryville, Carpenters Grade Road Widening, Maryville, TN Project Designer . The City of Maryville selected Gresham Smith to perform the traffic analysis, intersection study, NEPA document preparation and design of a section of Carpenters Grade Road from Cochran Road to Raulston Road. The project upgrades the typical section to include curb and gutter and the addition of a multi-use path. The addition of pedestrian facilities will directly affect walkability for hundreds of residents as the project termini at Cochran Road is currently a dead end for the City’s sidewalk system. Intersection improvement at the Raultston Road end will reconfigure and signalize the existing five-point type intersection into an intersection that improves safety and efficiency both now and as the surrounding area develops. Jake served as the project designer for all phases of this project.			
12/27–05/18	TDOT, SR 33 (Bridge over South Fork Sycamore Creek) Transportation Investment Report, Work Order #11, Brushy Ridge, TN Project Designer . Jake was responsible for determining the planning level costs, construction phasing, roadway approach impacts, and maintenance of traffic requirements to replace the existing structurally deficient crossing.			
09/17–Ongoing	City of Knoxville, Pleasant Ridge Road Improvements Phase II, Knoxville, TN Project Designer . Improvements to the road as originally designed included a full three-lane typical section and over 2,000 linear feet of large box culvert. The City determined the project would be too costly for the benefit it would realize and decided to explore other options. Upon completion of an EPD report that provided alternatives for select widening to accommodate traffic, the City selected Gresham Smith to design the project through NEPA, design, ROW and construction bidding.			
Career	Jake, a skilled transportation engineer, has a wealth of experience which includes roadway design projects that range from intersection designs, major roadway widening and new alignments. He has designed stormwater management facilities, closed system and open channel conveyance systems for roadways and sites. His expertise and engineering abilities will make him a valuable asset on this project.			

16. Staff Experience:

Gresham Smith

**Elizabeth Bender, E.I.T.**

Engineer-in-Training

Years of experience with this firm/employer

4

Years of experience with other firm(s)/employer(s)

5

Degree(s) / Years / Specialization

Bachelor of Science / Civil Engineering, Texas Tech University
Master of Science / Environmental Engineering, University of TennesseeActive registration number /
state / expiration date

E.I.T.33463 / TN

Year registered

N/A

Discipline

Civil

Contract role(s) / brief description of responsibilities

Engineer-in-Training / Elizabeth will assist with the HEC-RAS 1D and 2D Watershed Modeling.

Experience dates
(mm/yy–mm/yy)Experience and qualifications relevant to the proposed contract; *i.e.*, “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).

04/24–Ongoing

City of Jackson, Jackson Stormwater Condition Assessment and Master Plan, Jackson, TN | Hydraulic Engineer. Elizabeth is lead modeler on a comprehensive project including survey, condition assessment field work, H&H modeling, and master plan report. Project area includes Cane Creek and Bond Creek basin within the City of Jackson limits. The City of Jackson has no formal database for stormwater infrastructure while experiencing significant flooding.

04/21–Ongoing

TDOT, NEPA Studies Statewide, TN | Project Professional. Gresham Smith is currently working with TDOT Environmental Division on a sixth consecutive multi-year NEPA Document preparation contract they have held since June of 2010. Elizabeth is responsible for preparing D-List CEs, PCEs/C-List CEs, Minor TEER Documents, document reviews, Environmental Justice Analysis, and NEPA Document Re-Evaluations. These documents are for flood related land/rock slides in TDOT Regions 1, 2, & 3; stream mitigation projects; railroad crossings, bridge replacements; and road widenings

02/23–08/23

Sumner County, Rolling Acres Subdivision Sidewalks C-List Categorical Exclusion (CE), Sumner County, TN | Project Professional. Elizabeth was responsible for preparing the C-List CE for the Rolling Acres Subdivision project that included replacement and/or rehabilitation of existing sidewalk segments, the installation of sidewalks in gap areas, and upgrading the sidewalks and crosswalks to meet ADA requirements. The approximate total project length is 3,245 feet (0.615 miles).

03/23–Ongoing

Knox County, Gibbs Pedestrian Bridge C-List Categorical Exclusion (CE), Knox County, TN | Project Professional. Elizabeth was responsible for preparing the C-List CE for the Gibbs Pedestrian Bridge project that will construct a pedestrian bridge over State Route (SR) 131 (Tazewell Pike) to provide a separated grade crossing from the Gibbs High School to the Gibbs Elementary School and vice versa.

Career

Elizabeth is a Tennessee State Board of Architectural and Engineering Examiners Certified Engineering Intern with experience consulting and working in the public sector. She is proficient in MicroStation/GEOPAK, StormCAD, HY8, HEC-HMS, HEC-RAS, RIVER-2D and ARCGIS. Elizabeth is also experienced in CIVIL 3D, LAND-FX, SMS/SRH-2D, and OpenRoads. Her graduate work focused on environmental engineering and water resources, with a focus on design and implementation of environmentally responsible infrastructure. She has experience drafting NEPA documentation and permit submittals.

16. Staff Experience:

Gresham Smith

**Courtney Rome, P.E.**

Bridge Engineer

Years of experience with this employer

7

Years of experience with other employer(s)

8

Degree(s) / Years / Specialization

Bachelor of Science / 2009 / Civil Engineering, Southern University and A&M College

Active registration number / state / expiration date

PE.0043355 / LA / Exp. 9/30/25

Year registered

2019 (LA)

Discipline

P.E. / Civil

Contract role(s) / brief description of responsibilities

Bridge Engineer / Courtney will support bridge hydraulic design, including scour analysis

Experience dates (mm/yy–mm/yy)**Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**

06/19–10/23

LADOTD, Complex Bridge Inspections, Statewide, LA | Engineer. As an NHI Certified Bridge Inspector, Courtney performed bridge inspections for various complex bridge structures throughout Louisiana, including steel trusses, concrete structures and moveable bridges.

07/19–Ongoing

TDOT, Complex Bridge Load Ratings, Statewide, TN | Project Engineer. Complex structures were analyzed utilizing finite element methods and CSi Bridge software. The structures load rated consisted of curved steel tub girders, steel arches with steel cables supporting steel floor beam – stringer systems, deck trusses, bascule arched steel truss, steel girder-floor beam-stringer system bridges, steel rigid K-frame bridges, and reinforced concrete rigid k-frames with spliced prestressed girders for center span bridges. The standard structures were analyzed using the AASHTOWare BrR software. Courtney performed QC reviews on the load rating analysis and reports.

06/21–08/21

FLDOT, Florida DEP, Florida Keys Overseas Heritage Trail Historic Bridge Evaluation, Marathon, FL | QA/QC. Florida DEP selected Gresham Smith to inspect and evaluate two historic bridges, the Seven Mile Bridge and the Bahia-Honda Historic Truss. Both structures are closed to traffic.

11/17–01/18

TDOT, Off-System Underwater Bridge Inspections, Statewide, TN | QC Reviewer. Courtney provided quality control reviews for the inspection reports and graphics. The project included over 50 bridges throughout Tennessee

11/17–12/20

MDOT, SR 178 Benton County Bridge Replacements, MS | Engineer. Gresham Smith provided final design (Phase B) services for the replacement of two water crossings on parallel alignment. Both bridges include utilization of prestressed Florida I-Beams (FIB) to maximize span lengths while minimizing structure depths. Courtney performed the deck design and beam design services for a one-span (135-foot) and three-span (80- x 100- x 80-foot) structure and also completed the design of pipe piles for the pier bents.

16. Staff Experience:

Gresham Smith					
	Richard Savoie, P.E. Senior Roadway Engineer		Years of experience with this firm/employer		6
			Years of experience with other firm(s)/employer(s)		40
Degree(s) / Years / Specialization		Bachelor of Science / 1978 / Civil Engineering, McNeese State University			
Active registration number / state / expiration date		P.E.0020936 / LA / 9/30/26			
Year registered		1983 (LA)	Discipline	P.E. / Civil	
Contract role(s) / brief description of responsibilities			Senior Roadway Engineer / Richard will assist with Technical Resources and QA/QC.		
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).				
07/23–05/24	LADOTD, LA 3089 Serv Rd / LA 70 Up Stage 0 Study, Donaldsonville, LA <i>Project Manager</i>. Richard served as Project Manager for this Stage 0 Study that Gresham Smith delivered under our retainer contract for Stage 0 Studies. Richard was responsible for day-to-day operations and overall management of the project. This Stage 0 Study was completed two months ahead of schedule and was completed at nearly \$80,000 under budget.				
12/24–Ongoing	LADOTD, Lafourche Bayou Bridge Stage 0 Study, Raceland, LA <i>Project Manager</i>. Richard is serving as Project Manager for this Stage 0 Study that Gresham Smith is actively developing for LADOTD under our retainer contract for Stage 0 Studies. Richard is responsible for day-to-day operations and overall management of the project.				
05/18–12/21	LADOTD, LA 37: Sullivan Road to Liberty Road Stage 0 Feasibility Study, Baton Rouge, LA <i>QA/QC</i>. Gresham Smith 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. Crash reports were reviewed and evaluated using the LADOTD safety triage and the safety tool box. Traffic analysis will be performed using mainly HCS and Synchro and other software tools as needed. Gresham Smith reviewed historic traffic volumes counts and Trans CAD models and performed an extensive count analyses to develop regional growth rates for the study area. Richard provided QA/QC for the overall study.				
06/21–01/24	EBR DTD, MoveBR-Plank Road Corridor Enhancement Study and Design, Baton Rouge, LA <i>Project Manager</i>. Gresham Smith was selected to perform the corridor enhancement of Plank Road between Dawson Drive to Harding Boulevard. This project included a topographic survey, a design study for bicycle and pedestrian facilities, improved drainage, transit facilities, new traffic signals, and street lighting. The project resulted in a revitalized corridor with improvements for all users. Richard managed the project on a day-to-day basis and leading the coordination with our sub-consultants.				

03/21–04/24	MSY, Task 4: Entrance Road Capacity, Kenner, LA Senior Engineer. Gresham Smith provided 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 included the 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 (S.P. H.011670). The completed widened road connects the design-build freeway operated by LADOTD to the existing roundabout on the airport property, improving the flow of traffic from MSY. Richard performed Quality Control reviews on the final preliminary design submission and is overseeing Quality Control on the final design process.
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-way was acquired at one quadrant of the intersection and Richard is assisting with the coordination between the right-of-way plans and the roadway requirements. Richard performed Quality Control reviews on the final preliminary design submission and is overseeing Quality Control on the final design process.
08/22–Ongoing	City of Gonzales, US 61 Superstreet (Lowes Ave to LA 44), Gonzales, LA Project Manager. Gresham Smith is currently performing the design to convert this section of US 61 to a Superstreet. This design will remove all of the uncontrolled median breaks and replace them with directional median U-Turn or J-Turn with exclusive turn lanes. These J-Turns will be controlled by a 2 phased traffic signal which will only stop one direction of US 61 so that the U-Turns can be made. Additionally, the existing signalized intersection of US 61 at Lowes and US 61 at LA 44 will be converted to Restricted Crossing U-Turns (RCUTs).
08/22–Ongoing	LADOTD, Discretionary Grant Administration, Baton Rouge, LA Project Manager. Gresham Smith is responsible for assisting the Louisiana Department of Transportation and Development in administering discretionary grant funds, as historically, LADOTD has not had much success with securing pursued IIJA funds. Gresham Smith currently stations a Registered Professional Engineer within the DOTD headquarters on a full-time basis, allowing us to have intimate knowledge of the State's funding processes, and quick accessibility to help with coordination efforts. As the consultant, Gresham Smith has streamlined the monitoring of spending and obligation of federal discretionary funds that are awarded to entities within the state and LADOTD. Coordination with FHWA Headquarters and other municipalities is required with this contract, along with drafting scopes for grant application projects. Our team also monitors and assists as needed the Grant Agreement process with local agencies to ensure deadlines are being met.
05/80–02/06	LADOTD, Road Design, Baton Rouge, LA Design Engineer/Project Manager. Richard spent 26 of his 34-year LADOTD career in Road Design. Starting as an EIT 1 progressing to Assistant Road Design Engineer responsible for project management of roadway design by staff and design consultants preparing roadway plans and developing roadway design projects.

17. Firm Experience:

Gresham Smith		Past Performance Evaluation Discipline(s)*		Other (Hydraulics)	
GDOT, Special Drainage Studies				Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	Georgia Department of Transportation		
Project location	Statewide, Georgia	Owner's Project Manager		Drew Martin, P.E.	
Owner's address, phone, email	600 West Peachtree Street, Atlanta, GA 30308 / 404.679.8750 / dmartin@ga.gov				
Services commenced by this firm (mm/yy)		10/17	Total consultant contract cost (\$1,000's)		\$5,500
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)		\$5,500

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

Gresham Smith managed the 2017 GDOT On-Call IDIQ contract and provided consultant services for special drainage studies and construction plans as needed. The special drainage studies include loss of sediment, scour, flooding, turbidity, stream restorations, and water quality as well as preparation for litigation or responding to inquiries.

Gresham Smith managed this GDOT On-Call IDIQ contract and provided consultant services for special drainage studies on as-needed basis. Each task order included scoping projects and tasks and management of team members/subconsultants.

Gresham Smith is currently under an On-Call Indefinite Delivery, Indefinite Quantity (IDIQ) contract with GDOT to provide consultant services for special drainage studies and construction plans as needed. Typical projects include hydrological and hydraulic (H&H) analysis for culverts, flooding issues on state routes, bridge hydraulic studies and scour analysis, and post construction BMP design to resolve existing drainage issues. Professional services are also provided for writing the GDOT Drainage Design Policy Manual, expert witness for issues that involve litigation, and inspection of pipes and culverts.



Gresham Smith's experience in leading this on-call contract includes management of project scope, schedule and budget for the delivery of projects within these GDOT programs. Over the past eight years, Gresham Smith worked closely alongside Office of Design Policy & Support (ODPS) and its Roadway Hydraulics Group to respond to simultaneous tasks and deliver projects. Our team consistently strives for excellence, to meet and exceed the milestones delivery and metric goals. We understand meeting milestones are critical to delivering the Department's program(s), and we are always focused on meeting as many milestones as possible. In the ever-changing GDOT environment, the project delivery goal is constantly being met with challenges. Our staff and resources are well-positioned to tackle any and all unique challenges under this contract. We understand the complexities and are trained to provide problem solving ideas on a daily basis.

Nature of firm's responsibility: Prime

Firm members involved include: Rachel Westerfield, Deanna Walker, Nick Sopchak

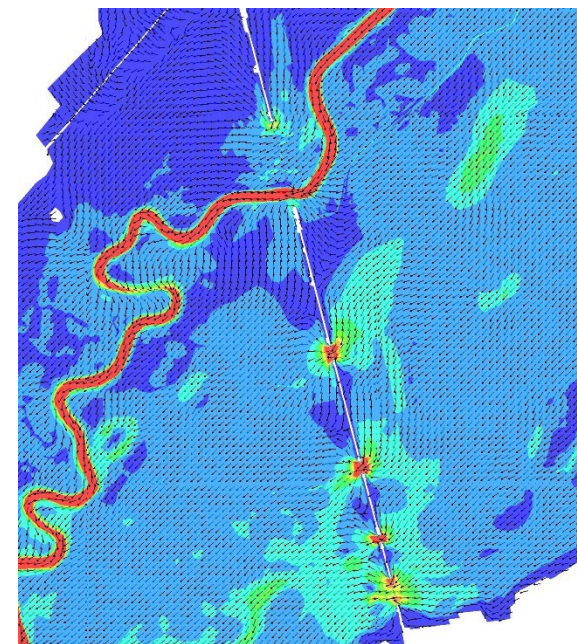
17. Firm Experience:

Gresham Smith		Past Performance Evaluation Discipline(s)*		Other (Hydraulics)	
MDOT, Hydraulic Engineering Services 2021				Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	Mississippi Department of Transportation		
Project location	Statewide, Mississippi	Owner's Project Manager		Amanda Farmer, P.E., CFM	
Owner's address, phone, email	401 North West Street, Jackson, MS 39215 / 601.359.7353 / mnfarmer@mdot.ms.gov				
Services commenced by this firm (mm/yy)		06/21	Total consultant contract cost (\$1,000's)		\$1,588
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)		\$1,588

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

Gresham Smith is currently under an On-Call Indefinite Delivery, Indefinite Quantity (IDIQ) contract with MDOT to provide consultant services for Hydraulic Engineering Services as needed. Typical projects include: bridge hydraulic design including hydrologic and hydraulic analysis of bridge sites, stream stability, channel and stream bank stabilization, bridge deck drainage, one-dimensional and two-dimensional modeling, and scour analysis; phase I-IV scour evaluations of existing bridge sites; FEMA studies and analysis including "No-Rise/No-Impact" Certifications as well as CLOMR applications and LOMR applications; channel and stream stability countermeasures, bridge scour countermeasures, drift protection and any other scour or protective measures as required; hydraulic reports to include all supporting documentation; assist MDOT in determining the most suitable bridge configurations and alternatives considering costs and constructability; roadway hydraulic design including hydrology, channels, culverts, energy dissipators, storm drainage systems, and storage facilities; as well as other hydraulic related services including independent technical reviews, as well as policy and procedural reviews.

Gresham Smith plays a key leadership role in delivering comprehensive hydraulic engineering services under MDOT's On-Call Indefinite Delivery, Indefinite Quantity (IDIQ) contract. Over the past decade, our team has worked closely with MDOT to manage scope, schedule, and budget across multiple, simultaneous task orders—consistently meeting critical milestones and contributing to the success of the Department's programs. Our longstanding partnership with MDOT demonstrates our commitment to responsiveness, quality, and innovation. We support a wide range of services through this contract, including bridge hydraulic modeling (1D and 2D), scour analysis, stream stability assessments, FEMA No-Rise/LOMR/CLOMR submittals, bridge countermeasure design, and roadway drainage systems. In an ever-evolving project environment, we understand the importance of adaptability and proactive problem solving. Our experienced staff and flexible resources are well-positioned to take on complex challenges—delivering consistent, collaborative support to MDOT's Hydraulics Section. Whether developing complex two-dimensional bridge hydraulic models or responding to scour evaluations, we provide forward-thinking solutions that support the Department's mission and delivery goals.



Nature of firm's responsibility: Prime

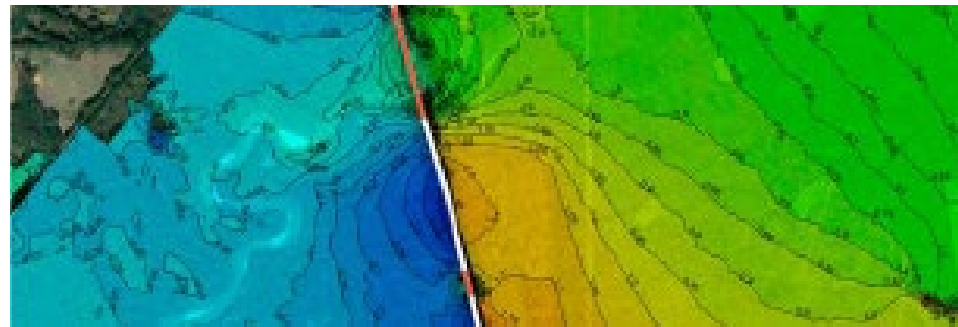
Firm members involved include: Rachel Westerfield, Holly Montgomery, Shannon McFadden, Deanna Walker, Nick Sopchak

17. Firm Experience:

Gresham Smith		Past Performance Evaluation Discipline(s)*		Other (Hydraulics)	
MDOT, US 51 at Big Black River and Reliefs – Bridge Hydraulic Analysis and Recommendations				Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner’s name	Mississippi Department of Transportation		
Project location	Madison and Yazoo Counties, MS		Owner’s Project Manager	Amanda Farmer, P.E., CFM	
Owner’s address, phone, email	401 North West Street, Jackson, MS 39215 / 601.359.7353 / mnfarmer@mdot.ms.gov				
Services commenced by this firm (mm/yy)		01/22	Total consultant contract cost (\$1,000’s)		\$311
Services completed by this firm (mm/yy)		04/24	Cost of consultant services provided by this firm (\$1,000’s)		\$311

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

Gresham Smith completed conceptual and preliminary bridge hydraulic design and recommendations under the MDOT 2021 Hydraulic Master for five existing bridge replacements for the US 51 crossing along the Big Black River floodplain (Bridge Nos. 138.3, 138.4, 138.6, 139.0, and 139.4) in Madison and Yazoo Counties. The project proposed to replace the bridges along the existing alignment, and MDOT will utilize road closures during construction.



Evaluation of the bridge design alternatives considered stream stability, backwater, flow distribution, stream velocities, flood hazards and consistency with established criteria for the National Flood Insurance Program (NFIP). The design process for sizing the bridge waterways included the evaluation of flood flow patterns in the main channel and floodplain for existing conditions compared to unconstricted conditions as well as the evaluation of proposed alternatives for consistency with design objectives.

The SRH-2D model and SMS were used to determine the most cost-efficient bridge replacement span arrangements meeting MDOT criteria. The model limits were established using a coarse SRH-2D model, prior to completing a detailed SRH-2D model to reduce modeling hours. Since the crossing included multiple bridge openings, Gresham Smith ensured that proposed bridge openings were lengthened as necessary along the floodplain in locations with the most conveyance providing the most efficient waterway openings subject to cost benefit ratios.

Nature of firm's responsibility: Prime

Firm members involved include: Rachel Westerfield, Holly Montgomery and Nick Sopchak

18. Approach and Methodology:

Purpose and Need

This contract represents a strategic opportunity to work alongside LADOTD in advancing the state’s hydraulic design framework—refining procedures, aligning practices, and contributing to the shared goal of modernizing drainage policy and guidance. Gresham Smith is honored to support this effort as a trusted partner.

We understand that LADOTD is seeking both technical expertise and forward-thinking support that goes beyond project-specific modeling. By updating the Hydraulics Section Manual, advancing implementation of evolving 2D modeling tools, and ensuring FEMA regulatory compliance, LADOTD is preparing to deliver safer, more resilient drainage infrastructure across the state. Our team is equipped and “ALL IN” on helping bring that vision to reality.

Approach

“ALL IN” for LADOTD

At Gresham Smith, we approach every task knowing it impacts the resiliency of Louisiana’s infrastructure and communities. Our team is “ALL IN” on partnering with LADOTD to deliver hydrologic and hydraulic solutions that are efficient, regulatory-compliant, and rooted in engineering excellence. Whether supporting the bridge design program, updating the Hydraulics Manual, or performing floodplain modeling for FEMA submittals, we bring the full depth of our experience, tools, and commitment to each assignment.

With local leadership and national expertise, our team is prepared to deliver high-quality work across a full range of hydrologic and hydraulic services—2D modeling using SMS/SRH-2D, FEMA application support, bridge scour analysis, culvert and storm sewer design, and manual documentation. Our approach prioritizes ongoing communication, integration with roadway and bridge disciplines, and QA/QC processes that ensure LADOTD receives technically sound, defensible, and efficient solutions.

Gresham Smith brings a dedicated team of hydrologic and hydraulic experts backed by decades of DOT experience and a strong culture of collaboration and quality service. We approach this IDIQ with a full commitment to supporting LADOTD through each task—whether performing advanced 2D bridge modeling, generating FEMA-ready documentation, or updating technical guidance to meet evolving state and federal expectations.

Our collaborative approach includes:

- **Proactive communication** with LADOTD staff to stay aligned on technical, regulatory, and scheduling needs.
- **Engineering leadership** through Rachel Westerfield, P.E., CFM—Hydraulics Practice Leader and former DOT State Hydraulics Engineer.
- **Adaptive tools and processes** that integrate the best of traditional LADOTD methods (e.g., HEC-RAS) with advanced modeling such as SRH-2D and SMS.
- **A deep commitment to modernization**, sharing best practices from national experience and helping LADOTD reduce inefficiencies while increasing clarity in guidance and deliverables.

This contract represents a strategic opportunity to collaborate with LADOTD in strengthening stormwater resilience and modernizing technical documentation. Gresham Smith is proud to contribute to this vision as LADOTD's trusted partner for hydraulic design services.

Methodology

Hydraulics Section Manual Updates

Gresham Smith will lead a thoughtful, technically supported update to the LADOTD Hydraulics Section Manual, recognizing the need to incorporate more modern modeling approaches and remove outdated or redundant content. We bring extensive experience modernizing DOT drainage manuals, including rewriting GDOT's 647-page manual into a simplified and focused 174-page policy document. For LADOTD, our team will:

- Align manual updates with current LADOTD modeling practices (e.g., HEC-RAS 1D/2D, SMS/SRH-2D)
- Cross-reference national resources (HEC-18, HEC-23, etc.) to reduce duplication
- Refine technical language through collaborative technical writing and subject matter review
- Maintain document usability for both LADOTD personnel and external design consultants
- Incorporate quality graphics and formatting to improve accessibility, consistency, and implementation

HEC-RAS 1D and 2D Watershed Modeling

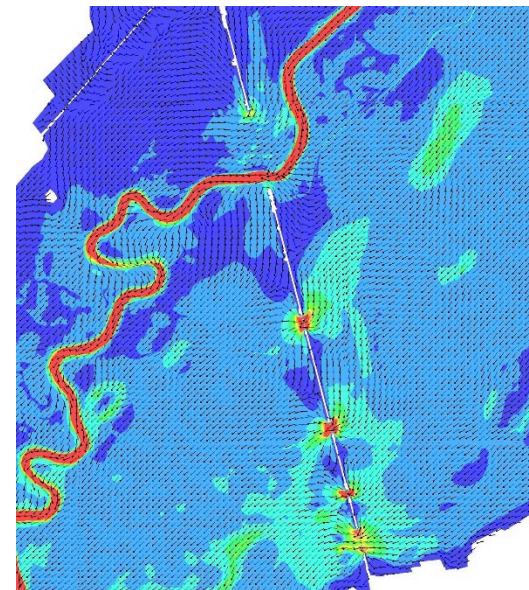
Gresham Smith routinely executes HEC-RAS 1D and 2D modeling for floodplain studies, bridge design, drainage corridors, and emergency relief projects. Our team routinely executes 1D and 2D HEC-RAS modeling for culverts, roadways, and large floodplain systems. We apply:

- 1D models for channelized systems with limited cross-sectional variability
- 2D models and unsteady flow options for complex terrain, split flows, and lateral spreading
- Terrain validation using ground topo, LiDAR, and aerial correlation
- Calibration based on local flood history, field data, or FEMA effective studies
- Complete model documentation prepared in LADOTD and FEMA-acceptable formats

NFIP No-Rise, CLOMR, and LOMR Review and Preparation

We bring extensive FEMA NFIP experience in Louisiana and across FEMA Region VI. Our services include:

- No-Rise certifications and documentation review for floodways
- CLOMR/LOMR modeling, coordination, and FEMA submittal preparation
- Support for MT-2 documentation and regulatory floodplain review
- Framing of applications to meet both LADOTD and FEMA permitting expectations
- Floodplain mapping and base flood elevation (BFE) validation as needed



2D Bridge Hydraulic Modeling and Scour Analysis using SMS/SRH-2D

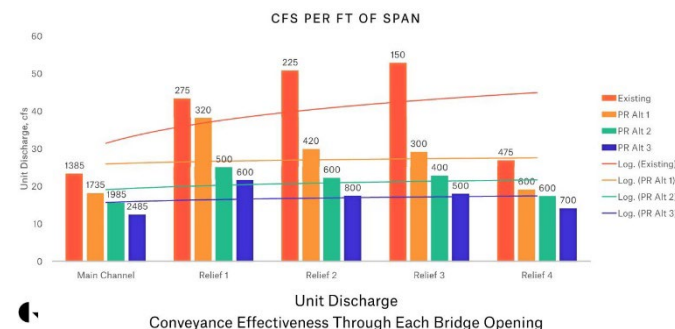
Bridge hydraulics is a primary focus under this contract. Gresham Smith uses **Aquaveo's SMS software with SRH-2D** to perform advanced modeling of flow conditions at bridge sites, including:

- Use of 2D mesh to assess floodplain flow paths, eddies, overtopping, and abutment transitions
- Bridge length optimization based on flood behavior and peak stage
- Integrated **scour analysis using the built-in SMS scour tools**, driven by SRH-2D outputs such as velocity and shear stress
- Design of riprap, abutment transitions, and guide banks based on HEC-23
- Development of predicted scour elevations for all piers, accounting for long-term degradation.

Providing advanced 2D modeling is a core service for our team. For bridge hydraulics and scour:

- We develop fully integrated SRH-2D models in SMS to capture lateral flow distribution across floodplains, evaluate contraction zones, and simulate overtopping
- We conduct detailed scour analysis using SMS's built-in tools, referencing HEC-18 methodology
- We prepare clear visualizations and reports showing shear stress distributions, debris clearance, and key design metrics for LADOTD review

Executive Summary Graphic for Multiple Openings



General Hydrologic and Hydraulic Support

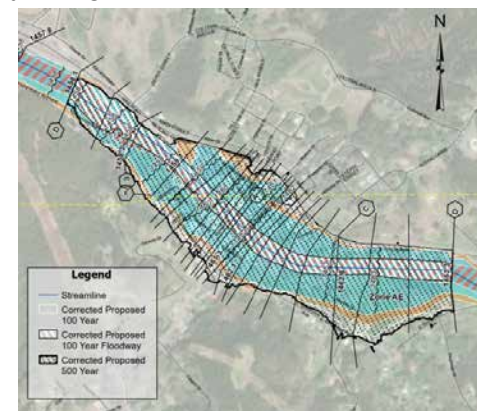
In addition to bridge-focused tasks, we provide services that include:

- Culvert sizing (HY-8), side and median drain design, and longitudinal channel analysis
- Urban system modeling using OpenRoads Drainage, StormCAD, or SWMM-based tools
- Detention/water quality modeling and MS4 compliance support
- Assessment and mitigation of upstream and downstream property impacts
- Application of LADOTD drainage criteria for compliance

Documentation & Delivery

All modeling, analysis, and hydraulic design recommendations will be documented in LADOTD-compliant formats, including:

- **Bridge Hydraulics Reports** complete with clear narratives, hydrology and hydraulic data, model summaries, and scour evaluations
- **Proper documentation of all steps** throughout the bridge hydraulic design process
- An **Executive Summary** at the front of each report summarizes critical design information and that brings all key results and findings for quick LADOTD review
- FEMA-ready documentation including Data tables, FIRM references, FEMA form attachments, and model archives for submittals requiring No-Rise, CLOMR, or LOMR actions
- Internal QA/QC of all modeling inputs, assumptions, and results by senior engineers with experience in DOT and FEMA modeling



19. Workload:

For all contracts where a firm on the team is a prime consultant or sub-consultant and where **a)** the consultant selection was made by DOTD, and **b)** a contract was executed by the consultant and the contracting entity by the date the advertisement for this proposal was posted, list all work meeting the following criteria:

- 1) one of the team's firms is responsible for the performance of the work;
- 2) authorization to perform the work has been provided, as provided in the contract between the consultant and the contracting entity;
- 3) the work has not yet been performed and invoiced; and
- 4) the work is not currently suspended for an indefinite period of time.

For indefinite delivery/indefinite quantity (IDIQ) contracts, list open Task Orders individually.

List only the portion of the fees attributable to firms on the team.

Firm All firms must be represented in this table	Past Performance Evaluation Disciplines(s) *	Contract Number & State Project Number	Project Name	Remaining unpaid balance**
Gresham Smith	CE&I/OV	44-24424; H.013256.6	I-10 Scott to Lake Charles ITS CEI	1,873
Gresham Smith	Other (Program Mgt)	44-27186; H.015959.1	Discretionary Grant Administration	1,469,102
Gresham Smith	Road	44-19871; H.013073.5	LRSP/STRPPP Greenwells Springs & Wooddale Sidewalks	7,033
Gresham Smith	Road	44-26911; H.016080.5	LRSP/STRPPP TO #6 US 190	4,000
Gresham Smith	Road	44-26911; H.016089	LRSP/STRPPP TO #7 Orice, Sandra & Darby	11,500
Gresham Smith	Road	44-26911; H.016078.5	LRSP/STRPPP TO #8 Highland / Dalrymp	6,500
Gresham Smith	Road	44-26911; H.016083.5	LRSP/STRPPP TO #9 W. Worthey	4,000
Gresham Smith	Road	44-26911; H.015202.5	LRSP/STRPPP TO #10 Donaldsonville	166,194
Gresham Smith	Road	44-27210; H.012859.5	Roundabout at Valhi Blvd	255,797
Gresham Smith	Road	44-27181; H.016012	Transportation Alternative Program TO #1	49,389
Gresham Smith	Road	44-26912; H.014640	LRSP/STRPPP TO #1 St. Mary Parish	19,233
Gresham Smith	Road	44-26912; H.015203.5	LRSP/STRPPP TO #2 Pinhook	88,442
Gresham Smith	Road	44-26912; H.016007.5	LRSP/STRPPP TO #6 Date St	5,000
Gresham Smith	Road	44-26912; H.016189.5	LRSP/STRPPP TO #7 LA 31	6,300
Gresham Smith	Road	44-21326; H.010074.1	Stage 0 Lafourche Bayou Bridge (HBI)	67,473

Gresham Smith	Road	44-19871; H.013714.5	LRSP/STRPPP Valhi Boulevard Shared Use Path Signing and Striping	6,912
Gresham Smith	Traffic	44-19871; H.015086.5	LRSP/STRPPP LA 14	1,690
Gresham Smith	Traffic	44-198771; H.015201	LRSP/STRPPP Richwood Traffic Study	87,761
Gresham Smith	Traffic	44-25298; H.013388.5	Lafourche Flashing Yellow Arrow Traffic Signal Upgrade	278,886
Gresham Smith	Traffic	44-25298; H.016007.1	Traffic Signal Comm SEA	131,278
Gresham Smith	Traffic	44-25298; H.016039.5	LA 47: LA46 - Virtue St	253,113
Gresham Smith	Traffic	44-26911; H.014629.5	LRSP/STRPPP TO #1 Lafourche Design	31,087
Gresham Smith	Traffic	44-26911; H.013718.5	LRSP/STRPPP TO #3 LA 23 Gretna	189,315
Gresham Smith	Traffic	44-26911; H.013713.5	LRSP/STRPPP TO #4 LA 60 Bogalusa	111,674
Gresham Smith	Traffic	44-26911; H.015198.5	LRSP/STRPPP TO #5 S. Carrollton)	21,886

(Add rows as needed)

DO NOT SUM

20. Certifications

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS) 9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com
	Mr. Herbert Eugene Moore II License/Certificate Type - Number PE.0031065 Status: Active Exp Date: 09/30/2026

Certificate of Completion presented to <i>Bert Moore</i> for completing the Traffic Engineering Analysis Process & Report Module 1		
Date: June 4, 2018 Location: Baton Rouge, Louisiana	Professional Development Hours (PDHs) Awarded: 4	
 Authorized Instructor	 Authorized Instructor	 Authorized instructor
		

Certificate of Completion presented to <i>Bert Moore</i> for completing the Traffic Engineering Analysis Process & Report Module 2		
Date: June 11, 2018 Location: Baton Rouge, Louisiana	Professional Development Hours (PDHs) Awarded: 4	
 Authorized Instructor	 Authorized Instructor	 Authorized instructor
		

Certificate of Completion presented to <i>Bert Moore</i> for completing the Traffic Engineering Analysis Process & Report Module 3		
Date: October 18, 2018 Location: Baton Rouge, Louisiana	Professional Development Hours (PDHs) Awarded: 3	
 Authorized Instructor	 Authorized Instructor	 Authorized instructor
		



April 6, 2016

Mr. Bert Moore
Gresham Smith and Partners
10,000 Perkins Rowe
Suite 280
Baton Rouge, LA 70810

Subject: Trafficware Certification

Mr. Bert Moore,

Congratulations on your successful completion of Trafficware University certification requirements in our hardware, traffic management software, and traffic analysis/optimization software.

Please retain this letter to serve as an official document certifying that Mr. Bert Moore is fully certified in the operation and maintenance of all products manufactured and distributed by Trafficware Group, Inc.

Sincerely,



PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Herbert Moore
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

4/7/2023 to 4/7/2027
Training Valid Through

Baton Rouge, LA
Location

Vern H. Clark
Vice President of Education and Technical Services

Shane Trisham
President, CEO

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



American Traffic Safety Services Association ATSSA.com



American Traffic Safety
Services Association

This is to affirm that

Herbert Moore

has satisfied the requirements to be designated as a
CERTIFIED FLAGGER

ATSSA

Issue Date 5/9/2023

Exp. Date 5/8/2027

State Issued LA

Instructor Name

Vern H. Clark

Instructor Signature

AT000026198

Verify at Flagger.com

Certificate of Training

PRESENTED BY

The National Cooperative Research Program

TO CERTIFY THAT

Herbert Moore

HAS SATISFACTORILY COMPLETED 20 HOURS OF TRAINING IN:

Highway Safety Manual Workshop
NCHRP 17-38

Karen K. Dixon, PhD, P.E.
Iida van Schalkwyk, PhD
Larry F. Sutherland, P.E.
Instructors



December 1-3, 2010
Date

Baton Rouge, Louisiana
Location



**LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)**
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Ms. Rachel K. Westerfield

License/Certificate Type - Number
PE.0044018

Status: **Active** Exp Date: **09/30/2025**




National Highway Institute
Certificate of Training
Rachel Westerfield
has participated in
**FHWA-NHI-135095 Two-Dimensional Hydraulic Modeling of
Rivers at Highway Encroachments**
hosted by
Mississippi Department of Transportation

Date: May 10-12, 2016 Hours of Instruction: 18
Location: Jackson, MS

[Signature]
Instructor

[Signature]
Local Coordinator

[Signature]
Instructor

[Signature]
Valerie Briggs, Director
National Highway Institute



ASFPM Membership Card

Rachel Westerfield P.E., CFM

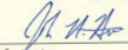
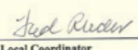
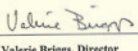
Sr. Drainage Engineer
210 E Capitol St Ste 1150
Jackson MS 39201-2306 US
Mobile: (601) 906-7072
rachel.westerfield@greshamsmith.com

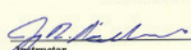
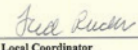
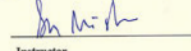
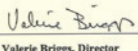


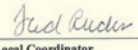
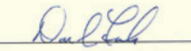
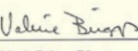
ASFPM Membership Card

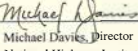
Member ID: 28319

Member Type: Individual Member
Member Status: Active
Expiration Date: 12/31/2023
Join date: 3/12/2015

			
National Highway Institute Certificate of Training Rachel Westerfield <i>has participated in</i> FHWA-NHI-135090 Hydraulic Design of Safe Bridges <i>hosted by</i> Mississippi Department of Transportation			
Date:	June 28-30, 2016	Hours of Instruction:	18
Location:	Jackson, MS		
 Instructor	 Local Coordinator		
 Instructor	 Valerie Briggs, Director National Highway Institute		

			
National Highway Institute Certificate of Training Rachel Westerfield <i>has participated in</i> FHWA-NHI-135046 Stream Stability and Scour at Highway Bridges <i>hosted by</i> Mississippi Department of Transportation			
Date:	November 15-17, 2016	Hours of Instruction:	18
Location:	Southaven, MS		
 Instructor	 Local Coordinator		
 Instructor	 Valerie Briggs, Director National Highway Institute		

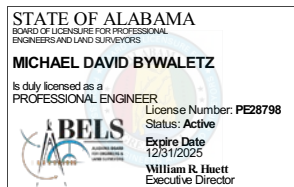
			
National Highway Institute Certificate of Training Rachel Westerfield <i>has participated in</i> FHWA-NHI-135027 Urban Drainage Design <i>hosted by</i> Mississippi Department of Transportation			
Date:	November 7-9, 2017	Hours of Instruction:	18
Location:	Jackson, MS		
 Instructor	 Local Coordinator		
 Instructor	 Valerie Briggs, Director National Highway Institute		

			
National Highway Institute Certificate of Training Rachel Westerfield <i>has participated in</i> FHWA-NHI-135048 Countermeasure Design for Bridge Scour and Stream Instability <i>hosted by</i> Mississippi Department of Transportation			
Date:	August 13-15, 2019	Hours of Instruction:	15
Location:	Jackson, MS		
 Instructor	 Local Coordinator		
 Instructor	 Michael Davies, Director National Highway Institute		

State of Alabama
Board of Licensure for Professional Engineer and Land Surveyors

License Type: Professional Engineer
License Status: Active

MICHAEL DAVID BYWALETZ
 11045 DOUBLE KNOT COURT
 MIDLAND NC 28107



Your license information is printed below. If you have any questions, or if we can be of assistance, please contact the Board office.

Date License Active Until: 12/31/2025
Business Affiliation: DRMP
PDH Carry Forward Hours: 15

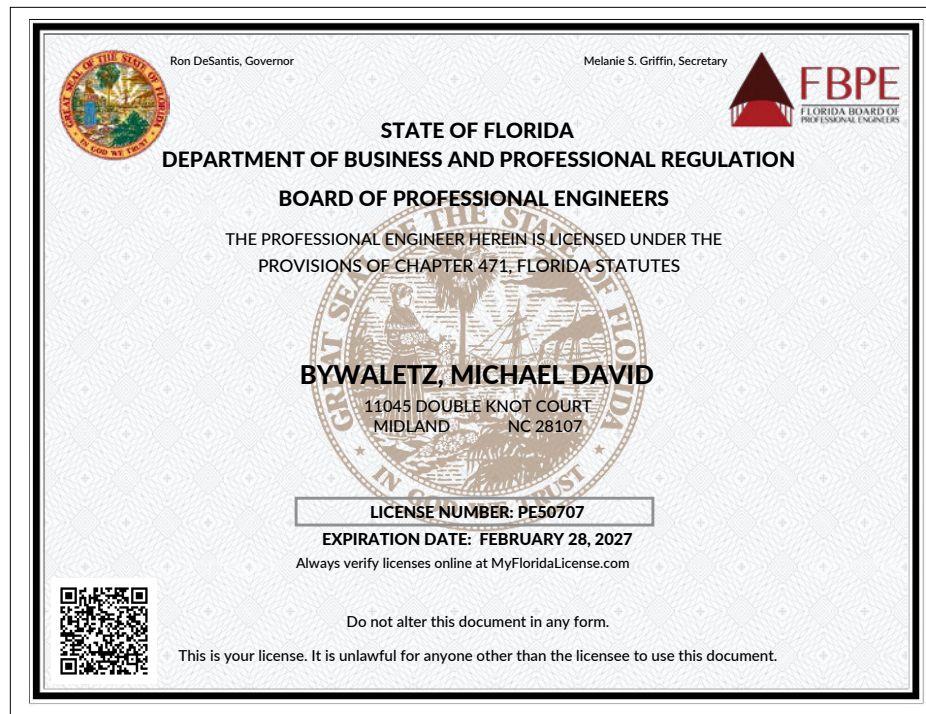
License Status

Active - A person who is current and licensed to practice.

Inactive - A person who is not engaged in the engineering or land surveying practice which requires licensure in Alabama.

Board Contact Information
 334-242-5568
 866-461-7640 toll free

Mailing Address
 PO Box 304451
 Montgomery, AL 36130-4451





STATE OF TENNESSEE
DEPARTMENT OF
COMMERCE AND INSURANCE



MR JACOB STINER GRAVES

ID NUMBER: 122211
LIC STATUS: ACTIVE
EXPIRATION DATE: June 30, 2025

308159

STATE BOARD OF ARCHITECTURAL AND ENGINEERING
EXAMINERS
PROFESSIONAL ENGINEER
THIS IS TO CERTIFY THAT ALL REQUIREMENTS
OF THE STATE OF TENNESSEE HAVE BEEN MET

MR JACOB STINER GRAVES
305 BLUFF RD
RUTLEDGE TN 37861

State of Tennessee

STATE BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS
PROFESSIONAL ENGINEER
MR JACOB STINER GRAVES

This is to certify that all requirements of the State of Tennessee have been met.



ID NUMBER: 122211
LIC STATUS: ACTIVE
EXPIRATION DATE: June 30, 2025

IN-1313
DEPARTMENT OF
COMMERCE AND INSURANCE



STATE OF TENNESSEE
DEPARTMENT OF
COMMERCE AND INSURANCE
REBEKAH HIGGINS



ID NUMBER: 126280
LIC STATUS: ACTIVE
EXPIRATION DATE: March 31, 2026

STATE BOARD OF ARCHITECTURAL AND ENGINEERING
EXAMINERS
PROFESSIONAL ENGINEER
THIS IS TO CERTIFY THAT ALL REQUIREMENTS
OF THE STATE OF TENNESSEE HAVE BEEN MET

315774

REBEKAH HIGGINS
280 WESTVIEW RD NW
GEORGETOWN TN 37336

State of Tennessee

STATE BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS
PROFESSIONAL ENGINEER
REBEKAH HIGGINS

This is to certify that all requirements of the State of Tennessee have been met.



IN-1313
DEPARTMENT OF
COMMERCE AND INSURANCE

ID NUMBER: 126280
LIC STATUS: ACTIVE
EXPIRATION DATE: March 31, 2026

ASSOCIATION OF STATE
FLOODPLAIN MANAGERS, INC.
CERTIFICATION BOARD OF REGENTS

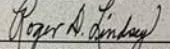
HEREBY CERTIFIES THAT PURSUANT TO THE PROVISIONS OF THE CHARTER FOR THE
CERTIFIED FLOODPLAIN MANAGER PROGRAM

Rebekah L. Higgins, CFM

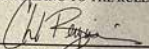
IS DULY REGISTERED AS AN

ASFPM CERTIFIED FLOODPLAIN MANAGER

IN TESTIMONY WHEREOF THIS CERTIFICATE HAS BEEN ISSUED BY THE AUTHORITY OF THE
CERTIFICATION BOARD OF REGENTS, CERTIFICATE NO. US-24-18518, ISSUED 3/11/2014 THIS
CERTIFICATE SHALL EXPIRE 7/31/2026, UNLESS RENEWED ACCORDING TO THE RULES OF THIS BOARD.



CERTIFICATION BOARD OF REGENTS
PRESIDENT, ROGER LINDSEY, P.E., CFM



ASSOCIATION OF STATE FLOODPLAIN MANAGERS
EXECUTIVE DIRECTOR, CHAD M. BERGINNIS, CFM



Certification

Name:

Name to appear on the certificate

Certification Number:

Status:

Program:

Certification Date:

Recertification Date:

Expiration Date:

DeAnna Walker

DeAnna E. Walker

US-16-09072

Active

National Certified Floodplain Manager

5/13/2016

7/31/2024

7/31/2026

Applications

Certification	Status	Created Date	Submission Date	
National Certified Floodplain Manager	Accepted Renewal	7/31/2024	7/31/2024	View Application

Gresham Smith

HUNDL, JENNIFER RENEE

PE# 109974

Status	Branch(s)	Granted	Expires	Employer(s)
Active	Civil,	12-14-2011	09-30-2025	GRESHAM SMITH & PARTNERS

Jennifer Hundl

2025 TFMA Membership/CFM Renewal

Your membership is current through 12/31/2025.

Your License Pocket Card

See your pocket-sized license card below.

Please make note of the expiration date on your license. It is your responsibility to renew your license before it expires. Please request a demographic change through the portal if you have a change of address.

Wall certificates suitable for framing are available at cost, see board fee schedule. To order a wall certificate, please order from the [Licensing Portal](#) at gapelsb.evokeplatform.com/app/licensingPortal

Please refer to Board Rules for any continuing education requirements your profession may require.

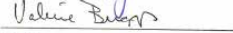
Georgia Professional Engineers & Land Surveyors Board
229 Peachtree Street Northeast, International Tower, Suite 1875
Atlanta, GA 30308
Phone: (404) 693-5754
Email: info@pels.ga.gov



 LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS) 9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com	
Mr. Courtney Jermaine Rome	
License/Certificate Type - Number PE.0043355	Expiration Date 09/30/2025
Active	

 U.S. Department of Transportation Federal Highway Administration	
Certificate of Training Courtney J. Rome	
has completed training in -AASHTO LRFD Bridge Design Specifications (Zone 1 & 2) -Guide Specifications for LRFD Seismic Bridge Design (SDC A & B)	
Location: Little Rock, Arkansas Dates: April 9, 2014	Hours of Instruction (PDH): 4.5 Continuing Education Units: 0.45
 Derrell Manceaux, P.E. Senior Structural Engineer Federal Highway Administration Resource Center	

 U.S. Department of Transportation Federal Highway Administration		 NATIONAL HIGHWAY INSTITUTE	
National Highway Institute Certificate of Training COURTNEY ROME			
<i>has participated in</i> FHWA-NHI-130056 Safety Inspection of In-Service Bridges for Professional Engineers			
<i>hosted by</i> LA DOTD/LTRC			
Date: May 13-17, 2019 Location: Baton Rouge, LA	Hours of Instruction: 34	 Instructor	 Local Coordinator
 Instructor	 Michael Davies, Director National Highway Institute		

 U.S. Department of Transportation Federal Highway Administration		 NATIONAL HIGHWAY INSTITUTE	
National Highway Institute Certificate of Training Courtney Rome			
<i>has participated in</i> FHWA-NHI-132070 Drilled Shaft Foundation Inspection			
<i>hosted by</i> Arkansas Highway and Transportation Department			
Date: June 6-8, 2017 Location: Little Rock, AR	Hours of Instruction: 14.0	 Instructor	 Local Coordinator
 Instructor	 Valerie Briggs, Director National Highway Institute		



Certificate of Training

this certifies that
Courtney Rome
 has successfully completed

MASH Criteria Training
 Presented by Trinity Highway Product and Gulf Material Sales
 on April 13, 2016 in Little Rock Arkansas

Professional Development Hours (PDH) – 2

Signed Chuck Boyd
 Chuck Boyd, P.E.

Date 4-13-16

**Mead
& Hunt**

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

Please select the date you attended the course:

- ☐ Tuesday, May 1, 2018
☒ Wednesday, May 2, 2018

Certificate of attendance and participation for:

Courtney Rome

Training Course:
 Maintenance and Rehabilitation of Historic Bridges

Transportation Training and Education Center
 4099 Courrier Avenue, Room 175
 Baton Rouge, Louisiana 70809

You have earned 8 PDH units that can be applied to applicable
 continuing education requirements for professional engineering
 licensure.

Duff Squitieri
 Mead & Hunt Instructor
 Amy Squitieri

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

CERTIFICATE OF TRAINING

SUNBELT RENTALS

This Certifies that
Courtney Rome
 of **Gresham Smith**

Has attended Mobile Elevating Work
 Platform Operator Training

MEWP's Trained on:
 ANSI MEWP Operator Boom Lifts 3b,
 Scissor Lifts 3a

Trainer:
Julio Torres
 Date of Training:
3/18/2022
 Expires 5 Years from Above Date

CERTIFICATE OF TRAINING

SUNBELT RENTALS

This Certifies that
Courtney Rome
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 Platform Operator Training

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 ANSI MEWP Operator Boom Lifts 3b,
 Scissor Lifts 3a

Trainer:
Julio Torres
 Date of Training:
4/18/2022
 Expires 5 Years from Above Date

As holder of this card, I pledge to follow all ANSI AS2 standards for the safe operation lifts and any other applicable safety guidelines for construction and industry as well as:

1. Read and Familiarize myself with all manuals for each AWP
2. Conduct a Prestart Inspection before each day or before each work shift.
3. Ensure operators are trained.
4. Perform a Workplace Inspection.
5. Ensure that before each movement or repositioning of the lift

The AWP is operated on a surface within the limits specified by the manufacturer.

Outriggers, extendible axles, or other stability enhancing means are used as required by the manufacturer.

Guards are installed and access gates or openings are closed per the manufacturer's instructions.

The load and its distribution on the platform are in accordance with the manufacturer's rated capacity.

There is adequate overhead clearance.

Maintain the Minimum Safe Approach Distance (MSAD) from energized power lines.

All PPE is worn including a personal fall arrest and lanyard attached to the manufacturer's anchorage point.

6. Follow all manufacturer's Warnings and Instructions

COURTNEY ROME

Has successfully completed a flagger training course meeting the
 requirement of the

**LOUISIANA DEPARTMENT OF TRANSPORTATION &
 DEVELOPMENT**

on the following date

APR 30, 2025

This certificate is valid for 30 days from completion date

with a government issued photo ID.

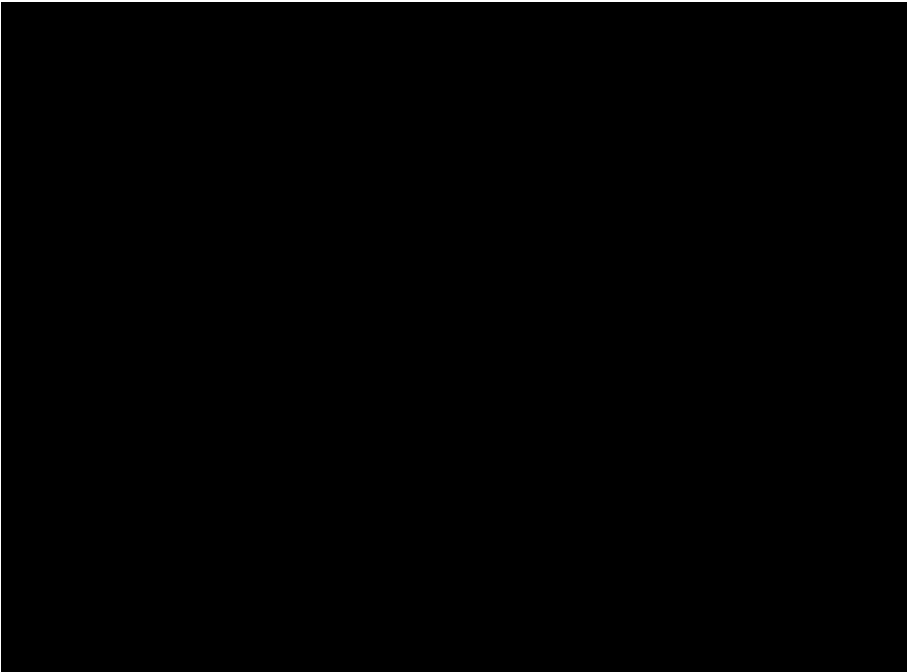
Verify this certificate against the information online use the code below to view certificates

191-57-126614

Enter the code to verify this certificate is an original at

<https://process.onlineflagger.com/duplicate>

ATSSA Serial Number will show here once we process your card. Please check back here in a few days if there is no number listed below.



State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers

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

Name	Type	City	Status
GRESHAM SMITH	Partnership (Non-Louisiana)	OFFICE: NASHVILLE, TENNESSEE	Active

Previous Names

GRESHAM, SMITH AND PARTNERS (Changed: 9/27/2018)

Business: GRESHAM SMITH

Charter Number: 36123793L

Registration Date: 2/17/2006

Domicile Address

DOMICILE: TENNESSEE

OFFICE: NASHVILLE, TENNESSEE

Mailing Address

222 SECOND AVENUE SOUTH

SUITE 1400

NASHVILLE, TN 37201

Principal Business Office

222 SECOND AVENUE SOUTH

SUITE 1400

NASHVILLE, TN 37201

Registered Office in Louisiana

Principal Business Establishment in Louisiana

10000 PERKINS ROWE, SUITE G280

BATON ROUGE, LA 70810

Status

Status: Active

Registered: 2/17/2006

Last Report Filed: 2/29/2024

Type: Partnership (Non-Louisiana)

Registered Agent(s)

Agent: NATIONAL REGISTERED AGENTS, INC.

Address 1: 3867 PLAZA TOWER DR.

City, State, Zip: BATON ROUGE, LA 70816

21. QA/QC Plan:

22. Sub-consultant information:**Firm Name**

(Name must match exactly as registered with Louisiana's Secretary of State (SOS): including punctuation, include screenshot(s) from SOS at the end of Section 20)

Address**Point of Contact
and email address****Phone Number**

(Add rows as needed)

23. Location:



Gresham Smith

Genuine Ingenuity

Alpharetta, GA
Atlanta, GA
Baton Rouge, LA
Birmingham, AL
Buford, GA
Charlotte, NC
Chattanooga, TN

Chicago, IL
Cincinnati, OH
Columbus, OH
Dallas, TX
Denver, CO
Detroit, MI
Ft. Lauderdale, FL

Jackson, MS
Jacksonville, FL
Knoxville, TN
Lexington, KY
Louisville, KY
Memphis, TN
Miami, FL

Nashville, TN
Orlando, FL
Richmond, VA
Tallahassee, FL
Tampa, FL

10000 Perkins Rowe
South Tower - Suite G520
Baton Rouge, LA 70810
225.757.5849
GreshamSmith.com